ENVIRONMENTAL ASSESSMENT/REGULATORY IMPACT REVIEW

for Amendment 82 to the BSAI FMP and regulatory amendments to allow the allocation of future Aleutian Islands pollock harvest to the Aleut Corporation as required by Public Law 108-199

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Abstract: This document contains an Environmental Assessment and a Regulatory Impact Review that analyze the potential impacts of Amendment 82 to the BSAI FMP, and regulations to allocate any future Aleutian Islands pollock harvest to the Aleut Corporation, as required by Section 803 of the 2004 Consolidated Appropriations Act (PL 108-199). This document also contains a Regulatory Flexibility Act (RFA) certification that this action will not have a significant impact on a substantial number of small entities. The analyses in this document address the requirements of the National Environmental Policy Act, Executive Order 12866, and the RFA.

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List of Acronyms

ABC	Acceptable Biological Catch
ADCED	Alaska Department of Community and Economic Development
ADF&G	Alaska Department of Fish and Game
AFA	American Fisheries Act
AFSC	Alaska Fisheries Science Center
AI	Aleutian Islands
AKFIN	Alaska Fisheries Information Network
AP	Advisory Panel
APA	Administrative Procedures Act
APICDA	Aleutian Pribilof Islands Community Development Association
B	Biomass
BBEDC	Bristol Bay Economic Development Corporation
BiOp	Biological Opinion
BS	Bering Sea
BSAI	Bering Sea and Aleutian Islands
CAA	Consolidated Appropriations Act
CBSFA	Central Bering Sea Fisherman's Association
CDQ	Community Development Quota
CEQ	Council on Environmental Quality
CEY	Constant Exploitation Yield
CFEC	Alaska Commercial Fisheries Entry Commission
CFR	Code of Federal Regulations
Council	North Pacific Fishery Management Council
CP	catcher-processor vessel
CV	catcher vessel
CVRF	Coastal Villages Region Fund
DFA	Directed Fishing Allowance
DFL	Directed Fishing Level
DPF	Directed pollock fishery
EA	Environmental Assessment
EIS	Environmental Impact Statement
EEZ	Exclusive Economic Zone
EFH	Essential Fish Habitat
ESA	Endangered Species Act
F	Fishing mortality rate
FMP	Fishery Management Plan
FONSI	Finding of No Significant Impact
FR	*Federal Register*
FRFA	Final Regulatory Flexibility Analysis
GOA	Gulf of Alaska
FRFA	Final Regulatory Flexibility Analysis
HAPC	Habitat Area of Particular Concern
ICA	Incidental Catch Allowance

IFQ	Individual Fishing Quota
ITAC	Initial Total Allowable Catch
IRFA	Initial Regulatory Flexibility Analysis
MSST	Minimum Stock Size Threshold
MSY	Maximum Sustainable Yield
mt	metric ton
NEPA	National Environmental Policy Act
nm	nautical mile
NMFS	National Marine Fisheries Service
NOA	Notice of Availability
NOAA	National Oceanic and Atmospheric Administration
NPFMC	North Pacific Fishery Management Council
NSEDC	Norton Sound Economic Development Corporation
OFL	Overfishing Level
OY	Optimum Yield
PRA	Paperwork Reduction Act
PSC	Prohibited Species Catch
PSQ	Prohibited Species Quota
PSEIS	Programmatic Supplemental Environmental Impact Statement
RFA	Regulatory Flexibility Act
RIR	Regulatory Impact Review
SAFE	Stock Assessment and Fishery Evaluation Report
SBA	Small Business Administration
SBREFA	Small Business Regulatory Enforcement Fairness Act
SEIS	Supplemental Environmental Impact Statement
SSC	Scientific and Statistical Committee
TAC	Total Allowable Catch
USFWS	United States Fish and Wildlife Service
VMS	Vessel monitoring system
YDFDA	Yukon Delta Fisheries Development Association

Executive Summary

What is this action?

This Environmental Assessment/Regulatory Impact Review (EA/RIR) evaluates an action to amend the BSAI groundfish FMP and fishery management regulations to create a framework within which to allocate pollock quota to the Aleut Corporation for an Aleutian Islands (AI) directed pollock trawl fishery for the purposes of economic development in Adak. This action is an amendment to the BSAI groundfish FMP (Amendment 82) and associated regulatory changes. This action is required by a recent U.S. Congressional action, PL 108-199, the 2004 Consolidated Appropriations Act (CAA).

An EA/RIR is the appropriate level of analysis to support taking action. Six decision elements necessary for implementation of the action, each with two or more alternatives, are analyzed in this document. The decision elements are allocation size, allocation mechanism, fishery monitoring, to delay or not delay entry of small vessels, economic development reporting, and Chinook salmon bycatch management. The document did not identify decision elements or alternatives that would have a significantly adverse effect on the quality of the human environment. In some instances impacts were unknown.

This executive summary is divided into five parts:

- Background
- What are the alternatives?
- Environmental Assessment
- Regulatory Impact Review
- Regulatory Flexibility Act considerations

Background

The U.S. Congress, in Section 803 of the Consolidated Appropriations Act of 2004, now Public Law 108-199, requires future directed fishing allowances of pollock in the Aleutian Islands be allocated to the Aleut Corporation.[1] Only fishing vessels approved by the Aleut Corporation or its agents would be allowed to harvest this allowance. In turn, the Aleut Corporation was only allowed to contract with vessels under sixty feet long, or with listed AFA vessels, to harvest the fish. The allocation was made to the Aleut Corporation for the purpose of furthering the economic development of Adak.

In February 2004, the Council passed a motion requesting an analysis of options that might be incorporated into an FMP amendment to create a structure within which such an allocation could be made.[2] It was the Council's intent that this analysis be presented to it in April 2004, in order that the Council could make a final decision on the amendment in June 2004. The Council reviewed a

[1] The text of Section 803 may be found in Appendix A.1.

[2] The text of this motion may be found in Appendix A.3.

draft EA/RIR at its April 2004 meeting and added several additional alternatives, and a new decision element with two alternatives, to the suite of decision elements for this action. In June 2004, the Council took final action, recommending an alternative for each of the six decision elements. In October 2004, the Council took further steps to clarify its intent.

This document provides environmental, economic, and small entity analyses of this proposed action. This document also includes a "Factual Basis for Certification" as an appendix. The "factual basis" provides grounds for determining that a substantial number of small entities will not be affected by this action, and that, therefore, an initial regulatory flexibility analysis is not required under the Regulatory Flexibility Act (RFA). This document addresses the analytical requirements of the National Environmental Policy Act (NEPA), Presidential Executive Order 12866 (EO 12866), and the RFA.

The U.S. Congress has determined that establishing a small boat fleet in the community of Adak will be critical for the economic diversification of that community (PL 108-199). Congress has further determined that this economic benefit can be gained through a direct apportionment of pollock quota to the Aleut Corporation to be used for economic development in Adak.[3] Congress' intent is that the Aleut Corporation, or its agent, will initially partner with large vessels (from a pool of vessels approved for the BSAI pollock fishery under the American Fisheries Act) and small vessels < 60 feet length overall (LOA) to fish their apportionment, but gradually develop and partner with a larger small vessel fleet to harvest pollock. Eventually, by the year 2013, Congress intends that 50 percent of the Aleut Corporation pollock apportionment will be fished by partner vessels under 60 feet LOA, and 50 percent will be fished by partner AFA vessels. Revenues generated from the use of the Aleutian Islands pollock apportionment will allow for greater investment opportunities in Adak.

Congress has mandated that, if the Council provides for an Aleutian Islands directed pollock fishery, the directed pollock fishery must be apportioned to the Aleut Corporation. This quota is to be fished with permission of the Aleut Corporation. Congress also specified that the Council could apportion this directed fishery over and above the 2 million mt Optimum Yield (OY) cap in the Bering Sea/Aleutian Islands groundfish fisheries which, based on longstanding policy, has never been exceeded by the Council. But Congress also mandated that, should the Council choose to exceed the OY cap for the purposes of apportioning pollock to the Aleut Corporation, the OY cap could be exceeded only for the fishing years 2004 through 2008.

In February 2004, the Council approved proceeding with an analysis of possible environmental effects of such a fishery, with the intent of opening an AI pollock fishery in 2005. The Council's motion is in Appendix A.3. The Council clearly determined that it did not want to provide for this AI pollock fishery by apportioning total allowable catch (TAC) quotas over the 2 million mt OY cap. The Council directed staff to develop an EA/RIR/IRFA with which the Council will evaluate the effects of this fishery and make a decision. At its April 2004 meeting, the Council further expanded the types of analyses it wishes to evaluate, and passed a motion adding a new decision

[3] The Aleutian Islands subarea includes federal management areas 541, 542, and 543. These, along with the location of Adak and other information, are shown in Figure 1.1-1.

elements and several alternatives to some of the decision elements. The text of the Council's April 2004 motion is provided in Appendix A11.

The Council requested an evaluation of (1) different approaches to determining levels of TAC apportionment, perhaps using the current community development quota (CDQ) apportionment formula as a guideline, possibly with a requirement that no AI apportionment would exceed 40,000 mt; (2) alternative methods for calculating the Aleut Corporation apportionment so as to remain under the OY cap, with an evaluation of how unused TAC from this fishery might be rolled back to other groundfish fisheries in the BSAI; (3) alternative approaches to monitoring catch in the fishery to be created; (4) whether to provide for a small vessel component of this fishery in 2004 or defer this decision to 2006 or 2009; (5) whether to require an annual report from the Aleut Corporation on how the pollock apportionment was used for economic development in Adak, and (6) whether or not Chinook salmon harvested as bycatch in the AI fishery would count against the Chinook bycatch cap in the Bering Sea pollock fishery. With respect to decision element 2 above, the Council stated that, in the future, the allocation to the AI pollock fishery would be "funded" first from any difference between the sum of all BSAI groundfish fishery TACs and 2 million mt, if any, and if not, then from the chosen alternative under this decision element.

In June 2004, the Council took final action on Amendment 82. The Council recommended preferred alternatives for each of the six decisions before it. The Council's preferred alternatives are described in detail at the end of the next section of this executive summary, and in Section 2.3 of this EA.

In October 2004, the Council revisited Amendment 82, and clarified its intent that a CDQ fishery be funded in the Aleutian Islands with 10% of the Aleutian Islands TAC. Under current regulations, the CDQ groups will receive 10% of any TAC created for the AI, and must fish the TAC in the AI. This is consistent with the provisions of the AFA which require that 10% of the BSAI pollock TAC be set aside for the use of the CDQ groups. The Council indicated that it did not intend to change these regulations.

What are the alternatives?

1.0 Allocation size

- 1.1 No action: Determine the appropriate Aleutian Islands pollock TAC each year during the annual specifications process.

- 1.2 For guidance in determining the allocation amount to the AI pollock fishery, the Council shall consider pollock allocations given to the various groups that participate in the CDQ program, in order to recommend a "reasonable amount" of AI pollock to award to the Aleut Corporation, and in no case should this amount exceed 40,000 mt.

- 1.3 The Council shall allocate a combined AI Incidental Catch Allowance (ICA) and Directed Fishing Allowance (DFA) equal to the lesser of the TAC generated from the acceptable biological catch (ABC) for that year or 40,000 mt. The DFA shall be subject to the 40% "A" season and 60% "B" season apportionment required by the Steller sea lion protection measures.

1.4 Beginning in 2005, and until changed, the AI pollock "A" season DFA shall be the lesser of 15,000 mt or 40% of the AI pollock annual TAC after subtraction of the ICA. No part of the annual DFA shall be allocated to the "B" season.

1.3[C] The Council shall allocate a combined Aleutian Islands ICA and DFA equal to the lesser of the ABC or 40,000 mt. This allocation shall be subject to the 40% A season, 60% B season allocation required by the SSL protection measures.

1.4[C] Beginning in 2005, and until changed, the annual Aleutian Islands pollock TAC shall be the lesser of 15,000 mt or 40% of the AI pollock ABC. One hundred percent of the DFA shall be available for harvest in the pollock "A" season."

2.0 Allocation mechanism

2.1 No action: no regulatory changes

2.2 The pollock allocation to the AI fishery will be funded by a reduction in the eastern Berign Sea (EBS) pollock TAC. Any unused pollock TAC from the AI fishery will be rolled back to the EBS pollock TAC. This will occur at the earliest time possible in the calendar year. Before making the apportionment as described here, the AI pollock DFA is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

2.3 The pollock allocation to the AI fishery will be funded by taking equal proportional reductions in the TAC amounts from each of the existing groundfish fisheries in the BSAI, without regard to species. Any unused TAC amount, surplus to the needs of the AI pollock fishery, will be rolled back to the fisheries from which it originated in the same proportions (and species). This should occur at the earliest time practicable in the calendar year. Before making the apportionment as described here, the AI pollock DFA is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

2.4 The pollock allocation to the AI fishery will be funded as described in Alternative 2.3 but the procedure for calculation of TAC exempts the BSAI sablefish individual fishing quota (IFQ) fishery from the proportional reduction and rollback. Before making the apportionment as described here, the AI pollock DFA is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

2.5 The pollock allocation to the AI fishery will be funded by an amount that is 10% from the BSAI rock sole fishery initial TAC (ITAC), 10% from the BSAI yellowfin sole fishery ITAC, and 80% from the EBS pollock fishery ITAC. No later than June 10, unused "A" season AI pollock directed fishing allowance (DFA), and the entire "B" season AI pollock DFA, shall be rolled back to the EBS pollock fishery. Before making the apportionment as described here, the AI pollock DFA is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

3.0 Monitoring vessel activity

3.1 Status quo (this option imposes only those monitoring and enforcement requirements that would be required if there were no change in regulation).

3.2 "Increased monitoring" alternative. This alternative would have several required measures (not options). These include:

1. The Aleut Corporation must notify the NMFS Alaska Region with a list of which vessels are authorized by it to fish for pollock in the Aleutians; notification must be at least 14 days prior to the anticipated start of fishing. The NMFS Restricted Access Management (RAM) Division will verify each vessel's eligibility (Federal Fisheries Permit (FFP), Alaska Department of Fish and Game (ADF&G) number, United States Coast Guard (USCG) fishery endorsement, length, or American Fisheries Act (AFA) status) and provide to the Aleut Corporation a list of qualified vessels and the date fishing may commence. These vessels must carry documentation showing they have RAM approval and Aleut Corporation permission;
2. Catcher vessels are prohibited from fishing for pollock in the Aleutian Islands if pollock harvested in the Bering Sea or Gulf of Alaska (GOA) are on board. Also, catcher vessels are prohibited from fishing for pollock in the Bering Sea or GOA if Aleutian Islands pollock are on board;
3. AFA requirements extend to catcher-processors and motherships (this extends AFA level observer and scale requirements to catcher/processors (CPs) under 60 feet and to unlisted AFA vessels);
4. Shoreside processors or stationary processors accepting deliveries of AI pollock must have an approved Catch Monitoring Control Plan;
5. The Aleut Corporation will be responsible for keeping its harvests and its agents' harvests within the AI pollock directed fishing allowance. The Aleut Corporation shall be responsible for designating a person as a quota manager for pollock catch accounting; this person shall report to NMFS Sustainable Fisheries Division with weekly pollock catch summaries.

3.3 "Observer" alternative. <u>Option 3.3a</u>: All the requirements of Alternative 3.2 would apply; in addition, all catcher vessels would be required to have 100% observer coverage while operating in the Aleutians. <u>Option 3.3b</u>: All of the requirements of Alternative 3.2 would apply; in addition, all catcher vessels would be required to have 30% observer coverage while operating in the Aleutian Islands and at least one trip by each participating vessel would have to be observed.

4.0 Small vessels

4.1 No action. Take no steps to delay ability of Aleut Corporation to introduce vessels under 60 feet in length overall (LOA).

4.2 Defer small vessel participation until a later date two (2006) or five (2009) years from 2004 to allow for development of a management program.

5.0 Economic development report mandate

5.1 No action: do not require the Aleut Corporation to submit a report to the Council or NMFS.

5.2 Require the Aleut Corporation to submit an annual report to the Council.

5.3 Require the Aleut Corporation to submit an annual report to NMFS or the State of Alaska comparable to the annual reports submitted by the CDQ groups.

5.4 Require the Aleut Corporation to submit a report to the Council prior to its June 2006 meeting. At the June 2006 meeting, the Council shall review the AI pollock fishery's performance including information on harvest success, development of a small vessel fleet, and progress toward completion of pollock processing capacity to determine if adjustments to the AI pollock TAC may be appropriate in light of Section 803 of the CAA and Senator Stevens' floor language.

6.0 Chinook salmon bycatch management

6.1 No action. Chinook salmon bycatch in the AI pollock fishery would count against the BSAI Chinook salmon bycatch cap.

6.2 Chinook salmon bycatch in the AI pollock fishery would not count toward the Chinook salmon bycatch cap in the BSAI.

6.3 A new 360 Chinook salmon bycatch cap is set for the AI pollock fishery which, when attained, results in closure of the AI Chinook Salmon Savings Area only.

The Council's preferred alternative

The Council's preferred alternative was adopted in June 2004. The elements of the preferred alternative include provisions governing: (a) allocation size, (b) allocation mechanism, (c) monitoring vessel activity, (d) small vessels, (e) economic development reporting, and (f) Chinook savings. The elements of the Council's motion follow:

Allocation Size

Starting in 2005:

1. Annual TAC

   (a) When the AI ABC is equal to or more than 19,000 mt, the AI TAC shall equal 19,000 mt.
   (b) When the AI ABC is less than 19,000 mt, the AI TAC shall be no more than the ABC.

2. The AI pollock CDQ directed fishing allowance shall be established as 10 percent of the AI TAC. The remaining amount will be termed the initial TAC (ITAC)[4]

3. The ICA shall be deducted from the annual ITAC.

4. Seasonal Apportionments

The A season apportionment of the DPF shall be the lesser of

(a) no more than 40% of the ABC or
(b) the annual ITAC after subtraction of the ICA

The total harvest in the A season (DPF, CDQ, and ICA) shall not exceed 40% of the ABC.

The B season apportionment will be equal to the annual ITAC minus the ICA and minus A season DPF. The B season apportionment may be further adjusted by rollover of unharvested A season pollock.

Allocation Mechanism

2.2 The AI pollock TAC will be funded by a reduction in the EBS pollock TAC. Any unused pollock ITAC from the AI fishery will be rolled back to the EBS pollock ITAC. This will occur at the earliest time possible in the calendar year. Before making the apportionment as described here, the AI pollock <u>TAC</u> is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so. (minor modifications have been made to this text)

Monitoring Vessel Activity

3.2 "Increased monitoring" alternative. This alternative would have several components (not options). These include:

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[4]The CDQ pollock directed fishing allowance is seasonally apportioned 40/60 between the A/B seasons, respectively, under 50 CFR 679.23(e)(2).

- The Aleut Corporation must notify the NMFS Alaska Region with a list of which vessels are authorized by it to fish for pollock in the Aleutians; notification must be at least 14 days prior to the anticipated start of fishing. The NMFS RAM Division will verify each vessel's eligibility (FFP, ADF&G number, USCG fishery endorsement, length, or AFA status) and provide to the Aleut Corporation a list of qualified vessels and the date fishing may commence. These vessels must carry documentation showing they have RAM approval and Aleut Corporation permission;
- Catcher vessels are prohibited from fishing for pollock in the Aleutian Islands if pollock harvested in the Bering Sea or GOA are on board. Also, catcher vessels are prohibited from fishing for pollock in the Bering Sea or GOA if Aleutian Islands pollock are on board;
- AFA requirements extend to catcher-processors and motherships (this extends AFA level observer and scale requirements to CPs under 60 feet and to unlisted AFA vessels);
- AI pollock may only be delivered to a shoreside processor or stationary processor which has an approved Catch Monitoring Control Plan or to one or more AFA qualified vessels, as permitted by legislation.
- The Aleut Corporation will be responsible for keeping its harvests and its agents' harvests within the AI pollock directed fishing allowance. The Aleut Corporation shall be responsible for designating a person as a quota manager for pollock catch accounting; this person shall report to NMFS Sustainable Fisheries Division with weekly pollock catch summaries.
- Vessels < 60 feet shall take a Cadre observer if provided by NMFS. The < 60 ft. vessel observer cadre restriction is waived under this program. Vessels < 60 feet that take an observer must comply with the safety provisions in 50 CFR 679.50(g)(1)(ii).

Small Vessels

4.1 No action. Take no steps to delay ability of Aleut Corporation to introduce to the fishery vessels under 60 feet LOA.

Council will review the observer issue associated with vessels < 60 ft. concurrent with the June 2006 economic report review.

Economic Development Report

5.2 Require the Aleut Corporation to submit an annual economic development report to the Council, similar to the AFA co-op reports. A draft report will be due in December and a final report will be due in February.

5.4 Require the Aleut Corporation to submit a report to the Council prior to its June 2006 meeting. At its June 2006 meeting, the Council shall review the AI pollock fishery performance, including how the money was spent, information on harvest success, Chinook salmon bycatch, development of a small vessel fleet, and progress toward completion of pollock processing capacity to determine if further adjustments to the AI pollock TAC may be appropriate, in light of Section 803 of the Consolidated Appropriations Act, 2004 and Senator Stevens' floor language.

Chinook Savings

6.2 Chinook salmon bycatch in the AI pollock fishery would not count against the BSAI Chinook salmon bycatch caps.

6.3 The Chinook salmon bycatch cap of 700 applies to the AI Chinook salmon savings area closure only.

The preferred alternative and the scope of the analysis

The Council's June motion, as it was clarified in October, drew on and adapted alternatives analyzed in the EA/RIR and falls within the scope of the alternatives adopted in that document. The principal modifications concern the determination of the AI pollock allocation size, and its distribution between the "A" and "B" seasons.

The allocation size provisions of the motion have several key characteristics. These include (a) a cap of 19,000 mt on the TAC, (b) an "A" season DPF apportionment of no more than 40% of the ABC or the annual ITAC after subtraction of the ICA, which ever is less, (c) a potential "B" season allocation, and (d) a deterministic link between ABC and TAC for ABCs above 19,000 mt, but no deterministic link for ABCs below 19,000 mt. These attributes all fall within the scope of the allocation size alternatives considered in the EA/RIR.

- The EA/RIR analyzed the impacts of a range of directed fishery allowances up to 58,000 mt. Alternatives 1.2, 1.3 and 1.3^C analyzed a 40,000 mt cap, while Alternatives 1.4 and 1.4^C analyzed a 15,000 mt cap. The cap in the Council's preferred alternative falls below the 40,000 mt cap, and close to the 15,000 mt cap. Specific AI pollock allocations will be made through the annual specifications process, and will be subject to NEPA analysis at that time.
- Alternatives 1.3^C and 1.4^C included "A" season apportionments equal to 40% of the ABC. These are evaluated in Section 4.2.3 of the EA.
- Alternatives 1.1 and 1.2 in combination with Alternatives 2.2, 2.3, and 2.4 provided for "B" season fisheries, contingent on Aleut Corporation ability to make use of their allocation in that season.
- Alternatives 1.3^C and 1.4^C included deterministic relationships between ABC and ITAC, while 1.3 and 1.4 evaluated ITAC determined in a separate process from the ABC.

The allocation mechanism is Alternative 2.2, which was analyzed in the EA/RIR. In October the Council clarified that it did not intend to change regulations to exempt the Aleut Corporation from contributing to CDQ allocations along with other pollock harvesters. The provisions for monitoring vessel activity are primarily Alternative 3.2, which was analyzed in the EA/RIR. Alternative 3.3 analyzed the provision of observer coverage to vessels. Provision 3.2-6 in the Council's motion, requiring vessels under 60 feet to take a Cadre observer at NMFS's request, is an attenuated version of 3.3, and falls within the scope of the analysis of 3.3. Small vessel alternative 4.1 was analyzed in the EA/RIR. The Council's expression of intent to review the observer issue in June 2006 does not require analysis. The Council's request for an annual economic development report, and for a cumulative report in June 2006, were analyzed in the EA/RIR. The Council modified the alternatives to clarify the nature of the information requested, but these did not substantively change the nature of the alternatives. The Council adopted Chinook bycatch alternative 6.2 as analyzed. It also adopted a modified version of Alternative 6.3. Alternative 6.3 was modified to adopt a higher cap on the AI Chinook cap and closure program. The higher cap was based on a high end AI Chinook bycatch rate, as analyzed in Section 4.7, and Table 4.7.1-2. The modification thus falls within the scope of the analysis.

Environmental Assessment

An Environmental Assessment (EA) was prepared for this action to address the statutory requirements of the NEPA. The purpose of the EA is to predict whether the impacts to the human environment resulting from the action will be "significant," as that term is defined under NEPA. If the predicted impacts from the preferred alternatives are found not to be significant, and those alternatives are chosen, no further analysis is necessary to comply with the requirements of NEPA.

The determination that the Council's chosen alternatives will not significantly adversely impact the human environment is called a "Finding of No Significant Impact" or FONSI. The finding is recommended by the Council and NMFS Alaska Region and is approved by NMFS Headquarters. In reality, the Secretary of Commerce in consultation with the Council is the authority. When the Council chooses its preferred elements in this action, and these have been determined to not result in a significant impact on the quality of the human environment, NMFS prepares a short document to that effect, a FONSI. The FONSI outlines the reasons why the action will not significantly impact the human environment, the selection of the alternatives for the action, and why preparation of an Environmental Impact Statement is not required. The FONSI would end the NEPA process for this action. A FONSI would be prepared after the Council makes its recommendations during the June 2004 meeting and after NMFS' review of the EA/RIR and determination that a FONSI is appropriate.

An EA must consider whether an environmental impact is significant. Significance is determined by considering the contexts (geographic, temporal, societal) in which the action will occur, and the intensity of the action. The evaluation of intensity should include consideration of the magnitude of the impact, the degree of certainty in the evaluation, the cumulative impact when the action is related to other actions, the degree of controversy, and violations with other laws.

Four significance assignments are made in this EA. These are:

Significantly adverse (S-): Significant adverse effect in relation to the reference point and based on ample information and data and the professional judgement of the analysts who addressed the topic.

Insignificant impact (I): Insignificant effect in relation to the reference point; this determination is based on information and data, along with the professional judgement of the analysts, that suggest that the effects will not cause a significant change to the reference point condition.

Significant beneficial (S+): Significant beneficial effect in relation to the reference point and based on ample information and data and the professional judgement of the analysts who addressed the topic.

Unknown (U): Unknown effect in relation to the reference point; this determination is characterized by the absence of information and data sufficient to adequately assess the significance of the impacts, either because the impact is impossible to predict, or because insufficient information is available to determine a reference point for the resource, species, or issue.

The significance of impacts of the actions analyzed in this EA were determined through consideration of the following information as required by NEPA, NOAA Administrative Order (NOA) 216-6, Section 6 and 40 CFR Section 1508.27:

Context: The setting of the proposed action is the groundfish fisheries of the BSAI exclusive economic zone. Any effects of this action are limited to these areas and adjacent shores, primarily Adak Island. The effects of the action on society, within these areas, is on individuals directly and indirectly participating in the groundfish fisheries and on those who use the ocean resources. Because the action affects the management of groundfish fisheries in the BSAI, which may have direct and indirect societal effects, the EA/RIR evaluated the regional societal effects of the action.

Intensity: Listings of considerations to determine intensity of the impacts are in 40 CFR § 1508.27 (b) and in the NOA 216-6, Section 6. Each consideration is addressed below in order as it appears in the regulations.

Adverse or beneficial impact determinations for marine resources (including sustainability of target and nontarget species, damage to ocean or coastal habitat or essential fish habitat, effects on biodiversity and ecosystems, and marine mammals)

Each of the alternatives for the six decisions faced by the Council was evaluated for significance with respect to the following potential direct and indirect impacts on marine resources:

- Pollock stock
- Other target species and fisheries
- Incidental catch of other and non-specified species
- Incidental catch of forage species
- Incidental catch of prohibited species
- Steller sea lions
- Other marine mammals
- Seabirds
- Habitat
- Ecosystem
- State managed and parallel fisheries

The criteria used to determine significance for each of these impacts are described in Section 4.1. The evaluations of direct and indirect significance may be found in Sections 4.2 to 4.7. These evaluations are summarized in Tables ES-1 to ES-6, and Table ES-9. The evaluation of the cumulative effects for significance may be found in Chapter 5. The cumulative effects significance evaluations are summarized in Table ES-7.

In general, these alternatives were found to have insignificant effects with respect to the range of potential impacts. There were two exceptions. Monitoring alternative 3.1 (status quo) was found to have "unknown" effects with respect to pollock fishing mortality, other target species and fisheries, incidental catch of other and non-specified species, incidental catch of forage species, and incidental catch of prohibited species. While pollock mid-water trawling is a relatively clean fishery, and bycatch of these species classes were expected to be insignificant, monitoring issues connected with Alternative 3.1 raised sufficient uncertainty about NMFS' ability to monitor mortality and mortality rates, that these impacts were given an "unknown" significance rating. (See Section 4.4.2). Monitoring alternative 3.3 (observer requirements) was found to have "unknown" effects with respect to the socio-economic impact of safety. The requirement would increase the numbers of persons potentially at risk, but vessels would be subject to more stringent safety inspection requirements. The net impact was difficult to discern. (See Section 4.2.4).

Public health and safety

Subsequent actions by the Council to create an Aleutian Islands DPF may have safety implications if trawlers under 60 feet LOA find it difficult to operate safely outside of the SSL protected areas. The CAA requires the AI pollock harvest to be allocated 50 % to vessels less than 60 feet in length starting in 2013. Many knowledgeable observers have noted the dangers of fishing in this area. A small vessel (under 60 feet in length) fleet, required to operate twenty miles from shore by SSL protection measures during a winter fishery, raises particular safety concerns. The current action does not create an allocation or, by itself, permit pollock fishing in the AI. A subsequent Council recommendation would be required for that. For this reason, the allocation size alternatives were rated "insignificant" with respect to safety. Nevertheless, it is important to keep the safety issue in mind if the fishery develops. Safety issues are further addressed in analysis of annual harvest specifications. The monitoring alternative 3.3, which would place observers on vessels under 60 feet, creating unknown safety implications by potentially increasing the number of persons on small vessel in the AI.

Cultural resources and ecologically critical areas

These actions take place in the geographic areas of the Bering Sea and Aleutian Islands, generally from 3 nm to 200 nm offshore. The land adjacent to these areas contains cultural resources and ecologically critical areas. The marine waters where the fisheries occur contain ecologically critical areas. Effects on the unique characteristics of these areas are not anticipated. Evaluations of impacts on habitat and on ecosystems were evaluated and found to be "insignificant."

Controversiality

These actions deal with management of the groundfish fisheries. Differences of opinion existed among various industry, environmental, management, and scientific groups on the appropriate levels of TAC to set for various target species and in particular fishery management areas. Aspects of the current action may be controversial. The Council has chosen to make potential AI pollock allocations from within the BSAI OY of 2 million mt. Because the OY is currently fully utilized for the TACs of other species, this means that an AI allocation will require a reduction in the TACs for other species. This creates distributional issues that may be controversial. One of the monitoring alternatives, 3.3, involves observer requirements on vessels under 60 LOA. Observers have not been required before on vessels of this size in the GOA or BSAI. This proposal may be controversial.

Some persons are concerned about the environmental impacts associated with reopening a pollock fishery in the Aleutian Islands. This could be a source of controversy. The supplemental environmental impact statement (SEIS) for the Steller sea lion protection measures and this EA fully analyzed the effects of an AI DPF outside of critical habitat for which this action establishes the management framework. Further effects on Steller sea lions of an AI DPF were determined to be insignificant. The current action does not create an allocation of AI pollock. The allocation of pollock for a directed fishery would be implemented each year during the harvest specifications process. This action amends the BSAI FMP to establish the management framework for an AI DPF to be allocated to the Aleut Corporation. The controversiality of the action primarily will depend on how allocation issues are resolved during the harvest specifications and if any new information indicates effects that were not previously anticipated.

Risks to the human environment, including social and economic effects

Risks to the human environment associated with groundfish fisheries are described in detail in the groundfish PSEIS (NMFS 2004a). Because of the mitigation measures implemented with every past action, it is anticipated that there will be no significant adverse impacts to the human environment beyond those disclosed in the PSEIS (NMFS 2004a) or the Steller Sea Lion Protection Measures SEIS (NMFS 2001b). No significant adverse impacts to the human environment were identified for the alternatives evaluated in this EA. As noted above, monitoring alternative 3.3 (observer requirements) was found to have “unknown” effects with respect to the socio-economic impact of safety. This alternative requires observer coverage on small vessels (under 60 feet in length). The requirement would increase the numbers of persons potentially at risk, but vessels would be subject to more stringent safety inspection requirements. The net direction and significance of the effect are unknown.

Future actions

Future actions related to this action may result in impacts. The action under consideration is an amendment to the BSAI FMP and supporting regulations meant to provide a structure within which future AI DPFs could be allocated to the Aleut Corporation. It does not establish a total allowable catch amount (TAC) or DPF allowance for AI pollock, and it does not affect existing BSAI TACs for other species. A subsequent recommendation by the Council during the harvest specifications process will be required in order to provide harvest amounts for an AI DPF. With the requirement to allocate a portion of the pollock harvest to vessels less than 60 feet, a potential future action may reduce some closure areas required by the Steller sea lion protection measures. Any reduction in closure areas would likely result in the reinitiation of Section 7 consultation under the Endangered Species Act (ESA), ensuring the future action is not likely to cause jeopardy or adverse modification or destruction of critical habitat. The opening of more near shore areas also may result in more potential for the introduction of rats onto rat free islands which may lead to an adverse effect on seabird colonies. However, the potential for opening new areas is speculative at this time. For all future actions, appropriate environmental analysis documents (EA or EIS) will be prepared to inform the decision makers of potential impacts to the human environment and to implement mitigation measures to avoid or minimize significant adverse impacts.

Cumulatively significant effects, including those on target and nontarget species

The EA evaluated cumulative impacts in Chapter 5. Chapter 5 reviewed nine past, present, and reasonably foreseeable future actions that could combine with the impacts of the actions considered here to have a combined effect on the quality of the human environment. These factors were:

- The annual specifications process
- The AI Steller Sea Lion population trajectory
- Development at Adak
- Other regional development
- State managed fisheries
- Changes in SSL protection measures
- Other ESA issues
- Evolving understanding of pollock stock structure in the Aleutians.
- Benthic Habitat

The cumulative effects analysis conclusions are summarized in Table ES-7. The cumulative effects analysis did not find that the alternatives would have significant incremental impacts when added to other past, present, or reasonably foreseeable future actions.

Districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places

This action will have no effect on districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places, nor cause loss or destruction of significant scientific, cultural, or historical resources.

Impact on ESA listed species and their critical habitat

ESA listed species that range into the fishery management areas are listed in Table ES-8. An FMP level Section 7 consultation was completed for the groundfish fisheries in November 2000 (NMFS 2000d) for those species under the jurisdiction of NMFS. This document is limited to those species under NMFS jurisdiction and covers most of the endangered and threatened species which may occur in the action area, including marine mammals and Pacific salmon.

Listed seabirds are under the jurisdiction of the USFWS which has completed an FMP level BiOp (USFWS 2003a) and project level BiOp (USFWS 2003b) for the groundfish fisheries. Both USFWS BiOps concluded that the groundfish fisheries and the annual setting of harvest specifications were unlikely to cause the jeopardy of extinction or adverse modification or destruction of critical habitat for ESA listed seabirds.

Under the FMP level BiOp (NMFS 2000d), the western distinct population segment of Steller sea lions was the only ESA listed species identified as likely to be adversely affected by the groundfish fisheries. A subsequent biological opinion on the Steller sea lion protection measures was issued in 2001 (NMFS 2001b, Appendix A, Supplement June 19, 2003). The 2001 BiOp found that the groundfish fisheries conducted in accordance with the Steller sea lion protection measures were unlikely to cause jeopardy of extinction or adverse modification or destruction of critical habitat for Steller sea lions.

No consultations are required on this action at this time because based on the best available information, the proposed actions will not modify the actions already analyzed in previous BiOps, are not likely to adversely affect ESA listed species beyond the effects already analyzed, and the incidental take statements of ESA species are not expected to be exceeded. Summaries of the ESA consultations on individual listed species are located in the section 3.0 with accompanying tables from the Draft PSEIS under each ESA listed species' management overview (NMFS 2003a).

Violations of Federal, state, or local laws or requirements for the protection of the environment

This action poses no known violation of Federal, State, or local laws or requirements for the protection of the environment. Implementation of this action would be conducted in a manner consistent, to the maximum extent practicable, with the provisions of the Alaska Coastal Management Program within the meaning of section 30(c)(1) of the Coastal Zone Management Act of 1972, and its implementing regulations.

Introduction and spread of nonindigenous species

This action may affect the introduction or spread of nonindigenous species into the AI; however these impacts were analyzed in Section 4.2 and were determined to be not significant. The main concern is the potential for the accidental introduction of rats on an island in the Aleutian Island region that currently is not rat infested. The impacts on the ecological relationships on such an island could be greatly changed; if burrow nesting birds were present, that species could be eventually eradicated due to rat predation. If this occurred on an island with a significant breeding population of that species, this could have large impacts. However, the likelihood of such an event is small, there is already other vessel traffic in the area to which the AI pollock vessels would be a small addition.

Comparison of Alternatives

In June 2004 the Council adopted a preferred alternative of which the allocation of TAC was further clarified in October 2004. This is described in detail in Section 2.3.

The direct and indirect effects of each alternative are evaluated in Chapter 4. The first section of that chapter describes the evaluation criteria. Each subsequent section deals with one of the Council's decision elements (for example, "allocation size," and "allocation funding"). The evaluation of the Council's preferred alternative is done in the last subsection of each of those chapters. The cumulative effects analysis may be found in Chapter 6. The direct, indirect, and cumulative effects analyses for all alternatives are summarized in the tables in this section.

Allocation Size

Four alternatives were examined for the "allocation size" decision (Table ES-1). Alternative 1.1 was a no action alternative. Alternative 1.2 would add language in the FMP amendment directing the Council to consider CDQ allocations when making the AI pollock allocation, and in no case to make an AI pollock allocation greater than 40,000 mt. Alternative 1.2 may constrain future AI pollock allocations in the short run, should ABCs be higher than the 40,000 mt cap. In the longer run, it would be possible for the Council to amend the FMP to relax the constraint. The proposed language directing the Council to consider CDQ program allocations when making Aleut Corporation allocations is consistent with a wide range of potential pollock allocations to the Aleut Corporation. Alternative 1.3 essentially sets a 40,000 mt cap on the amount of DPF the Council would allocate to the AI pollock fishery, and Alternative 1.4 similarly sets a maximum, in this instance 15,000 mt. Either 1.3 or 1.4 DPFs could be less than these maxima. The latter two alternatives give industry an earlier sense of what the AI allocation might be, perhaps facilitating industry negotiations and reducing acrimony during the specifications process. No alternative relating to allocation size would have significant impacts on the environment.

In addition to the alternatives described, two additional alternatives, designated 1.3^C and 1.4^C were analyzed. In February 2004 the Council requested an analysis of Alternatives 1.1 and 1.2. In April 2004 the Council requested analysis of two additional alternatives. As ntoed above,. the intent of the motion was to provide additional alternatives that would establish the specific size of the allocation to this fishery so that industry would know the approximate magnitude of the TAC prior to industry negotiations. In the review of this motion, the Council's intent was interpreted by the analysts preparing this EA/RIR and phrased as described for Alternatives 1.3 and 1.4. Upon a careful comparison of the language of 1.3 and 1.4, and the language in the Council motion, differences were evident. The Council's original April language has been identified and analyzed as Alternatives 1.3^C and 1.4^C ("C" designating "Council"). (See the start of Section 4.2.1 and Section 4.2.3 for detailed discussions of these issues.)

As recommended in October 2004, the Council's preferred alternative set a cap of 19,000 mt on the annual AI pollock TAC which includes the AI pollock DPF, the CDQ directed fishing allowance, and the ICA catches. For ABCs above the cap, the TAC would equal the cap; for ABCs below the cap, the TAC could not exceed the ABC, but could be set at a lower amount. The "A" season harvest (DPF + CDQ +ICA) would equal no more than the lessor of 40% of the ABC, or the annual ITAC after subtraction of the ICA. The "B" season apportionment would be equal to the balance. Detailed descriptions of the alternative may be found in Sections 2.3 and 4.2.4.

Allocation Mechanism

The Council has chosen to make AI pollock allocations count against the BSAI OY (Table ES-2). Thus, an increase in AI pollock TAC will reduce one or more other BSAI TACs. Four alternatives were considered: (2.1) no action - no FMP or regulatory changes; (2.2) fund AI pollock TACs from EBS pollock TAC; (2.3) fund AI pollock TAC equiproportionately from all other BSAI TACS; (2.4) fund AI pollock TAC as in (2.3), except that there would be no reduction in BSAI sablefish TACs; and (2.5) fund the AI allocation by reducing the BSAI yellowfin and rock sole fishery TACs and the EBS pollock TAC, rolling back unused and B season TAC to the EBS pollock fishery. The different allocations will generally have relatively small impacts on TACs. An AI pollock allocation of 40,000 mt is only two percent of the BSAI OY, and less than 3% of the current BSAI pollock TAC of 1,492,000 mt. Environmental impacts would be insignificant. This issue does have distributional implications, particularly 2.5 which reduces two sole fisheries and the EBS pollock fishery TACs while potentially "giving back" TAC only to the EBS pollock fishery.

The Council chose Alternative 2.2 as its preferred alternative. Only the FMP would be amended to reflect the Council's policy for funding AI pollock from the EBS pollock TAC.

Monitoring

Three monitoring alternatives were considered: (3.1) no action - no additional monitoring measures; (3.2) a heightened monitoring alternative with five elements; and (3.3) an "observer" alternative that adds observer requirements to the elements in Alternative 3.2 (Table ES-3). The "no action" alternative was rated with unknown significance over concerns with the monitoring of catch and for concerns over estimates of fishery mortality for various species in this new fishery, taking place in a remote area, under monitoring rules that are less comprehensive than those for other BSAI pollock fishing. The "observer" alternative was rated "unknown" for potential economic impacts. Observers may be expensive for small vessels and may reduce the economic viability of the small vessel fleet in this area. Moreover, placing observers on small vessels may put more persons at risk in case of an accident.

The Council's preferred alternative was 3.2, modified by requiring a cadre observer to be taken on vessels less than 60 feet LOA which meets the safety requirements of 50 CFR 679.50(g)(1)(ii), when requested by NMFS.

Small Vessel Entry

The Council considered a provision in the FMP that would prevent fishing by vessels under 60 feet LOA for two or five years (Table ES-4). Alternative 4.1, the "no action" alternative, would not have added this language. This action alternative, Alternative 4.2, appears to provide few benefits, at the risk of interfering with the Aleut Corporation's development plans. Initially, it was thought that making arrangements for small vessels might delay the introduction of the program. Effects from both alternatives were insignificant. However, whether or not this provision for deferring entry of small vessels is in the FMP, the Aleut Corporation would not be able to introduce small vessels unless acceptable monitoring arrangements were made. In this case, the Aleut Corporation could contract with AFA vessels to harvest its allocation until such time as the provisions were made to accept small catcher vessel deliveries.

The Council chose Alternative 4.1 as its preferred alternative.

Economic Development Reporting

The Council considered requiring the Aleut Corporation to report on the ways it had used its allocation to advance the development of Adak (Table ES-5). Alternative 5.1, no action (no report), Alternative 5.2, a basic report, Alternative 5.3, a CDQ-style reporting requirements were considered, and Alternative 5.4, a provision for a June 2006 report to check on the fishery performance and use of proceeds for economic development to see if adjustments should be made. The reporting requirement has no environmental implications. It may have economic implications if it helps ensure that the Aleut Corporation use of the pollock allocation is advancing the distributional goals of Congress. No legal obligation exists to monitor Aleut Corporation use of the allocation for development. A basic report could be provided at relatively low cost. A CDQ-style report could be expensive to produce, and for NMFS or the State of Alaska to fully evaluate - plus it would contain confidential data to which the Council would not have access. Because the Aleut Corporation could draw on existing reporting activities, it is believed that it could produce a detailed report at less additional expense that the average cost for CDQ reports.

The Council's preferred alternative included Alternatives 5.2 and 5.4, with modifications requiring reporting of additional information on incidental catches.

Chinook Bycatch

The Council considered proposals to address potential problems with Chinook salmon bycatch (Table ES-6). Alternative 6.1 would require Chinook salmon bycatch in the AI pollock fishery to count against the BSAI pollock Chinook salmon bycatch cap. If Chinook salmon bycatch in the AI is high, particularly early in the year, the Chinook Salmon Savings Areas would close, perhaps prematurely, having economic costs to vessels that have to then move and fish elsewhere. A second alternative, 6.2, would exempt the AI fishery from the cap and savings area closure process. This would have little impact other than potentially allowing larger bycatch of Chinook salmon to occur. It also would set a precedent of allowing a fishery to be prosecuted without a Chinook salmon bycatch avoidance incentive. Alternative 6.3 would set a Chinook salmon bycatch cap of 360 fish for the AI pollock fishery. Here the incentive would be to keep bycatch low or the AI Chinook Salmon Savings Area would close, perhaps having economic cost to the fleet. None of these alternatives would have adverse environmental impacts.

The Council's preferred alternative was a combination of Alternatives 6.2 and 6.3, with 6.3 modified to change the 360 fish cap to 700 fish. Reaching the 700 fish cap would result in the closure of the Chinook Salmon Savings area located in the AI subarea only. If the BS subarea Chinook salmon cap of 29,000 fish is reached, both Chinook Salmon Savings Areas in the AI and BS subareas would be closed.

Table ES-1 Summary of Significance Determinations for Decision 1 Alternatives: Effects of Allocation Size.

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown								
Issue	**Alt. 1 (no action)**	**Alt. 2**	**Alt. 3**	**Alt. 4**	**Alt. 1.3^{C} (without 2.5)**	**Alt.1.3^{C}(with 2.5)**	**Alt. 1.4^{C}**	**Council's preferred alt.**
	No action. TAC set through specifications process.	**Guidance for TAC from CDQ fisheries (~25,000 mt) with 40,000 mt cap.**	**DPF 40,000 mt or less.**	**DPF 15,000 mt or less, with "A" season fishery only.**	**Similar to Alt 1.3**	**Similar to Alt 1.3**	**Similar to Alt 1.4**	**19,000 mt cap, "A"/"B" season split**
Pollock stock	I	I	I	I	I	I	I	I
Other target species and fisheries	I	I	I		I	I	I	I
Incidental catch of other and nonspecified species	I	I	I	I	I	I	I	I
Incidental catch of forage species	I	I	I	I	I	I	I	I
Incidental catch of PSC	I	I	I	I	I	I	I	I
Steller sea lions	I	I	I	I	U	I	I	I
Other marine mammals	I	I	I	I	I	I	I	I
Seabirds	I	I	I	I	I	I	I	I
Habitat	I	I	I	I	I	I	I	I
Ecosystem	I	I	I	I	I	I	I	I
State-managed and parallel fisheries	I	I	I	I	I	I	I	I
Socio-economic	I	I	I	I	I	I	I	I

Table ES-2 Summary of Significance Determinations for Decision 2 Alternatives: Effects of Allocation Mechanism.

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown					
Issue	**Alternative 1 (no action)**	**Alternative 2 (Council's Preferred Alternative)**	**Alternative 3**	**Alternative 4**	**Alternative 5**
	No action. No fishery.	**TAC "funded" from Bering Sea pollock fishery**	**TAC "funded" from BSAI groundfish fisheries equi-proportionally**	**TAC "funded" from BSAI groundfish fisheries equiproportionally, excluding IFQ sablefish fishery**	**TAC "funded" by an amount that is 10% from yellowfin sole, 10% from rock sole, and 80% from EBS pollock TACs, with rollback to EBS pollock**
Pollock stock	I	I	I	I	I
Other target species and fisheries	I	I	I	I	I
Incidental catch of other and nonspecified species	I	I	I	I	I
Incidental catch of forage species	I	I	I	I	I
Incidental catch of PSC	I	I	I	I	I
Steller sea lions	I	I	I	I	I
Other marine mammals	I	I	I	I	I
Seabirds	I	I	I	I	I
Habitat	I	I	I	I	I
Ecosystem	I	I	I	I	I
State-managed and parallel fisheries	I	I	I	I	I
Socio-economic	I	I	I	I	I

Table ES-3 Summary of Significance Determinations for Decision 3 Alternatives: Effects of Monitoring Vessel Activity

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown				
Issue	**Alternative 1 (no action)**	**Alternative 2**	**Alternative 3**	**Council's preferred alternative**
	No action. Status quo monitoring and enforcement	**Increased level of monitoring**	**Increased level of monitoring plus 100 % observer coverage on C/Vs and 30% option**	**The Council adotped Alt 2 with requirement for small vessels to take Cadre observer if requested**
Pollock stock	U	I	I	I
Other target species and fisheries	U	I	I	I
Incidental catch of other and nonspecified species	U	I	I	I
Incidental catch of forage species	U	I	I	I
Incidental catch of PSC	U	I	I	I
Steller sea lions	I	I	I	I
Other marine mammals	I	I	I	I
Seabirds	I	I	I	I
Habitat	I	I	I	I
Ecosystem	I	I	I	I
State-managed and parallel fisheries	I	I	I	I
Socio-economic	I	I	I/U	I

Table ES-4 Summary of Significance Determinations for Decision 4 Alternatives: Effects of Small Vessel Entry Date

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown		
Issue	**Alternative 1 (no action)**	**Alternative 2**
	No action. No delay in entry of vessels < 60 feet LOA. Council's preferred alternative.	**Delay entry of small vessels 2 or 5 years from 2004**
Pollock stock	I	I
Other target species and fisheries	I	I
Incidental catch of other and nonspecified species	I	I
Incidental catch of forage species	I	I
Incidental catch of PSC	I	I
Steller sea lions	I	I
Other marine mammals	I	I
Seabirds	I	I
Habitat	I	I
Ecosystem	I	I
State-managed and parallel fisheries	I	I
Socio-economic	I	I

Table ES-5 Summary of Significance Determinations for Decision 5 Alternatives: Effects of Economic Development Reporting

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown					
Issue	**Alternative 1 (no action)**	**Alternative 2**	**Alternative 3**	**Alternative 4**	**Council's preferred alternative**
	No action. No annual economic report required.	**Require annual economic report.**	**Require annual economic report comparable to CDQ reports.**	**Report to Council in June 2006; Council will evaluate fishery performance.**	**The council adotped Alternatives 2 and 4, with additional requiremenst for incidental catch info.**
Pollock stock	I	I	I	I	I
Other target species and fisheries	I	I	I	I	I
Incidental catch of other and nonspecified species	I	I	I	I	I
Incidental catch of forage species	I	I	I	I	I
Incidental catch of PSC	I	I	I	I	I
Steller sea lions	I	I	I	I	I
Other marine mammals	I	I	I	I	I
Seabirds	I	I	I	I	I
Habitat	I	I	I	I	I
Ecosystem	I	I	I	I	I
State-managed and parallel fisheries	I	I	I	I	I
Socio-economic	I	I	I	I	I

Table ES-6 Summary of Significance Determinations for Decision 6 Alternatives: Effects of Chinook Salmon Bycatch Management

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown				
Issue	**Alternative 1 (no action)**	**Alternative 2**	**Alternative 3**	**Council's preferred alternative**
	No action. Chinook bycatch counts against BSAI cap.	**Chinook bycatch does not count against BSAI cap.**	**New 360 Chinook salmon bycatch cap for AI pollock fishery.**	**The council adopted Alt. 2 and Alt. 3 (after modifying the limit from 360 to 700 Chinook)**
Pollock stock	I	I	I	I
Other target species and fisheries	I	I	I	I
Incidental catch of other and nonspecified species	I	I	I	I
Incidental catch of forage species	I	I	I	I
Incidental catch of PSC	I	I	I	I
Steller sea lions	I	I	I	I
Other marine mammals	I	I	I	I
Seabirds	I	I	I	I
Habitat	I	I	I	I
Ecosystem	I	I	I	I
State-managed and parallel fisheries	I	I	I	I
Socio-economic	I	I	I	I

Table ES-7 Cumulative effects summary for this action

Environmental Component	Alternatives																													
	1.1	1.2	1.3	1.4	1.3^{C}	1.3^{C}+2.5	1.4	1.P	2.1	2.2	2.3	2.4	2.5	2.P	3.1	3.2	3.3	3.P	4.1	4.2	4.P	5.1	5.2	5.3	5.4	5.P	6.1	6.2	6.3	6.P
Pollock	I	I	I	I	I	I	I	I	I	I	I	I	I	I	U	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Other target	I	I	I	I	I	I	I	I	I	I	I	I	I	I	U	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Other and Non-specif	I	I	I	I	I	I	I	I	I	I	I	I	I	I	U	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Forage sp	I	I	I	I	I	I	I	I	I	I	I	I	I	I	U	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
PSC	I	I	I	I	I	I	I	I	I	I	I	I	I	I	U	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Steller sea lions	I	I	I	I	U	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Other mar mamm	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Seabirds	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Habitat	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Ecosystem	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
State fisheries	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Socio-econ	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	U/I	I	I	I	I	I	I	I	I	I	I	I	I	I

Table ES-8 ESA listed and candidate species that range into the BSAI or GOA groundfish management areas.

Common Name	Scientific Name	ESA Status
Blue Whale	*Balaenoptera musculus*	Endangered
Bowhead Whale	*Balaena mysticetus*	Endangered
Fin Whale	*Balaenoptera physalus*	Endangered
Humpback Whale	*Megaptera novaeangliae*	Endangered
Right Whale	*Balaena glacialis*	Endangered
Sei Whale	*Balaenoptera borealis*	Endangered
Sperm Whale	*Physeter macrocephalus*	Endangered
Steller Sea Lion (WesternPopulation)	*Eumetopias jubatus*	Endangered
Steller Sea Lion (Eastern Population)	*Eumetopias jubatus*	Threatened
Chinook Salmon (Puget Sound)	*Oncorhynchus tshawytscha*	Threatened
Chinook Salmon (Lower Columbia R.)	*Oncorhynchus tshawytscha*	Threatened
Chinook Salmon (Upper Columbia R. Spring)	*Oncorhynchus tshawytscha*	Endangered
Chinook Salmon (Upper Willamette .)	*Oncorhynchus tshawytscha*	Threatened
Chinook Salmon (Snake River Spring/Summer)	*Oncorhynchus tshawytscha*	Threatened
Chinook Salmon (Snake River Fall)	*Oncorhynchus tshawytscha*	Threatened
Sockeye Salmon (Snake River)	*Oncorhynchus nerka*	Endangered
Steelhead (Upper Columbia River)	*Onchorynchus mykiss*	Endangered
Steelhead (Middle Columbia River)	*Onchorynchus mykiss*	Threatened
Steelhead (Lower Columbia River)	*Onchorynchus mykiss*	Threatened
Steelhead (Upper Willamette River)	*Onchorynchus mykiss*	Threatened
Steelhead (Snake River Basin)	*Onchorynchus mykiss*	Threatened
Steller's Eider [1]	*Polysticta stelleri*	Threatened
Short-tailed Albatross [1]	*Phoebastriaa albatrus*	Endangered
Spectacled Eider[1]	*Somateria fischeri*	Threatened
Kittlitz Murrelet[1]	*Brachyramphus brevirostris*	Candidate
Northern Sea Otter[1]	*Enhydra lutris*	Candidate

[1]The Steller's eider, short-tailed albatross, spectacled eider, Kittlitz murrelet, and northern sea otter are species under the management jurisdiction of the U.S. Fish and Wildlife Service. For the bird species, critical habitat has been established for the Steller's eider (66 FR 8850, February 2, 2001) and for the spectacled eider (66 FR 9146, February 6, 2001). The northern sea otter has been proposed as a candidate species by USFWS (November 9, 2000; 65 FR 67343). The Kittlitz murrelet has been proposed as a candidate species by USFWS (69 FR 24875, May 4, 2004).

Table ES-9 Summary of Significance Determinations for Council April Motion Decision 1 Alternatives: Allocation Size

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown			
Issue	**Alternative 1.3^C (without 2.5)**	**Alternative 1.3^C(with 2.5)**	**Alternative 1.4^C**
Pollock stock	I	I	I
Other target species and fisheries	I	I	I
Incidental catch of other and nonspecified species	I	I	I
Incidental catch of forage species	I	I	I
Incidental catch of PSC	I	I	I
Steller sea lions	U	I	I
Other marine mammals	I	I	I
Seabirds	I	I	I
Habitat	I	I	I
Ecosystem	I	I	I
State-managed and parallel fisheries	I	I	I
Socio-economic	I	I	I

Regulatory Impact Review

This RIR is required by Presidential Executive Order (E.O.) 12866. Separate sections in the RIR evaluate the costs and benefits of the alternatives for each of the six decisions faced by the Council.

Allocation size

The Council faces a decision on whether or not to provide guidance in the FMP on the appropriate size of future AI pollock allocations to the Aleut Corporation Four alternatives were considered for this decision. Under Alternative 1.1, the FMP would contain no language constraining Council decisions with respect to the appropriate Aleut Corporation allocation. Under Alternative 1.2, the Council would be constrained in two ways. First, it would have to consider the allocations received by the CDQ groups in setting the Aleut Corporation allocation. Second, it could not provide a directed pollock fishery in the Aleutians with a TAC greater than 40,000 mt. Alternatives 1.3 and 1.3^C would set a maximum 40,000 mt DPF, and Alternatives 1.4 and 1.4^C would set a maximum DPF of 15,000 mt. Alternatives 1.3 and 1.4 lack a deterministic relationship between TAC and ABC, while Alternatives 1.3^C and 1.4^C have a deterministic relationship.

The action alternatives would have the following potential effects:

- Alternatives 1.2, 1.3, 1.4, 1.3^C and 1.4^C could, but would not necessarily, restrict the Council's freedom of action in some future years, leading to lower AI pollock DPF allocations than there might otherwise be.
- If allocations were constrained, the Aleut Corp and its affiliated entities would receive lower revenues (depending on market and price effects). This would be particularly the case for Alternatives 1.4 and 1.4^C.
- If allocations were constrained, other BSAI fishery TACs would be higher than they otherwise would have been and revenues to fleets exploiting those TACs would be somewhat higher.
- For a number of reasons, it is impossible to predict actual revenue impacts (depending on market and price effects)
- The action has no direct impacts, only indirect impacts so far as it constrains future Council decision making for recommendations. While constraint language in the FMP may constrain short term decisions by the Council, it would not necessarily constrain medium to long term decisions, because the Council could recommend amending the FMP to relax them.

The choice of a cap on the allocation to the Aleut Corporation has distributional significance. The Council has chosen to treat the AI pollock allocation to the Aleut Corporation as one of the allocations to be made within the BSAI optimum yield. Therefore, unless the sum of the TACs for other species are less than the OY, any allocation to the Aleut Corporation will be associated with smaller TACs for other species in the BSAI. The extent to which this would impact other fisheries would depend on choices made by the Council with respect to the funding of the allocation. These choices are discussed in the next section. The 40,000 mt cap on Aleut Corporation allocations places a limit on decreases in the amounts of TAC for the other BSAI fisheries; a 15,000 mt cap would limit these decreases more so.

Council's preferred alternative Of particular importance for the economic analysis is the limit that the 19,000 mt TAC places on aggregate harvests in the directed fishery, and on the revenues from those harvests. Considering recent years' incidental catches, a total of 18,000 mt may remain available for directed DPF and CDQ fisheries. Using the 2002 royalty information, royalties would rise from about \$900,000 at an ABC of 5,000 mt, up to a maximum of almost \$5 million for ABCs at about 50,000 mt and above. Using the 2002 first wholesale values, first wholesale gross revenues would rise from about \$2.4 million at an ABC of 5,000 mt, up to a limit of about \$15.4 million at an ABC of about 50,000 mt and above. At the current 2004 ABC level of 39,400 mt, 14,400 mt of the DPF would be allocated to the "A" season, and 1,700 mt would be allocated to the "B" season. This assumes, for illustration, a 1,000 mt ICA divided 600 mt to the "A" season and 400 mt to the "B" season. Actual ICA may be set at a higher level in the future, because the 1,000 mt level has been exceeded frequently in recent years. Valuing the DPF and CDQ using the royalties and first wholesale prices for 2002, this could generate \$4.8 million in royalties, and \$14.7 million in first wholesale value.

"Funding" the allocation

Section 803 incorporates into statute the Council's longstanding BSAI OY limit of two million mt, but allows the Council to create AI pollock allocations in addition to the OY for the years 2004 to

2008. At its February 2004 meeting, the Council determined to include any AI pollock allocations in the OY. For this reason, unless the sum of the TACs for other species are less than the OY, an AI pollock allocation to the Aleut Corporation will require reductions in one or more other groundfish fishery TACs. The Council must decide whether to provide itself future direction on the appropriate approach to TAC setting, and, if so, what sort of direction to provide.

Five principal alternatives, one of which has a significant optional element, are evaluated for this decision. These are: 2.1 - No action - FMP is not amended to provide the Council with direction on future approaches; 2.2 - The pollock allocation to the AI fishery will be funded by a reduction in the EBS pollock TAC. Any unused pollock TAC from the AI fishery will be rolled back to the EBS pollock TAC. This will occur at the earliest time possible in the calendar year; 2.3 - The pollock allocation to the AI fishery will be funded by taking proportional reductions in the TACs for each of the existing groundfish fisheries in the BSAI. Any unused pollock TAC from the AI fishery will be rolled back to the fisheries form were it originated in the same proportions. This should occur at the earliest practicable time in the calendar year; 2.4 - Exempt the BSAI sablefish IFQ fishery from the proportional reduction; and 2.5 - Fund the allocation by reducing the TACs of the EBS pollock fishery and the TACs of the BSAI yellowfin and rock sole fisheries, rolling back to just the EBS pollock fishery all of the “B” season AI allocation and any unused “A” season AI allocation. The Council has said that these methods are only to be used if the sum of the TACs is equal to the OY. If the sum of the TACs is less than the OY, the AI allocation is to be funded out of the unallocated OY.

Under Alternative 2.1, the “no action” alternative, the FMP would not be modified. Under these circumstances, the language of the FMP (for example, with respect to CDQ allocations) would be in conflict with the statutory language in Section 803. Therefore, this is not a viable alternative.

The funding decision is fundamentally a distributive decision. It is a decision about the fishing fleet sectors that will bear the burden of providing the Aleutian Islands TAC. Under Alternative 2.2, the AI pollock allocation would be funded by the AFA fishery. Some of the AFA operations will participate in the AI pollock fishery, so the sector may receive revenues offsetting some of the loss, however, this will not be evenly distributed among AFA operations. Under Alternative 2.3, all fleet sectors in the BSAI (other than the AI pollock fleet) will fund the allocation. At current TAC levels, the AFA would continue to fund 75% of the allocation. The pollock share of the BSAI OY was at its lowest in recent years in 1999, when it was about 50%. At 1999 levels the AFA pollock fishery would have funded half of the allocation. Under Alternative 2.4, funding would be shared by all BSAI fleet sectors except for the IFQ sablefish fishery. Funding allocations and impacts are very similar for most fleets under Alternatives 2.3 and 2.4.

BSAI fisheries are currently subject to a wide range of management regimes. Some of these, such as the AFA cooperatives and the sablefish IFQ program, represent rationalized fisheries in which operations have the freedom to harvest fish quotas in a relatively efficient manner. Other fisheries have not been rationalized, and fishing operations harvest the fish under arrangements that approximate open access fisheries. Rationalized fisheries are likely to produce relatively high net returns for the participants involved. Open access fisheries are subject to competitive dissipation of fishing rents through excessive entry. Net returns are likely to be relatively smaller in these latter fisheries. As a result, it is likely that allocations made from non-pollock fisheries involve the movement of fishery quota from operations with relatively lower net returns to operations with relatively higher net returns. This is likely to be a temporary effect. Under proposals like BSAI FMP Amendment 80 ("IR/IU"), many BSAI groundfish fisheries may move to more rationalized operating arrangements in a few years.

The Aleut Corporation may not be able to harvest its allocation in a year. The fishery will generally be taking place 20 miles from shore because of the SSL protection measures. However, the last directed fisheries, prior to 1999, took place within 20 miles to a great extent. There is uncertainty about the extent to which vessels will be able to catch the pollock allocation outside of 20 miles. Moreover, there is uncertainty about the ability of vessels under 60 feet LOA to operate successfully outside 20 miles. SSL protection measures mandate that no more than 40% of the DPF be taken in the lucrative "A" season roe fishery. There is uncertainty about whether the Aleut Corporation will have an interest in catching and marketing large volumes of pollock in the "B" season. Since BSAI fishery allocations are at the OY, and since the Council has chosen to include the AI pollock allocation within the OY, an AI pollock allocation, whether it is caught or not, means a reduced allocation for other fishermen. The Council has included "rollback" provisions in its proposal to return pollock DPF that the Aleut Corporation may be unable to use to the fisheries that originally funded the allocation.

Before the reallocation is effective, a DPF or TAC amount may be reached and could result in unnecessary closures and disruption within the fishing industry. Once the fishery for a species is closed to directed fishing, only maximum retainable amounts (MRAs) of that target species may be retained in other fisheries open to directed fishing. The amount of a target species that is caught could possibly move a target species to a prohibited species status which requires that all subsequent catch be discarded. Both of these cases may require mandatory discards, which may pose an economic loss to the industry and increase waste.

Fisheries that are completely utilized would be vulnerable to closures because many of the DPFs or TACs would be reached before the roll back. If a fishery has been closed to directed fishing and then the reallocation to increase TACs occurs, the remaining uncaught DPF or TAC may not be large enough to support a directed fishery and therefore TAC may remain unharvested, representing a potential economic loss to the industry.

In some instances, fisheries occur in the winter and spring, but not in the summer or fall. Two examples include the rock sole fishery, and the trawl fishery for Pacific cod. In these instances, there would be no ongoing fishery that could take advantage of the roll back, at least under current operational scenarios.

Alternative 2.4 exempts the sablefish IFQ fishery from original allocation. The sablefish fishery in the BSAI operates under an individual fishing quota (IFQ) program. This program divides the annual sablefish TAC among the individual fishermen with permits to fish for a specified quota of sablefish. The fishermen have considerable discretion about how to fish for their own quota during the course of the year. Each has a known allocation, and may fish throughout the year at their own pace. The benefits of an IFQ program flow from this certain knowledge about the size of the allocation. If a portion of the sablefish TAC was used to create an AI pollock allocation, with a commitment to return unused quota to the sablefish fishery at some unknown time late in the season, fishermen would lose the ability to plan the harvest of their individual quota during the course of the year. This would reduce the benefits of the IFQ program for sablefish.

Sablefish IFQ roll back creates difficult administrative problems which would disrupt sablefish fishing during the year. It is likely that the sablefish fishery would have to close for a brief period of time. Each year, the annual IFQ allocation and permit computation requires that the fishery be closed to harvesting/landing for a minimum of 30 days between allocation periods. This is necessary to allow landings for each permit holder to be identified, overages and underages of IFQ catch to be identified, and for transfers of quota share to be completed. The roll back of unused AI pollock DPF to the sablefish fishery would only affect a subset of the total QS holders: those who hold EBS or AI quota share. However, this would still require that all existing IFQ accounts be frozen and recomputed because many more permits are interdependent as a result of transfer activity. The required cessation of sablefish fishing in the BSAI, and of BSAI QS transfers to accommodate a roll back, is most likely to come in the period from late spring to mid-summer, when weather and logistics are most amenable to sablefish fishing in this area.

Alternative 2.5 would provide for an AI pollock TAC of 10% each from the BSAI yellowfin and rock sole fishery TACs and 80% from the EBS pollock TAC. Only an "A" season would be permitted, and all "B" season and any unharvested "A" season DPF would be rolled back to the EBS pollock fishery. This program would reduce three fishery TACs in the Bering Sea but would "refund" part of the EBS pollock fishery's component of the AI pollock TAC back to the EBS pollock fishery. Currently, the EBS pollock TAC is about 75% of the BSAI OY, and an 80% contribution level, with an assured partial return, would have a small economic impact on that fishery. The two sole fisheries would realize a greater economic impact as neither could participate in the roll back.

<u>*Council's preferred alternative:*</u> The Council chose Alternative 2.2 as its preferred alternative. This alternative would fund the allocation from the difference between the OY and the sum of the TACs for the BSAI species, if the sum of the TACs were lower than the OY. If the sum of the TACs were equal to the OY, as it has been in recent years, the allocation would be funded from the BSAI pollock TAC. Under this alternative, the CDQ groups would not contribute to the AI pollock TAC under any scenario. Polloc that the Aleut Corporation was unable to use woudl be rolled over to the EBS pollock ITAC at the earliest practicable time in the calendar year. The Council's preferred alternative has only minor differences in terminology from Alternative 2.2, resulting in no substantive differences.

Monitoring harvest

Three monitoring and enforcement objectives are considered in this EA/RIR. These are:

- (3.1) Status quo (this option imposes only those monitoring and enforcement requirements that would be required if there were no change in regulation;
- (3.2) "Increased monitoring" alternative. This alternative would have several components (not options). These include: (1) Aleut Corp must let the NMFS Alaska Region know which vessels are authorized by it to fish in the Aleutians, NMFS will provide the Aleut Corporation with a list of eligible vessels, and the participating vessels must carry documentation showing they have such NMFS approval and Aleut Corporation permission; (2) Catcher vessels authorized by the Aleut Corp to fish in the Aleutians may not have on board pollock from the Bering Sea or GOA, and vessels fishing in the GOA or Bering Sea may not have AI pollock on board; (3) AFA requirements extend to catcher-processors and

motherships (this extends AFA level observer and scale requirements to CPs under 60 feet and to unlisted AFA vessels); (4) AI pollock may only be delivered to a shoreside processor or stationary processor with an approved catch monitoring control plan; (5) The Aleut Corporation will be responsible for keeping its' harvests and its' agents' harvests within the AI pollock directed fishing allowance and shall designate a quota manager who shall report catch data to NMFS weekly; and

- (3.3) "Observer alternative. All the requirements of Alternative 2 would apply; in addition, under Alt 3, all catcher vessels would be required to have 100% observer coverage, with an option for only 30% coverage for these vessels.

Alternative 3.1, the status quo alternative, imposes no new monitoring requirements. Vessels under 60 feet in length, and AFA vessels, would only be subject to current regulatory requirements. This imposes no additional costs on industry or managers.

Alternative 3.2, described above, imposes five new monitoring and enforcement requirements in addition to those described in Alternative 3.1. These extensions, with estimates of their benefits and costs, are summarized below.

Under the first monitoring and enforcement element for Alternative 3.2, the Aleut Corporation would be responsible for managing the vessels participating in the AI pollock fishery. This will include determining that the vessel has the appropriate permits and meets the requirements of the statute for participation. The Corporation will also be responsible for notifying NMFS about the identities of eligible vessels, and of changes in the list. The Aleut Corporation will provide a letter to the NMFS Alaska Region with a list of approved vessels enclosed before the beginning of the fishery. The Aleut Corp will be required to provide each approved vessel with a letter of authorization for participation in the AI pollock fishery. Vessels will be prohibited from fishing for pollock in the AI unless they have a valid, authorized letter on board. It will be the responsibility of the vessel owner/operator to ensure their authorization is valid before fishing.

Monitoring and enforcement will be facilitated if NMFS knows, in advance, which vessels are authorized to fish for pollock in the Aleutian Islands, and which are not. Requiring vessels to carry documentation stating that they have Aleut Corporation authorization to fish for pollock in the Aleutian Islands will facilitate the efforts of USCG enforcement boarding efforts. Additionally, enforcement agents who are tracking VMS data will have information on which vessels harvesting pollock are allowed to fish within the Aleutian Islands. These measures would be of some benefit to the Aleut Corporation, as it would facilitate NMFS identification of vessels fishing for pollock without Aleut Corporation authorization.

Current plans involve imposing two regulatory obligations on the Aleut Corporation It must notify the NMFS Alaska Region of vessels authorized to fish in the AI pollock fishery prior to entry by those vessels into the fishery, and it must provide those vessels with documentation that they can carry, indicating that they have been authorized to participate in this fishery. NMFS will incur costs for collecting data and processing the paperwork. Aleut Corporation costs to notify NMFS and provide documentation to vessels are expected to be relatively small. NMFS estimates that these will be under $200. Most of the cost will be labor costs associated with preparing the letters. The information for these should be available to the Corporation following its negotiations with its affiliated fishing firms.

The second monitoring and enforcement element would prohibit CVs from fishing for pollock in the AI if pollock from the Bering Sea or GOA are on board, and CVs would be prohibited from fishing for pollock in the Bering Sea or GOA if AI pollock are on board. As described in Statute, the Aleut Corporation may choose to contract with AFA vessels to harvest part of their allocation. By definition, these vessels would also be able to harvest pollock in the Bering Sea. Catcher vessels that participate in these fisheries may mix multiple hauls in recirculating salt water tanks for transport back to the plant where the fish are processed. Under these circumstances, if a catcher vessel chose to fish in both the Bering Sea and the Aleutian Islands on the same trip, it would be very difficult for managers to deduct fish from the proper quota. Furthermore, vessel operators may have incentives to misreport the portion of fish harvested in each area, and these circumstances may be difficult to track and enforce. For these reasons, if a catcher vessel enters the Aleutian Islands area at any time during a trip, no pollock from elsewhere may be on board. Compliance with this requirement should not present a significant operational or economic burden to participating catcher vessels, and is a reasonable requirement on the part of the Agency to assure attainment of conservation and management objectives.

Catcher vessels, that may have been fishing for pollock in the GOA or EBS before entering the AI to fish for Aleut Corporation pollock will have to put into port and offload their product before entering the Aleutians. Similarly, vessels fishing in the Aleutian Islands fishery will have to offload any Aleutian Islands fish before entering the AFA fishery.

The third element would extend the scale, sampling station, and observer coverage requirements to all catcher processors and motherships. Observer and catch weighing requirements for AFA-listed catcher processors apply, whenever the vessel is fishing for groundfish off Alaska. However, catcher processors less than 60 feet, and the Ocean Peace (the only unlisted AFA vessel catcher processor) are not required to meet these requirements when fishing for non-AFA pollock. However, at this time, there are no trawl vessels under 60' capable of processing at-sea and endorsed to do so. Thus, NMFS does not anticipate that these regulations will have any additional impact except to the extent that the Ocean Peace voluntarily chooses to participate in this fishery.

The use of at-sea scales and observer work stations in the pollock fishery gives NMFS and the industry accurate and reliable catch data. AFA-listed catcher processors and motherships must currently weigh all groundfish caught off Alaska. Unlisted AFA vessels and CPs under 60 feet are not required by regulation to have the same monitoring measures as AFA listed CPs. On AFA catcher-processors, every haul is observed, all catch is weight by approved flow scales, a motion compensated platform scale is available for the exclusive use of the observer, and each vessel is required to have an approved observer sampling station. Since an unlisted AFA CP, or any CP under 60 feet LOA that processes at sea, has reduced observer coverage requirements, and may offload at sea, there is no way to determine if product is from the EBS or the AI. By requiring these AFA equivalent monitoring measures on CPs under 60 feet, and unlisted AFA vessels, managers have the ability to account for catch. This creates a more enforceable program.

Any CP under 60 feet or unlisted AFA vessel seeking to participate in the AI pollock fishery must ensure every haul is observed, all catch is weight by approved flow scales, a motion compensated platform scale is available for the exclusive use of the observer, and each vessel is required to have an approved observer sampling station. This will impose costs in the form of equipment acquisition and maintenance, observer coverage, and factory modifications. There would also be additional paperwork and reporting requirements. NMFS will incur costs as it must approve the scales and observer sampling station. However, NMFS does not anticipate that any of these vessels will participate in this fishery.

The fourth element would require all fish harvested in the Aleutian Islands to be delivered to a shoreside processor or stationary floating processor which is operating under an approved catch monitoring and control plan (CMCP). All shoreside or stationary floating processors which process AFA pollock are required to operate under an approved CMCP. This element extends this requirement to any shoreside or stationary floating processor that process pollock harvested in the Aleutian Islands. Each CMCP would be required to address a variety of performance standards. NMFS anticipates that this alternative would extend these requirements to one additional facility.

Currently, a processor accepting deliveries of AFA pollock must have a CMCP approved by NMFS. The regulations provide minimum requirements for the CMCP, including an observer sampling station, an MCP for the observer, and a plan for communicating with the observer. The onus is on the plant to develop a CMCP within the published guidelines. NMFS approves the CMCP. This plan ensures that deliveries can be effectively monitored and that delivery weights will be accurately reported. These plans also help ensure more accurate and reliable reporting by the processor and enable NMFS and the industry to more efficiently resolve reporting discrepancies.

Paperwork Reduction Act (PRA) estimates of the cost of creating a new CMCP are $8,000 for the firm and $1,000 for NMFS. Subsequently, CMCPs must be modified as changes are made in plant operations or layout. Costs associated with a modification of a plan would be less than the costs of creating the original. One processing firm in Adak is expected to incur these costs. Additionally, the plant would be required to incur equipment costs and any costs that may result from changes to the plant in the course of complying with CMCP guidelines. Depending on the layout of the existing plant, modifications to the catch-weighing system, the observer work area, or the layout of the plant could be necessary. These costs are difficult to predict but would probably range between $10,000 and $70,000.

The fifth element will place responsibility on the Aleut Corporation for not catching more pollock than are allowed under the AI pollock directed fishing allowance. The Corporation would be subject to fines if it or its agents exceeded the DPF. The monitoring procedures discussed under this alternative would allow NMFS to monitor compliance.

This provision should improve control of harvest, and reduce the potential of exceeding the AI pollock DPF. The Aleut Corporation or its agents will contract with fishing operations to harvest and deliver pollock. The Corp., or its agents, will be in a position to monitor catches almost as they occur. The Corp. will have the ability to slow harvests as the directed fishery allocation is approached, and to end harvests when it has been reached. Penalties for overage will give the Corp. or its agents an incentive not to exceed the DPF. NMFS will continue to monitor catches and deliveries through its normal monitoring systems and will have the right and responsibility to close the fishery if that is necessary to protect the stocks.. Costs appear to be minimal. This approach makes use of catch and delivery monitoring procedures that would be undertaken by the Aleut Corp, its agents, and NMFS.

Under Alternative 3.3, catcher vessels would be required to carry 100% observer coverage. NMFS commonly uses an estimated daily contract rate of $355/observer to estimate private observer costs. This cost estimate includes $30 per day towards travel expenses, but doesn't include an estimated $15/day for food provided by the vessel. In addition, these fishing operations incur economic and operational impacts that are not directly reflected in the money they must spend on observer coverage. For example, fishing vessel operators may have to alter their sailing plans and schedules to pick up or drop off observers; the observers take up limited (and valuable) space on vessels which (especially in the class of vessels under 60 feet) may be at a premium. That is, provisions must be made to accommodate the necessary work of the observer on deck (e.g., observing gear setting and retrieval, recording and sampling of catch and bycatch). The observer also occupies "living space" aboard, which otherwise could have housed additional crew members. These operational impacts may be reflected in both increased operating expenses and reduced harvests and revenues. It is not possible, with available information, to quantify these effects, but they may represent a substantial additional cost of operation for this smallest class of vessels.

The discussion above was predicated on a set of costs that reflect experience in the current 100% and 30% observed fleets. There are a number of reasons to believe that the costs of supplying certified observers to the small boat fleet (which, as noted, has heretofore been exempted from observer coverage requirements) will be higher, on average, than the costs of supplying observers to the larger vessel fleet. These may include, among others:

- Observers are likely to find the working and living conditions more difficult on the smaller boats; they will have fewer amenities, more restricted living and working space, and may not be as safe as when assigned to larger vessels. Wages may have to be higher to continue to attract sufficient numbers of qualified observers to meet the new demand associated with extending coverage requirements to this segment of the industry. These higher wage costs (should they emerge) are not reflected in the present estimates.
- Moreover, the logistical expenses are likely to be higher to supply observers for these small boats. Small vessels are expected to be operating out of the port of Adak. Adak is remote and transportation costs to and from Adak are high, making it more expensive to get the observers to their assigned vessels
- Smaller vessels tend to take shorter (but more frequent) trips than their larger counterparts, in these fisheries. This means that observers will spend more time transferring between operations (and perhaps locations), as each deployment is made for a shorter "trip" duration. The logistical and transportation costs are thus likely to be higher, per unit observer coverage, than under present conditions.
- It may be harder for observer provider companies to supply observers to small operations in a timely manner; thus, fishermen may lose fishing time and revenues due to an inability to obtain the required observer coverage.
- Costs for the vessel associated with carrying an observer may be high. Smaller vessels have less living space and working space than larger vessels. A vessel that is required to carry an observer may find that it must displace a crew member in order to accommodate the observer. This may increase the amount of work for each remaining crew member, lower the overall productivity of the vessel, and ultimately, lengthen the trip.

A further consideration is that the Council has never before required observer coverage on vessels less than 60 feet in length. This action would establish a precedent, and impose observer coverage requirements (and costs) on the AI pollock fleet that are not imposed on other vessels under 60 feet fishing elsewhere in the GOA and BSAI.

The benefit of the observer coverage requirement is the improvement in the monitoring of fishing vessel harvests at sea. Under the Alternatives 3.1 and 3.2, the only catch data for unobserved catcher vessels will be the landings records prepared when the catcher vessel delivers to a shoreside plant, mothership, or catcher processor. These records may differ from actual catches by the amounts of discards or unreported events (e.g., gear loss, bird or marine mammal strikes). By placing an observer on these vessels, fisheries managers may verify at-sea discards as reporting on the fish ticket, obtain additional biological sampling, and monitor marine mammal and seabird interactions.

This may not be a large potential benefit in this fishery. Pollock fishing is a “clean” fishery with relatively small amounts of incidental catch. Pollock fishermen tend not to routinely discard fish at sea (historically, <2% of total catch), although intermittent discards undoubtedly take place. These vessels will, in addition, operate under all prevailing regulations, including IR/IU, which “prohibits” discarding of pollock and Pacific cod). However, under these conditions, the value of the information on discards and unreported events may not be large.

There would be similar effects under a 30% observer coverage option, but less onerous to the fleet economically.

Council’s preferred alternative The Council adopted Alternative 3.2 with modifications as its preferred alternative. The Council made two modifications. First, it clarified the language to note that “AI pollock may only be delivered to a shoreside processor or stationary processor which has an approved Catch Monitoring Control Plan *or to one or more AFA qualified vessels, as permitted by legislation* (italicized text represents the change). Second, it required that vessels < 60 feet take a Cadre observer if provided by NMFS (which implies that they meet requirements to enable them to do so if requested, including complying with safety provisions). The first modification clarifies the language to reflect the intent of the analysis: that entities receiving fish meet the monitoring standards imposed on AFA vessels. The second modification incorporates a modified version of Alternative 3.3 for observer coverage.

Delay entry of small vessels

The proposed action would ban participation of vessels less than 60 feet LOA from participating in this fishery for two or five years. The “no action” alternative is to not put any restriction on small vessel activity into the FMP.

The proposed amendments to the BSAI FMP and regulations are meant to provide a framework within which an allocation of AI pollock may be given to the Aleut Corporation. It may be that elements of the framework can be put in place faster for AFA catcher-processors and motherships than for catcher vessels under 60 feet. For example, under monitoring and enforcement Alternative 2, shoreside plants accepting pollock deliveries must have a catch monitoring and control plan in place. Given the short time frame for this action, it may not be possible to accomplish that by January 2005.

The Aleut Corporation is planning to provide fishing opportunities in 2005, to catcher vessels under 60 feet LOA, if the fishery is opened that year. The boats that would fish are most likely vessels that are currently fishing for Pacific cod in the area. A provision in the FMP that explicitly delays the entry of small vessels for from two to five years, until monitoring and management issues unique to this class of vessel are resolved, may impose some cost on the Aleut Corporation and those small vessels in a position to enter the fishery.

The provisions that may prevent small vessels from fishing are those in Alternatives 2 and 3 under the decision on monitoring. However, small vessel entry would be effectively precluded by the absence of the regulatory prerequisite for their entry (for example, the CMCP). There is no need for a special regulation precluding small vessel activity for this reason. If a plant with a catch monitoring or control plan is required, but not available, small vessels would not be able to make landings. They would be prevented from making these landings whether or not the FMP contained language that prevented them from entering the fishery.

Concerns have been raised about the safety of small vessel fishing operations fishing for pollock in the Aleutian Islands. The most lucrative pollock fishery will be a winter fishery, and because of SSL protection measures, there aren't many pollock fishing areas available within 20 miles of shore. Moreover, under monitoring and enforcement Alternatives 3.1 and 3.2, these small vessels will not be observed. It may be desirable to concentrate fishing on larger vessels, which are more likely to carry observer coverage, during the first years of the program. Thus the program would generate better information on catches and incidental catches. For these reasons, it may be desirable to defer entry of vessels under 60 feet for the first few years of the program.

Council's preferred alternative The Council chose "no action" Alternative 4.1. The Council noted that it would review the observer issue associated with vessels < 60 ft. concurrent with the June 2006 economic review. This modification to the alternative element is likely to require an unknown amount of staff time for preparation and an unknown amount of the Council's time at the June 2006 meeting. Aside from time required to monitor the issue in the June meeting, the alternative is unlikely to impose significant costs on the Aleut Corporation.

Economic Development Mandate

Section 803(d) states that the allocation is "...for the purposes of economic development in Adak, Alaska..." The Council's February 2004 motion, under the heading "Economic Development Mandate" requests the evaluation of an option to "Require an annual report to the Council along the lines of CDQ reports."[5] The purpose of such a report would be to allow the Council to monitor the Aleut Corporation's use of their allocation, to assure it is used to promote the economic development of Adak. Four alternatives are considered in the RIR: (1) no reporting requirement, (2) require an annual report to the Council with no confidential information, (3) require an annual report to either NMFS or the State with elements equivalent to the reports provided by CDQ groups, or (4) require a mid-year (June) 2006 report to the Council so that the Council could consider adjustments to the fishery, as appropriate.

[5]Section 803 and the Council's motion may be found in Appendices A.1 and A.3.

The clearest benefit of a reporting requirement would be the contribution it would make to insuring the advancement of Congresses' distributional goals in making this allocation. The pollock allocation to the Aleut Corporation may be thought of as a lump sum grant to the Corporation for the purpose of the economic development of Adak. This grant will change the constraints faced by the corporation, and may change its allocation of resources. The possibility exists that the corporation may misuse the allocation, by utilizing resulting revenues for purposes unrelated to the development of Adak. To the extent that these are possibilities, and to the extent that monitoring by the Council can detect potential problems, this requirement might help advance Congresses' distributional objectives.

However the Council is not under any legal obligation to monitor the Aleut Corporation's use of the allocation to promote Adak development. The Aleut Corporation has made a significant commitment and investment in the economic development of Adak. It's subsidiary, the Aleut Enterprise Corporation, was formed to manage the corporation's business development projects in Adak. This suggests a congruence of interest between Congress and the Corporation with respect to community development goals and objectives.
Finally the "economic development" purpose of the Aleut Corporation is very broad and could encompass almost any activity funded or undertaken by the Aleut Corporation in or for Adak. Allocations would not necessarily have to be used to generate income for the Aleut Corporation, or result in investments or payment of ongoing operating costs. For example, allocation may be made to owners and operators of vessels under 60 feet in overall length at concessionary terms in order to encourage them to deliver to, or homeport their vessels in Adak. The Corporation may choose to allow crew members or skippers who choose to live in Adak, or enroll their children in local schools, exclusive access to some of the Aleut Corporation allocations in order to encourage the development of a community there. A reporting requirement that sought to be definitive, would have to be extremely comprehensive.

The two action alternatives, reporting non-confidential information, and CDQ-style reporting, would impose costs of the Aleut Corporation and on the Council and NMFS or the State. Under Alternative 5.2, it probably would take a limited amount of effort for the Aleut Corporation to provide a general description of how it was using the pollock allocation for economic development in Adak. In fact, the corporation probably would have to provide such a general descriptive document for its own use in informing board members and shareholders in the existing annual report process for the corporation itself. A general report to the Council would not add to the administrative cost for NMFS to administer the AI pollock allocation, because the report would not be submitted to NMFS and NMFS would not have oversight responsibilities for the economic development aspects of the allocation to the Aleut Corporation. The Council would incur limited costs associated with receiving, photocopying, and allocating time during a Council meeting to address the annual report.

Alternative 3 requires reports from the Aleut Corporation similar in scope to those required from CDQ groups. Section 4.6 of the EA provides a description of the elements one might expect in a report of this scope. This alternative would provide the highest level of monitoring of whether the Aleut Corporation was using the AI pollock allocation in a manner the Council judged to be consistent with the requirements of the statute. However, it also would be the most costly option to the Aleut Corporation, its affiliated business partners, and NMFS or the State.

Council's preferred alternative The Council chose modified versions of Alternatives 5.2 and 5.3. The modifications clarify the information requested by the Council. Under Alternative 5.2, the Council requested information similar to that provided in the reports submitted each year by the AFA cooperatives. This requirement is a request that the Aleut Corporation provide information on PSC bycatch. Alternative 5.3 was modified to request information on the ways the money received by the Aleut Corporation for its pollock allocation was spent and to request information on Chinook salmon bycatch. None of these clarifications are believed to significantly change the costs of providing the requested reports.

Managing Chinook salmon bycatch

The sixth decision element addresses potential problems with Chinook bycatch. Alternative 6.1 would require Chinook bycatch in the AI pollock fishery to count against the BSAI pollock Chinook bycatch cap. If Chinook bycatch in the AI is high, particularly early in the year, the Chinook Salmon Savings Areas could close, possibly imposing economic costs on AFA pollock vessels that must move to another area, to continue fishing. Catcher vessels may face larger costs from this than catcher/processors, because they are more dependent on proximity to port to deliver their product, and because catcher/processors are excluded from the CHSSA during the fall fishing season in any event, and would not be affected by a closure during that time. Chinook bycatch levels in a potential AI pollock fishery are uncertain; it is possible they will be of a larger magnitude than the reductions in Chinook bycatch in the BS, as TACs there are reduced to fund the AI allocation. Associated with this uncertainty is the potential for earlier BS CHSSA closure and increased operating costs.

A second alternative, 6.2, would exempt the AI fishery from the cap and savings area closure process. This may potentially allow a larger bycatch of Chinook to occur. It also would set a precedent of allowing a fishery to be prosecuted without a Chinook bycatch avoidance incentive. This approach would reduce the uncertainty faced by AFA pollock fishing operations.

Alternative 6.3 would set a Chinook bycatch cap of 360 fish for the AI pollock fishery. This rate is approximately equal to the product of the historical 1991-1998 Chinook bycatch rate in the AI (0.024 Chinook per metric ton) and a 15,000 mt funding allocation for the Aleutians. Under this alternative, if the AI pollock fishery reached its Aleutian's cap, the AI portion of the CHSSA would close, but the BS portion of the CHSSA would not be affected. AFA operations could continue to fish in the BS portion of the CHSSA until the BSAI cap was met. Chinook caught during ongoing fishing in the AI outside of the AI CHSSA would continue to count against the BSAI cap. This approach would provide a certain amount of protection against high AI bycatch to AFA fishermen; if the AI cap were reached, an AI area believed to have historically high Chinook bycatch rates would be closed. However, once the area is closed, non-AFA AI fishermen have less incentive to take steps to reduce bycatch.

Council's preferred alternative The Council adopted 6.2 as its preferred alternative, "Chinook salmon bycatch in the AI pollock fishery would not count against the BSAI Chinook salmon bycatch caps." In addition, the Council adopted a modified version of 6.3: "The Chinook salmon bycatch cap of 700 applies to the AI Chinook salmon savings area closure only." The analysis of 6.2 applies. The AI would have its own cap of 700 Chinook salmon, and the AI Chinook salmon savings area would close if the AI fishermen reached that cap. Pollock fishing could continue after that time in other parts of the AI. The EBS Chinook bycatch would continue to count against the AI Chinook salmon savings area, and if the EBS pollock fishery reached its cap, the AI pollock fishery would close. The impacts on subsistence, recreational, and commercial fisheries for Chinook associated with this 700 Chinook cap will be modest. The 19,000 mt of pollock will be deducted from the EBS pollock fishery and will be associated with some reduction in EBS Chinook bycatch. As noted in the EA, the Chinook bycatch is drawn from a large number of natal areas, including Asia, Canada, the U.S. West Coast, and Western , South Central, and Southeast Alaska. Perhaps half to 60% may come from Western Alaska. Moreover, Chinook are taken as bycatch one or two years before they would return to their natal streams. The impact of the bycatch must be measured in returning adult equivalents, and any given bycatch will be associated with a smaller change in adult equivalents because of annual mortality.

Regulatory Flexibility Act considerations

The Regulatory Flexibility Act (RFA) was passed in 1980, and substantially amended in 1996. The purpose of the act is to require agencies to consider the impacts of their actions on small entities. The Small Business Administration (SBA) guidelines for the implementation of the act state:

"The Regulatory Flexibility Act...requires agencies to consider the impact of their regulatory proposals on small entities, analyze effective alternatives that minimize small entity impacts, and make their analyses available for public comment. The RFA applies to a wide range of entities, including small businesses, small not-for-profit organizations, and small governmental jurisdictions." (SBA, 2003, page 1)

SBA's RFA guidelines state that:

> "If, after conducting an analysis for a proposed or final rule, an agency determines that a rule will not have a significant economic impact on a substantial number of small entities, section 605(b) provides that the head of the agency may so certify. The certification must include a statement providing the *factual* basis for this determination, and the certification may be published in the *Federal Register* at the time the proposed or final rule is published for public comment." (SBA, 2003, page 8)

NMFS has conducted a preliminary examination of the probable implications of the proposed FMP amendment for small entities, and has found that it will not have a "significant economic impact on a substantial number of small entities..." Appendix A5 reviews the factual basis for this conclusion.

Section 803(a) of the Consolidated Appropriations Act of 2004 (CAA) requires that effective January 1, 2004 and thereafter, the directed fishery for pollock in the Aleutian Islands Subarea (AI) of the BSAI shall be allocated to the Aleut Corporation. Except with the permission of the Aleut Corporation or its authorized agent, the fishing or processing of any part of such allocation shall be prohibited by Section 307 of the Magnuson-Stevens Fishery Conservation and Management Act.

For the purposes of the RFA, the Aleut Corporation is best characterized as a holding company. A holding company is "a company that usually confines its activities to owning stock in and supervising management of other companies. A holding company usually owns a controlling interest in the companies whose stock it holds."[6] The Aleut Corporation carries out most of its significant activities through a variety of other companies whose stock it holds. These include the Aleut Enterprise Corporation, the Adak Reuse Corporation, SMI International Corporation, Tekstar, Inc, Akima Corporation, Aleut Real Estate L..L.C., and the Alaska Trust Company. (Aleut Corp Annual Report, pages 29-30).

The Aleut Corporation is a large holding company entity under the SBA criteria. Aleut Corporation revenues ranged from about $72 million in its 2001 fiscal year, to about $49 million in its 2003 fiscal year.[7] SBA small entity criteria at 13 CFR 121.201 provide a small entity threshold for "Offices of Other Holding Companies" of $6 million.[8] [9]

The vessels used to fish for the subject pollock allocation are expected to enter into a joint venture cooperative agreement with the Aleut Corporation (and/or one or more of its subsidiaries). The Aleut Corporation shall have authority over dispersing the component shares of the block allocation to individual fishing operations, as well as managing and coordinating the harvesting, processing, transshipment, marketing, and sale of the resulting products. If that is approximately the structural organization, then all those vessels "allocated" a working share of the Aleut Corp.'s DPF are "affiliates" of the larger group and, by definition, are not "small entities", themselves, for RFA purposes.

As described in Section 8.2, entities affiliated with one another are evaluated, based upon the annual revenues (or employee numbers) of all member affiliates combined. This criterion means that entities which contract with the Aleut Corporation (itself determined to be a "large entity") are subsumed within the larger aggregate entity, for RFA purposes.

The decisions identified as (1), (3), (4), (5), and (6) at the start of this section (allocation size, monitoring, delay entry of vessels < 60 feet, reporting, Chinook salmon cap and closure) of the EA are only expected to directly regulate entities which would harvest or process the Aleut Corporation allocation of AI pollock. Since, as noted above, these entities are affiliated with the Aleut Corporation, they are all considered large, within the meaning of the RFA.

Council decision (2) will establish a "mechanism" by which the AI allocation is "funded," in order that it be contained under the 2 million ton total BSAI groundfish OY. This action will not actually reapportion the various pollock allocations to fund AI pollock. It will simply establish the process by which subsequent action, in the annual specifications process, will apportion the 2 million ton

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[6](Definition accessed at http://www.incorporating-online.org/Definition-holding-company.html on February 25, 2004).

[7]Aleut Corp. 2003. page 16.

[8]This is sector NIACS Subsector 551, NIACS code 551112. "Other" holding companies is in contrast to "Offices of Bank Holding Companies." 13 CFR 120.201 accessed at http://www.blm.gov/nhp/news/regulatory/CFR/13CFR121.201.html on February 25, 2004.

[9]Section 803 "requires" the Aleut Corp. to contract with AFA boats to harvest some (or all, initially) of the pollock allocation. Once they enter into a cooperative agreement, that "entity" is large (i.e., because all its AFA partners are "large", as documented in AFA, and the Aleut Corporation is "large" by affiliation).

OY. Under the Council's preferred alternative, if the sum of the TACs in the BSAI were less than the 2 million mt OY, the funding of the allocation would take place, to the maximum extent practicable, from the difference between the sum of the TACs and the OY. In this situation, (some or all of) the funding would not come at the expense of other fleet segments. Alternatively, if the sum of the TACs were equal to the 2 million mt OY, the funding would come from the BSAI pollock ITAC. ITACs are defined after subtraction of CDQ group allocations, therefore the CDQ groups in the BSAI would not contribute to the funding. The entire funding would come from a reduced ITAC accruing to the AFA pollock fishing fleet in the EBS.

The AI pollock proposed action establishes a "process" which will be followed by the Council and NMFS when setting the species/fishery ITACs, at which time all attributable impacts to small entities will be assessed, as required by RFA. The potential "direct effects" on small entities, attributable to funding the AI pollock allocation would be treated during the annual specifications process, an action which always contains an IRFA. This is appropriate, because it is not until the specifications are set that any adverse impacts may actually be "defined" (i.e., ITAC shares allocated).

To illustrate the point, note that the Council is free to set the AI DPF at zero, or any number above zero (presumably up to the AI pollock ABC, minus the ICA), according to the legislation. If it selects zero, no ITAC will be reallocated from other fisheries, and there clearly are "no significant adverse effects on a substantial number of small entities." If it selects some "non-zero", but very small DPF (which is within its purview), say 100 mt, there clearly are "no significant adverse impacts...". This logic extends continuously until some, as yet undefined, point at which an amount of AI DPF "does" create a "significant adverse impact..." (unless the funding source is the EBS pollock fishery, wherein there are no small entities). However, it is the "setting" of all the annual ITACs (AI pollock and its funding sources), and not the mechanism "for" setting, which will result in those impacts, and permit an analysis which has the potential to identify the likely number, distribution, and attributes of the entities impacted. The Council won't actually "set" the ITAC amounts until it has the recommended ABCs for the coming fishing year.

Moreover, the Council's preferred alternative either funds the allocation from an unallocated portion of the OY, or funds the allocation by a reduction in the ITAC available for harvest by the AFA pollock fleet in the BSAI. The vessels in the AFA pollock fleet are either affiliated with processors or fishing cooperatives. In all instances, the affiliated entities have gross revenues exceeding the $3.5 million threshold separating small and large entities. Thus, the Council's preferred alternative would only affect large entities.

Six CDQ groups harvest pollock in the BSAI. CDQ groups represent Western Alaska communities and are given allocations of the annual pollock TAC to use for the purpose of fisheries related economic development to benefit these communities. Under the terms of the AFA, these entities are entitled to 10% of the pollock TAC in the BSAI. The CDQ groups are private, non-profit, entities, and are small entities within the meaning of the RFA.

In June, the Council explicitly excused the CDQ groups from contributing to the funding of the Aleut Corporation allocation. In October, the Council clarified its intent that the Aleut Corporation, as one of the users of BSAI pollock, was expected to contribute 10% of its AI allocation to the CDQ groups.

Consistent with the Council's intent, the current regulations governing the allocation of pollock to CDQ groups will not be revised under this action. Under current regulations, the CDQ groups will receive 10% of any TAC issued in the Aleutian Islands, and must fish their allocation there. This would have been the case if the Council had chosen, as it could have, to allocate pollock in the AI in 2003 and 2004. It would be the case if Section 803 had not been included in the CAA, and the Council had chosen to create a pollock TAC in the AI in 2005, or in a future year. CDQ groups will receive a part of their CDQ allocation in the AI, and their EBS CDQ allocation will be reduced by a corresponding amount. CDQ groups will be able to request a rollover of some or all of their AI pollock allocation into the EBS, if it appears they will be unable to fully harvest it. The potential advantages and disadvantages of this to the CDQ groups were described in the RIR (Section 7.7).

The CDQ groups will not be directly regulated by the FMP amendment or by the changes in regulations associated with it.

Note on Maps

Many of the maps in this EA/RIR show the location of catch with vertical bars. The bars provide a measure of the absolute volume of target species catch taken in a location. A higher bar means that a larger volume of pollock was taken from that location during the period covered by the map. A legend on the left hand side of each map makes it possible to obtain a rough estimate of the volume of the target species catch indicated by any specific bar. The legend contains a bar of a certain length, with a number to the left of its base. The bars and numbers in the legend provide a scale with which to measure the metric tonnage represented by the bars in the map. A hypothetical legend bar may have a height of an inch and the number 1,000 to the left of its base. This means that a distance of an inch, measured against any of the bars in the map, represents a catch volume of 1,000 mt. A bar on the map that was two inches high would represent a catch of 2,000 mt; a bar of a half inch would represent a catch of 500 mt. These bars perform the same function for volume of catch that a normal distance scale (for example 100 miles per inch) performs for distance on a map. The program that generates the maps creates a unique volume scale for the legend of each map. The program finds the tallest bar on the map (representing the largest volume of catch). This bar becomes the standard for the legend. The program draws a bar in the legend equal in distance to half the height of the tallest bar. The number to the left of the base of the legend bar is set equal to half the volume represented by this tallest bar.

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1.0 PURPOSE AND NEED

1.1 Introduction

This document is an EA/RIR to analyze the potential impacts of Amendment 82 to the Bering Sea and Aleutian Island (BSAI) Fishery Management Plan (FMP), and associated regulations. This amendment and regulations allocate any future Aleutian Islands pollock harvest to the Aleut Corporation. This document has been prepared to meet the requirements of the National Environmental Policy Act (NEPA), Presidential Executive Order 12866 (which requires an analysis of the costs and benefits of regulatory actions), and the Regulatory Flexibility Act (which requires an analysis of the impacts of an action on smell entities).

The U.S. Congress, in Section 803 of the Consolidated Appropriations Act of 2004 (HR 2673) (CAA), now Public Law 108-199, required that future directed fishing allowances of pollock in the Aleutian Islands be allocated to the Aleut Corporation.[10] Only fishing vessels approved by the Aleut Corporation or its agents would be allowed to harvest this allowance. In turn, the Aleut Corporation would only be allowed to contract with vessels under 60 feet length overall (LOA), or with listed American Fisheries Act (AFA) vessels, to harvest the fish. The allocation was made to the Aleut Corporation for the purpose of furthering the economic development of Adak. Figure 1.1-1 provides a map of the Aleutian Islands.

In February 2004, the North Pacific Fishery Management Council (Council) passed a motion requesting an analysis of various options that might be incorporated into an FMP amendment to create a structure within which such an allocation could be made.[11] It was the Council's intent that this analysis be presented to it at its April 2004 meeting, in order that the Council could make a final recommendation for the amendment at its June 2004 meeting.

In its April 2004 meeting, the Council reviewed a draft Environmental Assessment/Regulatory Impact Review (EA/RIR) that provided environmental, economic, and small entity analyses of this proposed action. That document also included a "Factual Basis for Certification" as an appendix. The "factual basis" provides grounds for saying that a substantial number of small entities will not be affected by this action, and that, therefore, an initial regulatory flexibility analysis (IRFA) is not required under the Regulatory Flexibility Act.

During the April meeting, the Council received comments on the draft EA/RIR from the public and from its Advisory Panel (AP) and Scientific and Statistical Committee (SSC). The Council considered these comments and discussed the various elements and alternatives presented in the document and tasked Council and NMFS staff with making some revisions to the document. These suggested revisions add an additional decision element with alternatives and several additional alternatives to the existing decision elements for future consideration by the Council during its June 2004 meeting. The Council's revised list of decision elements and alternatives, reconstructed as a

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[10] The text of Section 803 may be found in Appendix A.1.

[11] The text of this motion may be found in Appendix A.3.

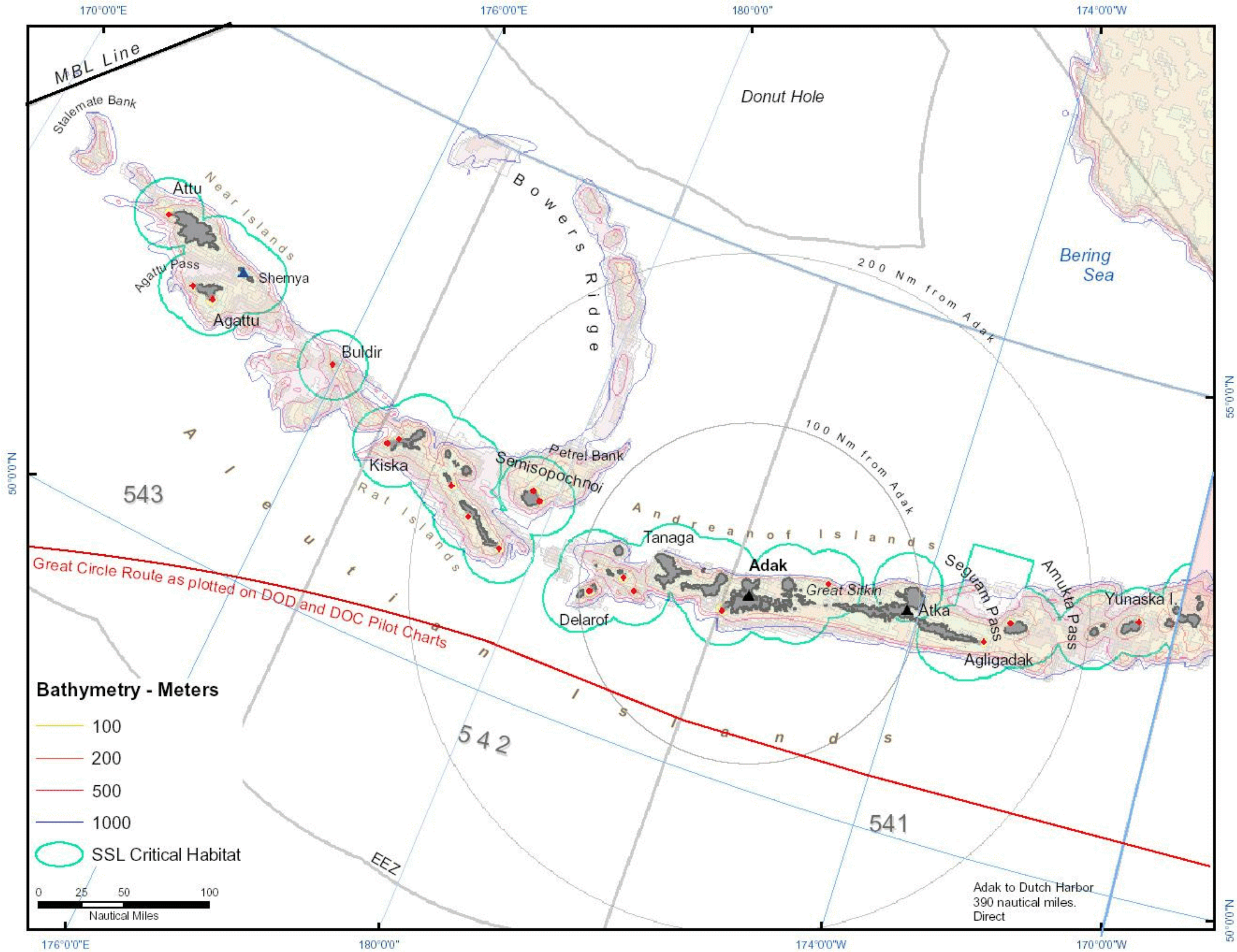
result of several motions[12] passed in the April meeting, is provided in Chapter 2 of this revised EA/RIR.

In June 2004, the Council heard testimony from the public, received comments from the SSC and AP on the revised draft EA/RIR, and took final action on each of the decision elements and alternatives. The Council took final action in June so that the FMP and regulatory amendment process, rulemaking, noticing, and other administrative process can be completed in time for an Aleut Corporation pollock fishery to commence in January 2005.

In October 2004, the Council revisited its June action and clarified its intent that CDQ groups receive a pollock allocation equal to 10% of the AI pollock TAC to fish in the AI as a part of their overall BSAI pollock allocation (issued pursuant to the provisions of the AFA). This is the status quo position for the CDQ groups, and involves no regulatory change.

[12] The text of the April 2004 motions is provided in Appendix A.11.

Figure 1.1-1 Map of the Aleutian Islands Management Areas (541, 542, and 543)



1.2 Problem statement

The U.S. Congress has determined that establishing a small boat fleet in the community of Adak will be critical for the economic diversification of that community (PL 108-199). Congress has further determined that this economic benefit can be gained through a direct apportionment of pollock quota to the Aleut Corporation to be used for economic development in Adak.[13] Congress' intent is that the Aleut Corporation will initially partner with large vessels (from a pool of vessels approved for the BSAI pollock fishery under the AFA), or with small vessels less than 60 feet LOA, to fish their apportionment. During public testimony at the Council's April 2004 meeting, representatives from the Aleut Corporation indicate that a group of small vessels will likely fish in 2005, with a longer-term goal of developing a resident fleet of small vessels in Adak to harvest the Aleut Corporation pollock apportionment. Eventually, by the year 2013, Congress intends that 50 percent of the Aleut Corporation pollock apportionment will be fished by partner vessels under 60 feet LOA, and 50 percent will be fished by partner AFA vessels. Revenues generated from the use of the Aleutian Islands pollock apportionment will allow for greater investment opportunities in Adak.

Congress has mandated that, if the Council provides for an Aleutian Islands directed pollock fishery, all of the directed pollock fishery must be allocated to the Aleut Corporation. This quota is to be fished with permission of the Aleut Corporation, and is to be used for economic development in Adak. Congress also specified that the Council could apportion this total allowable catch (TAC) over and above the 2 million mt Optimum Yield (OY) cap in the Bering Sea/Aleutian Islands groundfish fisheries which, based on longstanding policy, has never been exceeded by the Council. But Congress also mandated that, should the Council choose to exceed the OY cap for the purposes of apportioning pollock to the Aleut Corporation, the OY cap could be exceeded only for the fishing years 2004 through 2008.

In order to establish and manage an AI pollock fishery within the intent of the CAA, the FMP for the Groundfish Fishery of the BSAI and the regulations at 50 CFR part 679 must be amended. Such amendments are Federal actions that require environmental and socioeconomic analyses. In February 2004, the Council approved proceeding with an analysis of possible environmental effects of such a fishery, with the intent of opening an AI pollock fishery in 2005. The Council's motion is in Appendix A.3. The Council clearly determined that it did not want to provide for this AI pollock fishery by apportioning TAC over the 2 million mt OY cap. The Council directed staff to develop an EA/RIR/IRFA with which the Council will evaluate the effects of this fishery and make a recommendation.

The Council requested an evaluation of (1) different approaches to determining levels of TAC apportionment, perhaps using the current CDQ apportionment formula as a guideline, possibly with a requirement that no AI apportionment would exceed 40,000 mt; (2) alternative methods for calculating the Aleut Corporation apportionment so as to remain under the OY cap, with an evaluation of how unused TAC from this fishery might be rolled back to other groundfish fisheries in the BSAI; (3) alternative approaches to monitoring catch in the fishery to be created; (4) whether to provide for a small vessel component of this fishery in 2005 or defer this recommendation to 2007 or 2010; (5) whether to require an annual report from the Aleut Corporation on how the pollock

[13]The Aleutian Islands subarea includes federal management areas 541, 542, and 543. These, along with the location of Adak and other information, are shown in Figure 1.1-1.

apportionment was used for economic development in Adak, and (6) alternatives for managing Chinook salmon bycatch in the AI pollock fishery.

The Council further stated its intent to not take any action that might trigger the need for a formal Section 7 consultation under the Endangered Species Act. The Council specifically tasked its Steller Sea Lion Mitigation Committee (SSLMC) to review options for changing Steller sea lion protection measures in the AI to allow small vessels to operate more safely and efficiently. The SSLMC has met to consider a proposal offered by industry, but no recommendations have been made yet as both the SSLMC and NMFS have not had enough time to conduct an analysis. The SSLMC meeting minutes are provided in Appendix A12. Thus, the issue of safety and efficiency of small vessel operations in the proposed AI pollock fishery as it relates to options for changing SSL protection measures will be addressed after further consideration by the SSLMC and the Council, and is not part of the Council's recommendation for this action.

During its April 2004 meeting, the Council further refined the suite of decision elements and alternatives it wishes to consider when making a final recommendation on this proposed fishery. The Council requested that two additional alternatives be considered under decision element 1.0 which addresses the size of the pollock allocation that may be apportioned to the Aleut Corporation. One new alternative would apportion an amount that is the lesser of the TAC generated from the AI pollock acceptable biological catch (ABC) for that year, or 40,000 mt, retaining the 40%/60% A/B season split required by Steller sea lion (SSL) protection measures. The intent of this alternative is to constrain the amount allocated to either a specific amount, 40,000 mt, which would comport with Senator Stevens' floor language on Section 803 of the CAA, or, if the Council's recommended TAC based on the ABC for a given year is below 40,000 mt in a future year, an amount that would be no more than that TAC. Either way, the fishing industry would know several months before the new season opens what the approximate level of apportionment to the Aleut Corporation could be. The second new alternative would apportion an amount that is the lesser of 15,000 mt or 40% of the AI pollock TAC (after subtraction of the incidental catch allowance (ICA)), with all of the apportionment available for fishing in the"A"season. The intent of this alternative is similar, constraining the apportionment to a specific amount and assuring that the apportionment would be known several months ahead of the start of the next fishing season. This second new alternative differs from the first not only in amount allocated, but also that only an"A"season fishery would be allowed. The"A"season TAC would still remain at or below the 40% of annual TAC limit imposed by SSL protection measures. This alternative also conforms with some public testimony that stated that in the initial years of the Aleut Corporation fishery, their interest is primarily in"A"season pollock. The Council's second new alternative provides only an"A"season, and the included intent is that a trailing FMP amendment would be required to provide for an"B"season fishery. These two new alternatives respond specifically to AP and public suggestions, and to some Council member preferences, that the Aleut Corporation apportionment should be an amount that could be estimated prior to the industry negotiations and specifications process.

The Council also added an alternative mechanism for "funding" the Aleut Corporation apportionment and included a rollback procedure specific to this alternative. This alternative establishes the AI pollock TAC as 10 % from each the BSAI rock sole and yellowfin sole fishery TACs, and 80 % from the Eastern Bering Sea (EBS) pollock fishery TAC. For example, if the AI pollock TAC is 10,000 mt, it would be funded by a reduction of 1,000 mt from the two sole fishery TACs and an 8,000 mt reduction of the EBS pollock fishery TAC. All AI pollock"B"season TAC and all unused AI pollock fishery"A"season TAC is rolled back to the EBS pollock fishery. The rollback is to occur prior to or on the first day of the"B"season (June 10). The Council's intent is to reduce the TAC of two fisheries whose PSC bycatch rates are judged to be higher than in other groundfish fisheries, and to rollback TAC that is not, or cannot be, fished by the Aleut Corporation to the fishery that would "fund" the largest percentage of their TAC, the EBS pollock fishery. The Council's additional intent in this alternative also does not provide for an AI pollock fishery"B"season; a trailing FMP amendment would be required to authorize a"B"fishery. The Council also specified that this alternative and Alternatives 2.2, 2.3, and 2.4 also include a provision that the first step in the annual Aleut Corporation "funding" process will consider if there is any "room" between the combined BSAI groundfish fishery TACs and the 2 million mt OY cap, and if so, "fund" the Aleut Corporation allocation from that amount of TAC before proceeding with "funding" using the mechanism in that alternative. With all groundfish fishery TACs in the BSAI fully allocated this year and possibly in future years, the Council believes this likely will not be possible, but expressed an intent that if it were possible, the "funding" mechanism would use the difference between the OY cap and the sum of all groundfish fishery TACs as the first choice for obtaining TAC for the Aleut Corporation pollock fishery.

The Council also added a sixth decision element with three alternatives: having the Chinook bycatch in the AI pollock fishery count against the BSAI Chinook salmon bycatch cap, exempting the AI pollock fishery from any Chinook bycatch cap, or assigning a new 360 Chinook salmon cap to the AI pollock fishery. The Council was concerned that inordinately high Chinook salmon bycatch in an AI pollock fishery might prematurely close the Bering Sea Chinook salmon savings areas, thereby increasing cost of fishing to the rest of the industry. This alternative responds to AP recommendations and public comment, and to concerns expressed by certain Council members.

The Council also added a fourth alternative to the economic report mandate decision element. This alternative would require the Council to review the performance of the AI pollock fishery in June 2006 to determine the degree to which the fishery has been prosecuted under the terms of Section 803 of the CAA and Senator Stevens' intent as expressed in his floor language.

In June 2004, the Council took final action on Amendment 82. The Council recommended preferred alternatives for each of the six decisions before it. The Council's preferred alternatives are described in detail in Section 2.3 of this EA.

In October 2004, the Council revisited Amendment 82, and clarified its intent that a CDQ fishery be funded in the Aleutian Islands with 10% of the Aleutian Islands TAC. Under current regulations, the CDQ groups will receive 10% of any TAC created for the AI, and must fish the TAC in the AI. This is consistent with the provisions of the AFA which require that 10% of the BSAI pollock TAC be set aside for the use of the CDQ groups. The Council indicated that it did not intend to change these regulations.

1.3 Action necessary to allocate TAC to the Aleut Corp in January 2005

FMP and regulatory amendments are required to allocate the AI pollock TAC (other than the incidental catch allowance and CDQ allocation) to the Aleut Corporation as prescribed by the 2004 legislation. As with all fisheries rulemaking, a number of statutes and executive orders must be complied with throughout the regulatory process.

The harvest of pollock in the AI is managed through the harvest specifications. NMFS specifies each year the amount and method of the harvest of groundfish in the Exclusive Economic Zone off Alaska. To allow for the analysis and rulemaking for specifications based on the best available information and to prevent disruption of the fisheries while rulemaking is completed, NMFS uses interim specifications for the first part of the fishing year. The interim specifications for pollock are the first seasonal apportionment or 40 percent of the proposed TAC. Final specifications will be implemented in approximately late February to June, depending on the implementation of Amendments 48/48 to change the harvest specifications process (NMFS 2003). Interim specifications based on proposed specifications recommended by the Council at its October meeting are usually published in the Federal Register by early December.

For the interim and final harvest specifications in 2005, NMFS will prohibited the AI directed pollock fishery until the management provisions for the AI directed pollock fishery become effective. An AI pollock TAC based on the provisions of Amendment 82 will be included in the interim and final harvest specifications to allow the Regional Administrator to open the AI directed pollock fishery when the regulations for Amendment 82 are effective. This management is authorized by the Consolidated Appropriations Act of 2004 (CAA), which requires that only the Aleut Corporation may participate in the AI directed pollock fishery. Current regulations provide for the AI directed pollock fishery to be allocated to the AFA program, in conflict with Section 803 of the CAA.

1.4 The Role of this EA/RIR and Response to Issues

The allocation of Aleutian Islands pollock to the Aleut Corporation takes two major steps. In order to allocate a directed fishery allowance of Aleutian Islands pollock to the Aleut Corporation, it is necessary to create a structure within the FMP and regulations for doing that, and then to create a large enough Aleutian Islands pollock TAC during the specifications process in the Fall to allow a directed fishery.

The first step is to make provisions in the FMP, and in implementing regulations, for an allocation to the Aleut Corporation. The BSAI FMP currently does not make any provisions for an allocation of the AI pollock directed fishing allowance to the Aleut Corporation. The FMP must be changed to provide for this allocation. This amendment is number 82. Moreover, regulations implementing the FMP must also be changed to create this pollock allocation. Section 803 of the CAA requires the allocation, but left important implementation provisions up to the Council and NMFS. The Council's February and April 2004 motions identify many of these decisions, which are stated above and also listed in Section 2.1 of this EA/RIR. This means that the Council must make important recommendations during this process, and requires analytical support. This EA/RIR has been prepared to address the decisions associated with this first step.

The second step in creating this allocation will be to set a TAC during the annual harvest specifications process for 2005 that is large enough to provide for a directed fishery on AI pollock. If the Council did this following approval by the Secretary of the Amendment 82, then the directed fishing allowance would be allocated to the Aleut Corporation under the terms Amendment 82. The annual TAC would require a separate analysis of the different potential TAC levels that might be considered.

Each of the two actions requires analysis to help the Council make a reasonable recommendation based on the facts and avoid making a recommendation that could result in decision making by NMFS that could be characterized as “arbitrary and capricious.” The natures of the analyses differ. Amendment 82 creates the structure within which the Council will make future allocation recommendations, but does not make any specific allocation decision. Allocations within that structure could be small enough to preclude actual directed fishing, or they could be large enough to provide for significant fishing activity. Amendment 82 may include provisions that constrain future Council recommendations with respect to the size of an allocation (for example, if they reflect floor language indicating Senator Stevens’ intent that the allocation not exceed 40,000 mt), but they do not actually determine the allocation.

The allocations themselves will be made in the second step - the annual harvest specifications process. The analysis of that action will address specific alternative TAC levels. The AI pollock fishery specifications will also be analyzed under the NEPA, the ESA, and the RFA each year a TAC allocation is made to the Aleut Corporation, along with all the other harvest specifications implemented each year.

2.0 DESCRIPTION OF THE ALTERNATIVES

2.1 Council alternatives

The following six decision elements are the product of two Council motions, one at its February 2004 meeting (Appendix A3) and the other at its April 2004 meeting (Appendix A11).

1.0 Allocation size

1.1 No action: Determine the appropriate Aleutian Islands pollock TAC each year during the annual specifications process.

1.2 For guidance in determining the allocation amount to the AI pollock fishery, the Council shall consider pollock allocations given to the various groups that participate in the Community Development Quota (CDQ) program, in order to recommend a "reasonable amount" of AI pollock to award to the Aleut Corporation, and in no case should this amount exceed 40,000 mt.

1.3 The Council shall allocate a combined AI Incidental Catch Allowance (ICA) and Directed Fishing Allowance (DFA)[14] equal to the lesser of the TAC generated from the acceptable biological catch (ABC) for that year or 40,000 mt. The DFA shall be subject to the 40% "A" season and 60% "B" season apportionment required by the Steller sea lion protection measures.

1.4 Beginning in 2005, and until changed, the AI pollock "A" season DFA shall be the lesser of 15,000 mt or 40% of the AI pollock annual TAC after subtraction of the ICA. No part of the annual DFA shall be allocated to the "B" season.

1.3[C] The Council shall allocate a combined Aleutian Islands ICA and DFA equal to the lesser of the ABC or 40,000 mt. This allocation shall be subject to the 40% A season, 60% B season allocation required by the SSL protection measures.

1.4[C] Beginning in 2005, and until changed, the annual Aleutian Islands pollock TAC shall be the lesser of 15,000 mt or 40% of the AI pollock ABC. One hundred percent of the DFA shall be available for harvest in the pollock "A" season."

Implications of Decision Element 1: The No Action option would, in essence, give the Council the latitude to set the TAC at zero or any amount between zero and the ABC. ABC for pollock in the AI for the fishing year 2004 was set at 39,400 mt. The second alternative would allow the Council to set a

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[14]While the Council's motion refers to a directed fishing allowance (DFA), the term directed pollock fishery (DPF) is more consistent with the language of the American Fisheries Act. In this EA/RIR, the term "DFA" has been retained in when the Council's decision elements and alternatives are described, in deference to the Council's use of this language. The term "DPF" has been used elsewhere in EA/RIR discussions and analysis.

DPF in the range of pollock TACs apportioned to the 6 CDQ groups (or perhaps an average of the 6 or some other calculation). CDQ groups receive 10% of the BSAI pollock TAC, which for the 6 CDQ groups in 2004 their combined TAC is set at 149,200 mt. The 6 CDQ groups for 2003 received pollock TAC (based on a Bering Sea TAC of 1,491,760 mt) of 149,176 with individual CDQs receiving an apportionment ranging from 7,458 to 35,802 mt (an average of about 25,000 mt). Thus the second option would apportion to the Aleut Corporation DPF somewhere in the range of the amounts above, conceivably in the range of 6,000 or 7,000 mt to 25,000 to a maximum of 40,000 mt. Note that for this option, the Council would essentially be precluding a future opportunity to set the DPF at levels higher than 40,000 mt; this could occur if the ABC is higher than 40,000 mt, as it was ten years ago. The third alternative was added by the Council at their April 2004 meeting. This alternative sets the potential AI TAC (ICA and DPF) equal to the TAC that the Council would determine based on the recommended ABC for that year, or 40,000 mt, whichever is less. In essence, this alternative is a formula that sets a 40,000 mt ceiling for the year. Alternative 1.4, also added by the Council in April, sets future maximum "A" season DPF allocations equal to 15,000 mt, with the potential of even lower quotas if the TAC recommended from that year's ABC is below about 39,500 mt (39,500 minus an ICA of, say, 2,000 mt = 37,500 x 40% = 15,000 mt); under this alternative, fishing would be restricted to the A season. ABCs in the AI may change if future AI pollock stock assessments suggest a conservation measure that would close the AI region east of 174 degrees W, and/or if the remaining open area ABC drops below ABCs of recent years for the entire AI area.

2.0 Allocation mechanism

2.1 No action: no regulatory changes

2.2 The pollock allocation to the AI fishery will be funded by a reduction in the EBS pollock TAC. Any unused pollock TAC from the AI fishery will be rolled back to the EBS pollock TAC. This will occur at the earliest time possible in the calendar year. Before making the apportionment as described here, the AI pollock DFA is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

2.3 The pollock allocation to the AI fishery will be funded by taking equal proportional reductions in the TAC amounts from each of the existing groundfish fisheries in the BSAI, without regard to species. Any unused TAC amount, surplus to the needs of the AI pollock fishery, will be rolled back to the fisheries from which it originated in the same proportions (and species). This should occur at the earliest practicable time in the calendar year. Before making the apportionment as described here, the AI pollock DFA is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

2.4 The pollock allocation to the AI fishery will be funded as described in Alternative 2.3, but the procedure for calculation of TAC exempts the BSAI sablefish IFQ fishery from the proportional reduction and rollback. Before making the apportionment as described here, the AI pollock DFA is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

2.5 The pollock allocation to the AI fishery will be funded 10% by a reduction in the BSAI rock sole fishery ITAC, 10% by a reduction in the BSAI yellowfin sole fishery ITAC, and 80% by a reduction in the EBS pollock fishery ITAC. No later than June 10, unused "A" season AI pollock DFA, and the entire "B" season AI pollock DFA, shall be rolled back to the EBS pollock fishery. Before making the apportionment as described here, the AI pollock DFA is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

Implications of Decision Element 2: Alternative 1: the Council takes no action. Section 803(a) requires that "Effective January 1, 2004 and thereafter, the directed pollock fishery in the Aleutian Islands Subarea (AI) of the BSAI...shall be allocated to the Aleut Corporation.." However, currently the FMP does not authorize the Council to make an allocation exclusively to the Aleut Corporation. Pursuant to the AFA, and Section 13.4.7.3.4 of the BSAI FMP, 10% of BSAI pollock must be allocated to the CDQ program. Moreover, the FMP is not explicit about excluding AI pollock from the AFA program. The "no action" alternative is, therefore, in conflict with existing statutes and is not a legally viable alternative. The next three options would allow the Council to either take some quota from the Bering Sea pollock fishery TAC (which is almost 1,500,000 mt for 2004) and apportion that to the Aleut Corporation - or - take some quota, proportionately, from the TACs of each BSAI fishery, either including or not including the sablefish IFQ fishery (about 2,000,000 mt for all combined for 2004) and apportion it to the Aleut Corporation. The effect either way would be a relatively small (1 to 2%) reduction in any fishery's TAC. The reallocation (rollback) component of these options would go into effect once it becomes evident that the Aleut Corporation would not harvest the full quota. This could occur in the early years of the program as the Aleut Corporation may initially only seek to gain revenues from the A season (roe) fishery, and not seek to fish the B season. Since the current Steller sea lion regulations require a 40%/60% TAC split in the Aleutian Islands to spread out the harvest, and if the Aleut Corporation does not fish the 60% "B" season allocation, that amount of TAC "left on the table" would be reallocated back to "where it came from" - i.e. either back to the Bering Sea pollock fishery or back to each of the BSAI fisheries. Alternative 2.4 is a suboption to the latter measure, because the IFQ fishery for sablefish may *not be "able" to absorb TAC "returned" to it later in the year (the AI pollock fishery A season ends June 10).....the structure of the IFQ fishery is not very amenable to a reallocation procedure. The above two alternatives (funding the AI TAC from all BSAI fishery TACs, 2.3 and 2.4) is considered by some to be the intent of the Congressional Bill, since Section 803(c) directs that the allocation to the Aleut Corporation be made "...without adversely affecting current fishery participants..." Alternative 2.5 was added by the Council at its April 2004 meeting. Under 2.5, the AI pollock fishery would be funded by reductions that would come from two sole fisheries and the EBS pollock fishery, but all the "B" season AI pollock apportionment plus any unharvested "A" season AI pollock TAC would all roll back to just the EBS pollock fishery. The rock and yellowfin sole fisheries would not receive a rollback. Under Alternatives 2.2 to 2.5, the Council would attempt to first allocate TAC to the Aleut Corporation from the difference between the OY cap and the sum of all groundfish fishery TACs for the BSAI (the Council specified that this concept would be its first choice in funding under all the alternatives).*

3.0 Monitoring vessel activity

3.1 Status quo (this option imposes only those monitoring and enforcement measures that would be required if there were no change in regulation).

3.2 "Increased monitoring" alternative. This alternative would have several required measures (not options). These include:

1. The Aleut Corporation must notify the NMFS Alaska Region with a list of which vessels are authorized by it to fish for pollock in the Aleutians; notification must be at least 14 days prior to the anticipated start of fishing. The NMFS RAM Division will verify each vessel's eligibility (FFP, ADF&G number, USCG fishery endorsement, length, or AFA status) and provide to the Aleut Corporation a list of qualified vessels and the date fishing may commence. These vessels must carry documentation showing they have RAM approval and Aleut Corporation permission;
2. Catcher vessels are prohibited from fishing for pollock in the Aleutian Islands if pollock harvested in the Bering Sea or GOA are on board. Also, catcher vessels are prohibited from fishing for pollock in the Bering Sea or GOA if Aleutian Islands pollock are on board;
3. AFA requirements extend to catcher-processors and motherships (this extends AFA level observer and scale requirements to CPs under 60 feet and to unlisted AFA vessels);
4. Shoreside processors or stationary processors accepting deliveries of AI pollock must have an approved Catch Monitoring Control Plan;
5. The Aleut Corporation will be responsible for keeping its harvests and its agents' harvests within the AI pollock directed fishing allowance. The Aleut Corporation shall be responsible for designating a person as a quota manager

for pollock catch accounting; this person shall report to NMFS Sustainable Fisheries Division with weekly pollock catch summaries.

3.3 "Observer" alternative. Option 3.3a: All the requirements of Alternative 2 would apply; in addition, all catcher vessels would be required to have 100% observer coverage while operating in the Aleutian Islands. Option 3.3b: All of the requirements of Alternative 2 would apply; in addition, all catcher vessels would be required to have 30% observer coverage while operating in the Aleutian Islands and at least one trip by each participating vessel would have to be observed.

Implications of Decision Element 3: The Statute allows basically two classes of vessels to participate in the Aleut Corporation fishery: vessels 60 ft and smaller LOA, and AFA vessels (which are larger catcher, catcher/processor, or mothership vessels). Regardless which vessel class fishes for the Aleut Corporation allocation, they would have to follow current regulations for observer coverage and other monitoring and reporting requirements under the "No Action" option. The Council, however, may wish to increase or otherwise change how this fishery is monitored, and under the second alternative there are a suite of elements that would apply (in addition to status quo). These elements are a set of measures that would increase the level of monitoring currently required. These elements are not options but rather are intended to apply collectively to the action should this alternative (3.2) be selected. The first is an enforcement measure - making it easier for enforcement to know if a vessel is either fishing under AFA rules or the rules set forth for this new Aleut Corporation fishery. (Note that under current regulations, listed AFA catcher-processors and motherships are under AFA rules in any groundfish fishery.) The second element would enable more accurate catch accounting and would prohibit vessels from fishing for pollock in both the Bering Sea and GOA, and the AI, in the same trip. The third element would enhance catch composition accounting by imposing observer, sampling station, and scale requirements on all C/Ps and unlisted AFA vessels. The fourth element requires shore or stationary floating plants receiving AI pollock to operate under an approved CMCP, thereby enhancing catch accounting at the plant. The fifth element requires the Aleut Corporation to ensure that the AI pollock harvest remains within the quota prescribed; the burden of closely monitoring the DPF is placed on the Aleut Corporation, which would be subject to penalties if DPFs are exceeded. Alternative 3.3 imposes all elements in 3.2 plus a mandatory 100% observer requirement on all catcher vessels. An option under 3.3 retains all of the requirements of 3.2, but reduces the mandatory observer coverage to 60% for catcher vessels. Requiring 100% observer coverage on small vessels might be considered too onerous, at least in the early years of this new fishery.

4.0 Small vessels

4.1 No action. Take no steps to delay ability of Aleut Corporation to introduce vessels under 60 feet LOA.

4.2 Defer small vessel participation until a later date 2 (2006) or 5 (2007) years from 2004 to allow for development of a management program.

Implications of Decision Element 4: Either small vessels (60 ft LOA or less) or AFA vessels are permitted to fish the Aleut Corporation pollock quota. But there is a phase-in clause in the 2004 Consolidated Appropriations Act (CAA) for the 60 ft or less vessel class. The Council decision is whether the 60 ft or less vessels will be allowed to fish now, or whether the 60 ft or less vessels would be prohibited to fish now but would be allowed to fish starting either 2 years from now or 5 years from now. The issue here is whether to set in place <u>now</u> in the FMP amendment any provisions that the Council would impose on small vessels "down the road". Those small vessel provisions are discussed above, to some extent. Under the other option, deferring that decision to a later date would give the Council some time to gather information on how they might better monitor the small vessel component of this fishery and perhaps to design a more appropriate and enforceable set of measures based on a few years of actual experience with this fishery.

5.0 Economic development report mandate

5.1 No action: do not require the Aleut Corporation to submit a report to the Council or NMFS.

5.2 Require the Aleut Corporation to submit an annual report to the Council.

5.3 Require the Aleut Corporation to submit an annual report to NMFS or the State of Alaska comparable to the annual reports submitted by the CDQ groups.

5.4 Require the Aleut Corporation to submit a report to the Council prior to its June 2006 meeting. At the June 2006 meeting, the Council shall review the AI pollock fishery's performance, including information on harvest success, development of a small vessel fleet, and progress toward completion of pollock processing capacity to determine if further adjustments to the AI pollock TAC may be appropriate, in light of Section 803 of the Consolidated Appropriations Act, 2004 and Senator Stevens' floor language.

Implications of Decision Element 5: The CAA states that the pollock quota apportioned to the Aleut Corporation fishery must be "used" for economic development in Adak. What might be considered economic development? What use of revenues or fish, etc. would be construed as economic development? The Council might want to receive information on how the

Aleut Corporation used its quota each year. Or they might not (No Action alternative). The Council might even want to pattern the report from the Aleut Corporation after the more detailed reports NMFS and the State of Alaska currently receive from the CDQ groups. In this case, note that the Council would not directly receive the report since, under CDQ guidelines, data contained in these reports are confidential and thus can only be received by NMFS or the State of Alaska. So the choice among the first three alternatives, then, is no report, a report that might be minimal but would supply sufficient information to judge that the TAC went to "economic development in Adak", or a more elaborate report that gets into much detail on the Aleut Corporation's business ventures. The Council added a fourth alternative in their April 2004 meeting: a revisit in June 2006 of the performance of the Aleut Corporation fishery and progress made toward economic development in Adak. Alternative 5.4 could be combined with either 5.2 or 5.3, since it requires a specific 2006 report only, and in the middle of the calendar year, whereas the other alternatives set in place a requirement for reports to be provided year after year, presumably at year end.

6.0 Chinook salmon bycatch management

6.1 No action. Chinook salmon bycatch in the AI pollock fishery would count against the BSAI Chinook salmon bycatch cap.

6.2 Chinook salmon bycatch in the AI pollock fishery would not count toward the Chinook salmon bycatch cap in the BSAI.

6.3 A new 360 Chinook salmon bycatch cap is set for the AI pollock fishery which, when attained, results in closure of the AI Chinook Salmon Savings Area only.

Implications of Decision Element 6: The status quo or no action alternative would require that Chinook salmon taken as bycatch in the Aleut Corporation fishery would be counted against the current Chinook salmon PSC cap for the BSAI. In 2004 and into the future this cap is 29,000 Chinook salmon. Note that 7.5% of this cap is allocated as Chinook PSC for the CDQ fisheries and the remainder to the non-CDQ fisheries (currently 26,825 Chinook is the BSAI pollock fishery cap). If the bycatch of Chinook salmon in the AI pollock fishery is appreciable, then this could impact the date of closure of the Chinook Salmon Savings Areas in the BSAI to the directed pollock trawl fishery in the Bering Sea. Alternative 6.2 would exempt the AI pollock fishery from the current Chinook salmon bycatch management program in the EBS pollock trawl fishery; presumably this could remove some incentives for avoiding Chinook bycatch in the AI fishery. Alternative 6.3 imposes a special cap for only the AI pollock fishery. When this 360 Chinook cap is reached, the AI (only) Chinook Salmon Savings Area would close to further AI pollock fishing. The remainder of the AI region would continue to be open. This AI Chinook cap would not affect the Bering Sea *pollock fishery Chinook cap or the BSAI Chinook Savings Area closure process.*

2.2 Alternatives considered but not evaluated

Optimum Yield

The FMP for the BSAI groundfish fisheries treats the issue of the OY cap in Section 10. Portions of this section relevant to the cap are provided in Appendix A.4. The Council has maintained, by policy, a cap on the volume of groundfish that are harvested in the BSAI region. As described above, the Council's intent is to retain the 2 million mt OY cap intact as it considers the current action.

The Council has in the past maintained this ceiling or maximum combined harvest level for a variety of reasons including concerns over conservation of the groundfish stocks, as a buffer against uncertain monitoring of catch, and as a means for maintaining conservative harvest levels.

In February 2004, the Council revisited the issue of allowing fishing to occur over the OY cap in the BSAI. Specifically, Congress has determined that, in the context of allocating pollock TAC to the Aleut Corporation for a directed fishery in the AI, the Council could exceed the OY cap for the years 2004 through 2008. Congress apparently recognized that the Council, in following Congress' directive to provide TAC for an AI pollock fishery, could be constrained in making that allocation because of potential economic impacts on other fisheries in the BSAI. In the specifications process during which TACs were allocated to the various groundfish fisheries for the 2004 fishing year, industry informed the Council that negotiations to develop recommendations for allocating TAC were difficult, because each fishery has developed the ability to harvest the currently-available levels of TAC for each fishery, and the combined harvesting capacity of all these fisheries currently sums to the 2 million mt OY cap. Thus, accommodating an additional fishery may be problematic to other fisheries currently being prosecuted in the BSAI. In light of this concern, which was expressed to the Council in February, the Council discussed the issue of possibly allocating quota for 2005 over the OY cap, perhaps even through 2008, as provided in the Congressional legislation.

Because Congress has provided an opportunity to exceed the OY cap for the years 2004 through 2008, the Council discussed an option of exceeding the OY cap, as it pursues and analyses various options in the process of providing for the AI pollock fishery. Exceeding the OY cap for a small amount of pollock TAC could be considered by some a reasonable alternative. Some members of the public have encouraged the Council to at least consider this as an option, and recommended that staff provide an analysis of the potential impacts of this alternative in this Environmental Assessment document. Some Council members were sympathetic to this concept because the upcoming 4-year window available for providing for the AI fishery without affecting TACs available to other fisheries would allow for the AI pollock fishery to proceed with minimal changes in other groundfish fisheries because "funding" the allocation would come from above the OY cap. This period of time also would allow opportunity for the Council and NMFS to obtain actual catch data from the new AI fishery which may provide helpful insights into how to manage the fishery in the future. This period of time also might be considered a planning period during which other fisheries and the industry in general could determine how best to accommodate an AI pollock fishery in the more distant future. Regardless, these potential advantages to "funding" the AI pollock allocation above the cap, most Council members felt that exceeding the cap was not a viable option. These Council members do not believe it is necessary to exceed the cap given the likely small allocation required for an AI pollock fishery. The guidance given the Council in the Congressional legislation suggests an allocation similar to the current CDQ pollock allocation, which average 25,000 mt. This amount is just over one percent of the overall 2 million mt groundfish apportionment in the BSAI for 2004, a very small amount that the Council believes can be accommodated within the TAC amounts that are specified to the groundfish fisheries in the BSAI.

During February 2004, the Council further reiterated its interest in remaining under the OY cap. This has been Council policy for many years and some Council members believe the AI pollock fishery issue is not a sufficiently large or complex issue to warrant even considering allocating quota over the cap. The Council has had the opportunity to exceed the cap in prior years, but has chosen not to do so in every case. The Council's own F_{40} report documents the desirability of retaining the OY cap as a management measure (Goodman et al. 2002). And the programmatic SEIS retains the OY cap as a bookend that is part of the Council's preliminary preferred alternative for long-term management of BSAI groundfish fisheries (NMFS 2003b).

Council members believe that adhering to an OY cap is partly a conservation issue – that the OY cap has been used as a "safeguard" against possible error in the stock assessment process and uncertain knowledge about stock strength. The cap can be considered a safeguard to help the Council manage for sustained yield from these groundfish stocks in the BSAI region. Some Council members also believe the cap is "insurance" for ecological balance in the BSAI region – that biomass extracted from the BSAI is maintained at a ceiling until considerably more knowledge is gained about how this ecosystem functions, in light of existing fisheries. The Council has felt that remaining under the cap maintained a conservation-oriented stance that the public has embraced and has repeatedly encouraged the Council to preserve. One Council member felt that the manner in which the Congressional legislation was worded signified that even Congress was uncertain about exceeding the cap when it specified that the cap could be exceeded only for a few years, and then would be firmly placed into Federal law thereafter.

Given the Council's discussions as summarized above, the Council decided to continue with the evaluation and analysis of effects of a directed pollock fishery in the AI but with the firm intent of providing TAC for this fishery from within the OY for the BSAI groundfish fisheries. The analysis in this document, therefore, has taken this as a given, and will not further address exceeding the OY cap as an option or any component of an option.

Market Alternatives Considered but not Analyzed Further

Two market based alternatives for funding the AI pollock allocation were considered, but not subjected to detailed analysis. The pollock allocation could be made available through outright purchase of harvest shares held by AFA vessels. This alternative was not evaluated because current statutes do not permit the transfer of AFA harvest rights to an entity such as the Aleut Corporation. Moreover, purchase from internal Aleut Corporation funds would eliminate much of the value Congress appears to have desired to create for the Corporation through a type of in-kind grant. Congress made no provision for a cash grant for this purpose. If the purchase were funded by a federal grant, this approach would reduce the funding burden on the AFA sector, by spreading it more broadly among U.S. taxpayers.

The value of the harvest rights received by the Aleut Corporation is considerable. The actual cost to the Corporation of buying the rights in the market place is impossible to ascertain, as there is no market in these rights. However, the estimated royalty payments for a ton of CDQ pollock in the 2002 "A" season appears to have averaged $300. The government might have given the Aleut Corporation a grant to acquire a 15 year lease of 15,000 mt of this quota to fish in the "A" season. Assuming that this would have had a total annual royalty value of $4,500,000 in each year, it could have a present value of $54 million using a 3% real discount rate.

Alternatively, it might be possible to fund a portion of the AI pollock allocation as an exchange for forgiveness of a portion of any outstanding balance remaining from the $75 million AFA loan. This was a loan made under the AFA to buy nine pollock catcher/processors and retire them from the fishery. The loan's principal of $75 million carries a fixed interest rate of 7.09 percent. The loan and accrued interest are to be repaid by an assessment on the AFA inshore fleet of six tenths of a cent on each round pound of pollock landed. This is equivalent to an assessment of about $13 on each metric ton (2002 annual ex-vessel pollock prices averaged about $265/mt). The current (May 2004) balance on this loan is $67.15 million of principal and $0.44 million of accrued interest.[15] This alternative was not evaluated, as Congress made no provision for such an exchange. Again, however, this approach would reduce the funding burden on the AFA sector, by spreading it more broadly among U.S. taxpayers.

Funding from OY before TAC determination

It would be possible to deduct the AI pollock DPF from the OY before choosing the size of the TACs for the different species. Under this approach, the OY would be equal to the sum of the DPF and ICA for AI pollock, and the TACs for all other species. This method could be followed for Alternatives 2.2, 2.3, and 2.4 above. The following bulleted points provide a more detailed description of this approach:

- The OY is capped at two million metric tons.
- Amend 679.20(a)(2) to say that the sum of the TACs for all species (other than AI pollock) plus the AI pollock ICA and the AI pollock DPF. should fall below the OY cap. ($\sum_i TAC_i + DPF_{AI} + ICA_{AI} <= OY_{upper}$).
- Determine the AI pollock DPF.
- Specify an ICA sufficient to cover pollock bycatch needs in the AI.
- Deduct these from the OY.
- The TACs for other species must be less than or equal to the remainder after the AI DPF and ICA have been deducted from the OY. Determine the TACs for each species.
- Calculate species specific unspecified reserves and CDQ reserves, and ITACs, as provided for in regulation.

[15]Barry, Shawn. National Marine Fisheries Services Financial Services Division. Silver Spring, MD. 301-713-2390. Personal communication. May 2004.

Under this alternative, the AI DPF is taken “off the top,” and CDQ groups as well as all other participants in the BSAI groundfish fisheries would contribute to the funding. Any funding mechanism desired (compared to historical divisions of the OY among species TACs) can be created by the choice of appropriate TACs for the different species.
However, this approach appears to conflict with the statutory mandate of the AFA, which “allocates ten percent of any directed pollock fishery in the Aleutian Islands to the western Alaska Community Development Program (“CDQ”) as a threshold matter prior to the allocation for any other purpose.” (Yukon Delta, page 1)

Steller Sea Lion Mitigation Committee

The Council’s February 2004 motion included instructions to request the Steller Sea Lion Mitigation Committee (SSLMC) to review the issues associated with a modification of SSL protection measures in the Aleutian Islands subarea to allow vessels to fish for pollock in waters where they are currently prohibited from doing so.

The SSLMC met April 26, 2004 to discuss the Council’s charge: to review SSL protection measures in the Aleutian Islands region to determine whether changes can be made in SSL protection measures to allow small pollock trawlers to operate more safely and efficiently. The SSLMC received a proposal from the Aleut Corporation that would open two SSL closed areas to pollock trawling in the “A” season, and, to offset these two new openings, would close another area (not currently closed) to Pacific cod fishing. NMFS’ Office of Protected Resources has conducted a general review of the proposal, but has not had sufficient time or opportunity to thoroughly review available data that bear upon this issue. NMFS and the SSLMC agreed to continue to informally explore this proposal and possible alternative actions that might provide the desired benefit to the fishery and yet minimize impacts on Steller sea lions and not trigger formal ESA Section 7 consultation. The minutes of the April 26 SSLMC meeting, without attachments, are provided in Appendix A12.

At its June meeting, the Council asked its Steller Sea Lion Mitigation Committee to continue informal discussions with NMFS on possible alternatives for Steller sea lion protection measures in the AI region so that more opportunity may be provided for small vessel participation in the AI pollock fishery. Given the large areas currently closed to pollock fishing in the AI region (0 to 20 nm offshore), the Council wishes to possibly consider changes in SSL protection measures in the future to provide safer conditions for small vessels participating in this fishery – that is, more areas open to fishing closer to shore near Adak. The Council restated its intention to not entertain proposals for SSL protection measure changes that would trigger formal Section 7 consultations under the ESA.

The SSLMC has met twice since the Council’s June meeting, on July 19-20 and September 8-9. It has worked with the Aleut Enterprise Corporation (AEC, a subsidiary of the Aleut Corporation) on a proposal to relax SSL closed areas in two areas near Adak. However, the Committee has been unable to develop a proposal without requiring formal consultation with NMFS under the Endangered Species Act. NMFS Protected Resources Division reviewed the original AEC proposal and a modified AEC proposal, and indicated that if implemented, the proposed SSL regulatory changes would result in a finding of “likely to adversely affect” the western SSL, and thus to further pursue this proposal, the agency would have to open formal consultation. Since the Council has given specific instructions to the SSLMC not to pursue a proposal that would trigger formal consultation, the Committee has ended its work for now.

A request by the Council that one of its committees evaluate an issue does not raise NEPA, EO 12866, or RFA concerns, and is not otherwise evaluated in this document. Any action that may result from the SSL Mitigation Committee review will be analyzed as required under these statutes and order.

2.3 The Council's Preferred Alternative

The Council's final motion in June 2004 contained elements dealing with: (a) allocation size, (b) allocation mechanism, (c) monitoring vessel activity, (d) small vessels, (e) economic development reporting, and (f) Chinook savings. The elements of the Council's motion follow.

Allocation Size

Starting in 2005:

1. Annual TAC

   (a) When the AI ABC is equal to or more than 19,000 mt, the AI TAC shall equal 19,000 mt.
   (b) When the AI ABC is less than 19,000 mt, the AI TAC shall be no more than the ABC.

2. The AI pollock CDQ directed fishing allowance shall be established as 10 percent of the AI TAC. The remaining amount will be termed the initial TAC (ITAC)[16]

3. The ICA shall be deducted from the annual ITAC.

4. Seasonal Apportionments

The A season apportionment of the DPF shall be the lesser of

(a) no more than 40% of the ABC or
(b) the annual ITAC after subtraction of the ICA

The total harvest in the A season (DPF, CDQ, and ICA) shall not exceed 40% of the ABC.

The B season apportionment will be equal to the annual ITAC minus the ICA and minus A season DPF. The B season apportionment may be further adjusted by rollover of unharvested A season pollock.

[16]The CDQ pollock directed fishing allowance is seasonally apportioned 40/60 between the A/B seasons, respectively, under 50 CFR 679.23(e)(2).

Allocation Mechanism

2.2 The AI pollock TAC will be funded by a reduction in the EBS pollock TAC. Any unused pollock ITAC from the AI fishery will be rolled back to the EBS pollock ITAC. This will occur at the earliest time possible in the calendar year. Before making the apportionment as described here, the AI pollock <u>TAC</u> is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so. (minor modifications have been made to this text)

Monitoring Vessel Activity

3.2 "Increased monitoring" alternative. This alternative would have several components (not options). These include:

- The Aleut Corporation must notify the NMFS Alaska Region with a list of which vessels are authorized by it to fish for pollock in the Aleutians; notification must be at least 14 days prior to the anticipated start of fishing. The NMFS RAM Division will verify each vessel's eligibility (FFP, ADF&G number, USCG fishery endorsement, length, or AFA status) and provide to the Aleut Corporation a list of qualified vessels and the date fishing may commence. These vessels must carry documentation showing they have RAM approval and Aleut Corporation permission;
- Catcher vessels are prohibited from fishing for pollock in the Aleutian Islands if pollock harvested in the Bering Sea or GOA are on board. Also, catcher vessels are prohibited from fishing for pollock in the Bering Sea or GOA if Aleutian Islands pollock are on board;
- AFA requirements extend to catcher-processors and motherships (this extends AFA level observer and scale requirements to CPs under 60 feet and to unlisted AFA vessels);
- AI pollock may only be delivered to a shoreside processor or stationary processor which has an approved Catch Monitoring Control Plan or to one or more AFA qualified vessels, as permitted by legislation.
- The Aleut Corporation will be responsible for keeping its harvests and its agents' harvests within the AI pollock directed fishing allowance. The Aleut Corporation shall be responsible for designating a person as a quota manager for pollock catch accounting; this person shall report to NMFS Sustainable Fisheries Division with weekly pollock catch summaries.
- Vessels < 60 feet shall take a Cadre observer if provided by NMFS. The < 60 ft. vessel observer cadre restriction is waived under this program. Vessels < 60 feet that take an observer must comply with the safety provisions in 50 CFR 679.50(g)(1)(ii).

Small Vessels

4.1 No action. Take no steps to delay ability of Aleut Corporation to introduce to the fishery vessels under 60 feet LOA.

Council will review the observer issue associated with vessels < 60 ft. concurrent with the June 2006 economic report review.

Economic Development Report

5.2 Require the Aleut Corporation to submit an annual economic development report to the Council, similar to the AFA co-op reports. A draft report will be due in December and a final report will be due in February.

5.4 Require the Aleut Corporation to submit a report to the Council prior to its June 2006 meeting. At its June 2006 meeting, the Council shall review the AI pollock fishery performance, including how the money was spent, information on harvest success, Chinook salmon bycatch, development of a small vessel fleet, and progress toward completion of pollock processing capacity to determine if further adjustments to the AI pollock TAC may be appropriate, in light of Section 803 of the Consolidated Appropriations Act, 2004 and Senator Stevens' floor language.

Chinook Savings

6.2 Chinook salmon bycatch in the AI pollock fishery would not count against the BSAI Chinook salmon bycatch caps.

6.3 The Chinook salmon bycatch cap of 700 applies to the AI Chinook salmon savings area closure only.

The preferred alternative and the scope of the analysis

The Council motion drew on and adapted alternatives analyzed in the EA/RIR and falls within the scope of the alternatives analyzed in that document. The principal modifications concern the determination of the AI pollock allocation size, and its distribution between the "A" and "B" seasons.

The allocation size provisions of the motion have several key characteristics. These include (a) a cap of 19,000 mt on the ITAC, (b) an "A" season apportionment of no more than 40% of the ABC or the annual ITAC after subtraction of the ICA, which ever is less, (c) a potential "B" season allocation, and (d) a deterministic link between ABC and ITAC for ABCs above 19,000 mt, but no deterministic link for ABCs below 19,000 mt. These attributes all fall within the scope of the allocation size alternatives considered in the EA/RIR:

- The EA/RIR analyzed the impacts of a range of directed fishery allowances up to 58,000 mt. Alternatives 1.2, 1.3 and 1.3^C analyzed a 40,000 mt cap, while Alternatives 1.4 and 1.4^C analyzed a 15,000 mt cap. The cap in the Council's preferred alternative falls below the 40,000 mt cap, and close to the 15,000 mt cap. Specific AI pollock allocations will be made through the annual specifications process, and will be subject to NEPA analysis at that time.
- Alternatives 1.3^C and 1.4^C included "A" season apportionments equal to 40% of the ABC. These are evaluated in Section 4.2.3 of the EA.
- Alternatives 1.1 and 1.2 in combination with Alternatives 2.2, 2.3, and 2.4 provided for "B" season fisheries, contingent on Aleut Corporation ability to make use of their allocation in that season.

- Alternatives 1.3^C and 1.4^C included deterministic relationships between ABC and ITAC, while 1.3 and 1.4 evaluated ITAC determined in a separate process from the ABC.

The allocation mechanism is Alternative 2.2, which was analyzed in the EA/RIR. The provisions for monitoring vessel activity are primarily Alternative 3.2, which was analyzed in the EA/RIR. Alternative 3.3 analyzed the provision of observer coverage to vessels. Provision 3.2-6 in the Council's motion, requiring vessels under 60 feet to take a Cadre observer at NMFS's request, is an attenuated version of 3.3, and falls within the scope of the analysis of 3.3. Small vessel alternative 4.1 was analyzed in the EA/RIR. The Council's expression of intent to review the observer issue in June 2006 does not require analysis. The Council's request for an annual economic development report, and for a cumulative report in June 2006, were analyzed in the EA/RIR. The Council modified the alternatives to clarify the nature of the information requested, but these did not substantively change the nature of the alternatives. The Council adopted Chinook bycatch alternative 6.2 as analyzed. It also adopted a modified version of Alternative 6.3. Alternative 6.3 was modified to adopt a higher cap on the AI Chinook cap and closure program. The higher cap was based on a high end AI Chinook bycatch rate, as analyzed in Section 4.7, and Table 4.7.1-2. The modification thus falls within the scope of the analysis.

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3.0 AFFECTED ENVIRONMENT

3.1 Related literature

This chapter discusses the affected environment in the Aleutian Islands, and includes information on environmental features, existing fisheries, Adak and the Aleut Corporation, the Steller sea lion population, existing enforcement and monitoring regimes, and other background information relevant to the proposed action. The chapter provides information directly applicable to the action, and thus does not contain lengthy reviews of information that would be duplicative of information already contained in other documents. However, there are data and information contained in a variety of other documents that are helpful background, and therefore these documents are incorporated herein by reference. These documents include:

- The draft groundfish programmatic supplemental Environmental Impact Statement (NMFS 2003a)
- The Stock Assessment and Fishery Evaluation report for the 2004 fisheries in the BSAI including related Economic Status of Fisheries and Ecosystems Considerations appendices (NPFMC 2003b)
- The draft Environmental Impact Statement for Essential Fish Habitat Identification and Conservation in Alaska (NMFS 2004)
- The Steller sea lion protection measures final supplemental EIS (NMFS 2001a)
- The 2001 Steller sea lion Biological Opinion and Incidental Take Statement (NMFS 2001b)
- The Supplement to the 2001 Steller sea lion Biological Opinion (NMFS 2003c)
- The C-6 Supplemental information for the February 2004 Council meeting (NPFMC and NMFS 2004)
- “MSC Assessment Report The United States Bering Sea and Aleutian Islands Pollock Fishery” (Scientific Certification Systems, 2004)

The latter document provides a series of appendices that contain particularly useful information:

5. Historical review of Council discussions and actions on an AI directed pollock fishery, 1998-present
6. Overview of the AI pollock fishery
7. Overview of other groundfish fisheries in the AI
8. Overview of Steller sea lions in the AI
9. Information on groundfish fishery interactions with marine mammals, ESA-listed salmonids, and seabirds
10. Overview of the pollock stock structure in the AI

3.2 Aleutian Islands pollock fishery

This section presents information on the structure of the pollock stock in the Aleutian Islands, fishery data, as well as information on the current AI pollock stock assessment model. Refer to NPFMC and NMFS (2003) for more detail as well as several helpful figures and tables.

Stock Structure

Walleye pollock (*Theragra chalcogramma*) are distributed throughout the Aleutian Islands with concentrations that vary by area and depth, depending on the season. Generally, larger pollock occur in spawning aggregations during February - April. Three stocks of pollock are identified in the U.S. portion of the Bering Sea for management purposes. These are: the eastern Bering Sea stock, which consists of pollock occurring on the eastern Bering Sea shelf from Unimak Pass to the U.S.- Russia Convention line; the Aleutian Islands Region stock, encompassing the Aleutian Islands shelf region from 170°W to the U.S.-Russia Convention line; and the Central Bering Sea - Bogoslof Island pollock stock. These three management stocks probably have some degree of exchange. The Bogoslof stock is a group that appears to form a distinct spawning aggregation and may be related to pollock found in the deep water regions of the Aleutian Basin. In the Russian EEZ, pollock are thought to form two stocks, a western Bering Sea stock centered in the Gulf of Olyutorski, and a northern stock located along the Navarin shelf from 171°E to the U.S.- Russia Convention line. The northern stock is believed to be a mixture of eastern and western Bering Sea pollock with the former predominant. Bailey et al. (1999) present a thorough review of population structure of pollock throughout the north Pacific region. Recent genetic studies using mitochondrial DNA methods have found the largest differences to be between pollock from the eastern and western sides of the north Pacific.

Previously, Wespestad et al. (1997) developed a model for Aleutian Islands pollock and concluded that the spatial overlap and the nature of the fisheries precluded a clearly defined “stock” since much of the catch was removed very close to the eastern edge of the region and appeared continuous with catch further to the east. In some years a large portion of the pollock removed in the Aleutian Islands region was from deep-water regions and appears to be most aptly assigned as “Basin” pollock. In the 2003 assessment proposal, the data were reorganized along alternative boundaries that appear more consistent with survey observations and historical fishing patterns. The Aleutian Islands region was divided into areas where discontinuities in pollock distribution were apparent (Fig. 3.2-1). These breaks separate the northern “Basin” area from the Aleutian Islands chain and split the eastern-most portion of the Aleutian Islands region from the Aleutian Islands. Two regional partitions were developed, one called NRA (for Near, Rat, and Andreanof Island groups) extending to 170°E, and another that excludes the eastern portion between 174°W and 170°W. This partitioning was done based primarily on fishery distribution data. Also, the resulting sub-areas are more consistent with the area covered by summer bottom-trawl surveys.

Fishery Description

The nature of the pollock fishery in the Aleutian Islands region has varied considerably since 1977 due to changes in the fleet makeup and in regulations. During the late 1970s through the 1980s the fishing fleet was primarily foreign. In 1989, the domestic fleet began operating in earnest and has continued in the Aleutian Islands region until 1999 when the Council recommended closing this region for directed pollock fishing due to concerns for Steller sea lion recovery. Table 3.2-1 summarizes AI and Bering Sea pollock fishery OFL, ABC, TAC, and harvest data, 1989-2004 (no harvest data for 2004).

The distribution of observed catch differed between the foreign and joint venture (JV) years (1977-1989) and the domestic fishery years (1989-2002)(Fig. 3.2-2). In the early period, the JV fishery operated in the deep basin area extending westward to Bowers Ridge and in the eastern most portions of the Aleutian Islands. Some operations took place out to the west but observer coverage was limited. Prior to 1980 pollock catch in the Aleutians Islands area was less than 10,000 tons, but in 1980 catch in the Aleutians greatly increased to nearly 59,000 tons. In 1980, observer data indicate that nearly equal portions of pollock catch came from the NRA area east of 174°W (47%) and the NRA area west of 174°W (53%). Observer data from 1980 represent only 2% of the total catch reported from the Aleutians Islands area. In 1981 and 1982 observer data indicate that more pollock were removed from the eastern NRA area and Basin (59% and 65% respectively). In 1983 through 1986 between 47% and 80% of the annual catch was taken from the Basin of the Aleutian Islands area. From 1987 through 1994 between 80% and 100% of the annual catch was taken from the NRA area east of 174°W. The highest annual catch in the Aleutian Islands area was in 1991 with 98,000 tons, 99% of which was removed from the NRA area east of 174°W, mostly from Amukta Pass. Catch at age data reveal that for 1983 through 1994 the Aleutian Islands catch was largely composed of the 1978 year class (Barbeaux et al., 2003). In 1995 the fishery shifted west and from 1995-1997 the majority (80%-100%) of the annual catch was removed from the NRA area west of 174°W. Most of the annual catch from 1995-1997 was removed from the shelf area north of Adak, Kanaga, and Tanaga Islands in INPFC area 542. In 1998 the fishery shifted farther west and the majority (66%) of catch was removed from around Buldir Pass in INPFC area 543. Since 1998 all pollock catch in the Aleutian Islands area has been as bycatch (~1,000 tons annually), primarily in the Pacific cod and Atka mackerel fisheries. Observed pollock catch has been relatively uniformly distributed within the NRA.

The number of hauls and length samples in the NRA region west of 174°W are quite small compared with the eastern and northern (basin) areas. However, the differences in the length frequencies appear to be substantial between regions. During the JV period, the region west of 174°W longitude was composed of smaller fish. Pollock from this region also tended to have a broader range of lengths. The Basin region was similar to the eastern most region and the Bogoslof region (during the years when a fishery was allowed there). An investigation as to whether the change for the NRA region west of 174°W could be attributed to different seasonal concentrations of fishing showed that before 1990, the fishery tended to be more concentrated later in the year. The occurrence of larger fish later in the time series is likely due to the fishery targeting on spawning pollock. This also seems to have affected average weight-at-age data with pollock from the early period having considerably lower mean weights-at-age. Interestingly, the observed proportion of females in the catch appeared to show a decline over this period.

Note that foreign vessels began fishing in the international zone of the Bering Sea (commonly referred to as the “Donut Hole”) in the mid-1980s. The Donut Hole is entirely contained in the deep water of the Aleutian Basin and is distinct from the customary areas of pollock fisheries, namely the continental shelves and slopes. Japanese scientists began reporting the presence of large quantities of pollock in the Aleutian Basin in the mid-to-late 1970s, but large scale fisheries did not occur until the mid-1980s, when more stringent restrictions on foreign fishing in the U.S. EEZ were implemented through the Magnuson Act. In 1984, the Donut Hole catch was only 181,000 mt. The catch grew rapidly and by 1987 the high seas catch exceeded the pollock catch within the U.S. Bering Sea EEZ. The extra-EEZ catch peaked in 1989 at 1.45 million mt and has declined sharply since then. A fishing moratorium was enacted in 1993 and only trace amounts of pollock have been harvested from the Donut Hole by resource assessment fisheries. We do not know how, or if, the

Donut Hole fishery impacted the Aleutian Islands area pollock aggregations, but we include a description of the Donut Hole fishery here because some interaction of Donut Hole and Aleutian Islands pollock may occur.

Fishery Data

Estimates of pollock catch in the Aleutian Islands region are derived from a variety of data sources (Table 3.2-2). During the early period, the foreign-reported database (held at AFSC) is the main source of information and was used to derive the official catch statistics until about 1980 when the observer data were introduced to provide more reliable estimates. The foreign and joint-venture (JV) blend data take into account observer data and reported catches, and form the basis of the official catch statistics until 1990. The raw observed catch shown in the fifth column provides an indication of the amount of catch observed relative to the blend data. The last column of this table shows the best estimate of catch as presented in Barbeaux et al. (2003). To evaluate alternative area definitions for stock assessment purposes, the spatial distribution of catch was examined. For the period 1977-1984, the foreign reported catch database was used to partition catches between areas, while for 1985-2002, observer data were used. These proportions by the current standard Aleutian Islands region sub-areas were then expanded to match the total catch (Table 3.2-3).

Survey Data

Bottom trawl survey effort in the Aleutian Islands region has not been as extensive as in the eastern Bering Sea. The National Marine Fisheries Service in conjunction with the Fisheries Agency of Japan completed bottom trawl surveys for the Aleutian Islands region (from ~165°W to ~170°E) in 1980, 1983, and 1986. The Alaska Fisheries Science Center's Resource Assessment and Conservation Engineering (RACE) Division conducted bottom trawl surveys in this region in 1991, 1994, 1997, 2000, and 2002. All of the bottom trawl surveys were conducted in the summer when pollock are thought to be less aggregated in the surveyed area. Biomass estimates from the surveys conducted in the 1980s ranged between 309,000 and 779,000 mt (mean 546,000). Biomass estimates from the five most recent RACE surveys ranged between 117,000 and 357,000 mt (mean 188,000; Table 3.2-4). The biomass estimates from the early surveys are not comparable with the biomass estimates obtained from the RACE trawl surveys because of differences in the net, fishing power of the vessels, and sampling design. In the early surveys, biomass estimates were computed using relative fishing power coefficients (RFPC) and were based on the most efficient trawl during each survey. Such methods will result in pollock biomass estimates that are higher than those obtained using standard methods employed in the RACE surveys. The relative distribution of pollock appears to be highly variable between years and areas.

The RACE Aleutian Islands bottom trawl (AIBT) surveys indicate that most of the pollock biomass has been located in the Eastern Aleutian Islands area (INPFC Area 541) and along the north side of Unalaska-Umnak Islands in the eastern Bering Sea region (~165°W and 170°W). The 2002 Aleutian Islands trawl survey showed that the greatest densities and estimated biomass occur in the Unalaska-Umnak area in the eastern Bering Sea region. Within the Aleutian Islands region (INPFC Areas 541, 542, and 543) the 2002 AIBT survey indicated the highest densities and biomass were in the Central Aleutian Islands area (INPFC Area 542) followed by the Eastern (INPFC Area 541) and Western areas (INPFC Area 543). In earlier years (1991-2000) the highest biomass was in the Eastern Aleutian Islands area followed by the Central and Western areas. The RACE AIBT surveys revealed a decline in pollock biomass in the portion of INPFC Area 541 east of 174°W longitude from a high of 53,865 mt in 1991 to a low of 28,985 mt in the 2000 survey and then back up to 53,368 mt in the 2002 survey (Table 3.2-5). The estimated biomass in the remainder of the Aleutian Islands region, west of 174°W longitude, has increased since the 1994 survey. Since the AIBT is limited to within the 500 m isobath, these biomass estimates do not include mid-water pollock, nor do they include pollock located offshore from the 500 m isobath. These biomass estimates therefore represent an unknown portion of the total biomass. The biomass in this area may be greater if the on-bottom/off-bottom distribution is similar to that of the eastern Bering Sea. In addition, climatic and year class variation may cause a difference in the proportion of pollock available to the bottom trawl survey.

The 2002 AIBT Survey showed an increase in pollock biomass in the Unalaska-Umnak Area from the 2000 AIBT survey of over 700 percent. Although the 2002 Echo Integration-trawl (EIT) Survey showed an increase in number of pollock in the Umnak Island aggregation from the 2001 EIT survey, the 2002 EIT survey found a slight decrease in the estimated biomass of pollock in the Bogoslof survey area (232,000 tons in 2001 to 227,000 tons in 2002). This is a further decrease from the estimated pollock biomass in the Bogoslof survey area from the 2000 EIT survey (301,000 tons). In the 2002 AIBT survey the pollock size composition for the Unalaska-Umnak area was more comparable to that found in the eastern Bering Sea than the size composition of the Eastern and Central Aleutian Islands areas. In the Unalaska-Umnak and the eastern Bering Sea areas the size mode was between 450 mm and 500 mm while in the Eastern and Central Aleutian Islands areas the size mode was between 570 mm and 630 mm. The pollock size composition in the Western Aleutian Islands area was bimodal with one size mode between 430 mm and 470 mm and another between 570 mm and 630 mm. These data indicate that small (450-500mm) fish from the eastern Bering Sea may move to the Unalaska - Umnak Islands. This movement would explain the apparent increase in estimated pollock biomass observed in the 2002 Aleutian Islands trawl survey. Previous AIBT surveys (2000, 1997, 1994, and 1991) showed the pollock size composition in the Unalaska-Umnak Area to be similar to that of the Aleutian Islands region.

Unlike the 2000 and 1994 AIBT surveys, there were few fish observed between the 100 and 250 mm range, indicative of 1 or 2 year old fish. The large numbers of 1 or 2 year old size pollock observed in the 1994 and 2000 surveys were assumed to have entered the fishable population in 1996 and 2002, respectively, and stabilized or increased pollock biomass in the Aleutian Islands in recent years. Differences in length distribution are apparent between areas east and west of 170°E longitude. Differences in pollock length distributions between the areas east and west of 174°E longitude in the NRA are not as apparent.

Assessment Model

In 2003 a preliminary age-structured model for Aleutian Islands pollock was developed. This model was implemented using software developed for general use. This software is part of NMFS national initiative to develop a stock assessment toolbox. The "Assessment Model for Alaska" (referred to as AMAK) is a statistical approach following Fournier and Archibald (1982) and Methot (1990). An earlier version of this software was first used for the 2002 Atka mackerel stock assessment (Lowe et al. 2002). This model application for Aleutian Islands pollock was reviewed during the December 2003 NPMFC meeting, and will be refined and likely accepted for the 2004 Aleutian Islands pollock stock assessment. The result of this preliminary assessment follows.

The model is tuned to the available fishery and survey data and is affected by assumptions about growth, natural mortality, and recruitment variability (Barbeaux et al. 2003). The results for the NRA region west of 174°W suggest a decline in the early 1980s followed by an increase to a level of about 330,000 mt (Fig. 3.2-3). Importantly, the degree of uncertainty is quite high. The 2004 female spawning biomass was estimated at 160,000 mt, well above the $B_{35\%}$ estimate of 60,000 mt. Estimates of exploitation rate show a high degree of inter-annual variability with a peak value of about 22% in 1995 (Fig. 3.2-4). In 2004 a new summer bottom-trawl survey will be conducted, additional age-structure information will become available, and further refinements to the age-structured model will be completed. The results presented here are regarded as preliminary pending these developments.

Management

The Council's SSC reviewed the Aleutian Islands pollock stock in 1978 and recommended a 100,000 mt TAC. This level of harvest was thought to be reasonable given historic catch levels. In reviewing stock dynamics and available information, in 1984 NMFS scientists estimated that 100,000 mt was biologically sustainable. The SSC concurred and the TAC remained at 100,000 mt through 1987. For the period 1988-1995 an estimate of ABC was determined based on an $F_{0.1}$ harvest strategy applied to the most recent AIBT survey biomass estimate. The ABC was set as an upper limit for TAC recommendations. The biomass estimate for these years included pollock from the Unalaska-Umnak Islands area of the survey. For 1996 Aleutian Islands pollock biomass was computed as the product of the 1994 AIBT survey biomass and a ratio of the 1994 to 1996 eastern Bering Sea biomass. The estimated ABC was computed by an application of $F_{40\%}$ fishing mortality rate, 0.34, with a resultant exploitation rate of 25% (estimated biomass x 0.25). For 1997 the SSC set the ABC based on $F_{40\%}$ of the lower bounds of the biomass estimate obtained from an age structured stock assessment model proposed by Wespestad et al. (1997). For 1998 through 2004 the SSC set the Aleutian Islands region pollock ABC at Amendment 56, Tier 5 levels (0.75 x M x Most recent AIBT survey biomass estimate); for these years the estimate of pollock in the Unimak-Umnak islands area of the survey was excluded from the survey biomass estimate.

For the 2004 fishery, the preliminary age-structured assessment arrived at an estimated maximum permissible ABC for the western sub-region of the Aleutian Islands of 67,400 mt. However, Barbeaux et al. (2003) noted that since the assessment was still preliminary and given the limited amount of data, the ABC should be adjusted downward. The Council determined that given these factors, an ABC based on Tier 5 from FMP Amendment 56 was sufficiently conservative. This gave an ABC of 27,400 mt (for this sub-region of the Aleutian Islands).

For the area of the Aleutian Islands omitted from these calculations (i.e., east of 174˚W), the authors recommended that this area continue to be closed to directed pollock fishing to form a contiguous protection zone with the Bogoslof area. This pollock conservation zone would provide buffer between management areas and proactively address uncertainties regarding stock structure. In terms of reduction in available pollock fishing areas, the suggested buffer zone east of 174˚W represents approximately 22% of the "fishable" area (Fig. 3.2-5). Fishable area in the entire NRA region is defined as the surface area of the water down to 1,000 m. Since Steller sea lion critical habitat extends to 20 nm around rookeries and haulouts, the fishable area *outside* of Steller sea lion critical habitat is 26% of the entire NRA fishable area. Further excluding the fishable area to the east of 174°W leaves about 20% of the entire NRA fishable area open to fishing. If the Council was considering opening this eastern sub-area to a directed pollock fishery, Barbeaux et al. (2003) recommended a Tier 5 ABC level for this area of 12,000 mt based on the biomass apportionment from the summer bottom trawl surveys. The Council did not subdivide the Aleutian pollock stock, and recommended a Tier 5 ABC level for the entire Aleutian region of 39,400 mt.

The preliminary assessment indicated that the female spawning biomass for 2004 (153,600 mt) was projected to be above $B_{35\%}$. Thus, the NRA pollock stock west of 174˚W is determined to be *above* its minimum stock size threshold (MSST) and is *not overfished* and further analysis indicated that the stock is *not* expected to fall below its MSST and is *not approaching an overfished condition*.

For additional reference, Figs 3.2-6 and 3.2-7 illustrate locations of AI pollock harvests from 1989-2003.

Table 3.2-1 OFL, ABC, TAC and harvest in the AI and BS. Values are metric tons of pollock.

Year	Bering Sea						Aleutian islands					
	OFL	ABC	TAC	Target catch	Incidental catch	Total catch	OFL	ABC	TAC	Target catch	Incidental catch	Total catch
1989		1,340,000	1,340,000			992,113			2,932			5,842
1990		1,450,000	1,280,000			1,315,491			100,000			75,642
1991		1,676,000	1,300,000	1,473,040	57,550	1,530,590		101,460	85,000	97,334	1,165	98,499
1992	1,770,000	1,490,000	1,300,000	1,344,836	45,737	1,390,573	62,400	51,600	51,600	50,953	1,390	52,343
1993	1,340,000	1,340,000	1,300,000	1,252,532	68,332	1,320,864	62,600	51,600	51,600	55,672	1,460	57,132
1994	1,590,000	1,330,000	1,330,000	1,238,798	82,487	1,321,285	60,400	56,600	56,600	57,780	879	58,659
1995	1,500,000	1,250,000	1,250,000	1,198,806	65,773	1,264,579	60,400	56,600	56,600	64,216	709	64,925
1996	1,460,000	1,190,000	1,190,000	1,133,345	58,596	1,191,941	47,000	35,600	35,600	28,413	648	29,061
1997	1,980,000	1,130,000	1,130,000	1,050,548	70,375	1,120,923	38,000	28,000	28,000	25,327	613	25,940
1998	2,060,000	1,110,000	1,110,000	1,068,446	33,719	1,102,165	31,700	23,800	23,800	23,159	679	23,838
1999	1,720,000	992,000	992,000	948,700	41,008	989,708	31,700	23,800	2,000	--	1,010	1,010
2000	1,680,000	1,139,000	1,139,000	1,091,735	41,001	1,132,736	31,700	23,800	2,000	--	1,244	1,244
2001	3,536,000	1,842,000	1,400,000	1,349,575	37,877	1,387,452	31,700	23,800	2,000	--	824	824
2002	3,530,000	2,110,000	1,485,000	1,439,857	41,958	1,481,815	31,700	23,800	1,000	--	1,177	1,177
2003	3,530,000	2,330,000	1,491,760	1,454,424	35,499	1,489,923	52,600	39,400	1,000	--	1,653	1,653
2004	2,740,000	2,560,000	1,492,000			0	52,600	39,400	1,000	–		0

1. 1993 to 2004 catch includes Community Development Quota.
2. 1991 to 2002 catch is from the blend database, 2003 catch is from the catch accounting system.
3. 1980 to 1990 catch is from weekly production reports.
4. Harvest Specifications include overfishing levels from 1992 to 2004.

Table 3.2-2 Estimates of AI region pollock fishery catch by source and values used for the 2003 stock assessment, 1977-2002. Units are mt.

Year	Official	Domestic	Foreign Blend	NMFS	2003
1977	7,367		7,827	5	7,367
1978	6,283		6,283	234	6,283
1979	9,446		9,505	58	9,446
1980	58,157		58,477	883	58,157
1981	55,517		57,056	2,679	55,517
1982	57,753		62,624	11,847	57,753
1983	59,021		44,544	12,429	59,021
1984	77,595		67,103	48,538	77,595
1985	58,147		48,733	43,844	58,147
1986	45,439		14,392	29,464	45,439
1987	28,471			17,944	28,471
1988	41,203			21,987	41,203
1989	10,569			5,316	10,569
1990		79,025		51,137	79,025
1991		98,604		20,493	98,604
1992		52,352		20,853	52,352
1993		57,132		22,804	57,132
1994		58,659		37,707	58,659
1995		64,925		18,023	64,925
1996		29,062		5,982	29,062
1997		25,940		5,580	25,940
1998		23,822		1,882	23,822
1999		1,010		24	1,010
2000		1,244		75	1,244
2001		824		88	824
2002		1,156		144	1,156

Table 3.2-3 **Estimates of pollock catch (metric tons) by new area definitions.** "NRA" stands for Near, Rat, and Andreanof island groups, "NRA w/o E" signifies the NRA region without the area east of 174°W, "Basin" represents the northern portions of areas 541 and 542. See Fig. 1 for locations on a map. (*Note: 1977 - 1984 area assignments are based on foreign reported data, 1985-2002 are based on observer data*).

	NRA	NRA w/o E	Basin	Basin + E
1977	6,788	3,785	579	3,582
1978	5,989	3,846	294	2,437
1979	9,245	6,383	202	3,063
1980	55,561	31,029	2,596	27,128
1981	43,554	22,972	11,963	32,545
1982	41,384	19,993	16,369	37,760
1983	31,282	17,224	27,739	41,798
1984	31,811	6,300	45,784	71,295
1985	9,675	870	48,472	57,278
1986	17,436	704	28,003	44,735
1987	26,220	2,720	2,251	25,752
1988	36,864	574	4,339	40,628
1989	10,569	0	0	10,569
1990	79,025	10,462	0	68,563
1991	97,775	554	829	98,051
1992	20,457	8,515	31,895	43,837
1993	33,839	16,150	23,293	40,981
1994	31,769	5,969	26,890	52,690
1995	61,407	57,991	3,518	6,934
1996	28,162	23,039	900	6,023
1997	25,940	25,795	0	145
1998	23,755	23,340	66	482
1999	1,010	606	0	403
2000	1,244	908	0	336
2001	824	571	0	253
2002	1,154	318	1	837

Table 3.2-4 Pollock biomass estimates from the Aleutian Islands Groundfish Survey, 1980-2002.

	Aleutian Islands Region			
	NRA West (174W - 170E)	NRA East (170W - 174W)	Unalaska-Umnak area (~165W - 170W)	Combined
1980	243,695		56,732	300,427
1983	495,775		282,648	778,423
1986	439,461		102,379	541,840
1991	83,337	53,865	51,644	188,846
1994	47,623	29,879	39,696	117,199
1997	57,577	39,935	65,400	158,912
2000	76,613	28,985	22,462	128,060
2002	121,915	53,368	181,334	356,617

Table 3.2-5 Allowable Biological Catch (ABC) and Commercial catch from Aleutian Islands area in metric tons.

Year	ABC	Catch	Year	ABC	Catch
1978	100,000	6,283	1992	67,000	52,352
1979	100,000	9,447	1993	58,700	57,132
1980	100,000	58,157	1994	56,600	58,659
1981	100,000	55,517	1995	56,600	64,925
1982	100,000	57,753	1996	35,600	29,062
1983	100,000	59,021	1997	28,000	25,940
1984	100,000	77,595	1998	23,800	23,821
1985	100,000	58,147	1999	23,800	1,010
1986	100,000	45,439	2000	23,800	1,244
1987	100,000	28,471	2001	23,800	824
1988	160,000	41,203	2002	23,800	1,155
1989	117,900	10,569	2003	39,400	1,653
1990	153,600	79,025	2004	39,400	
1991	101,460	98,604			

Figure 3.2-1 Regions defined for consideration of alternative data partitions for Aleutian Islands Region pollock. The abbreviation "NRA" represents the Near, Rat, and Andreanof Island groups.

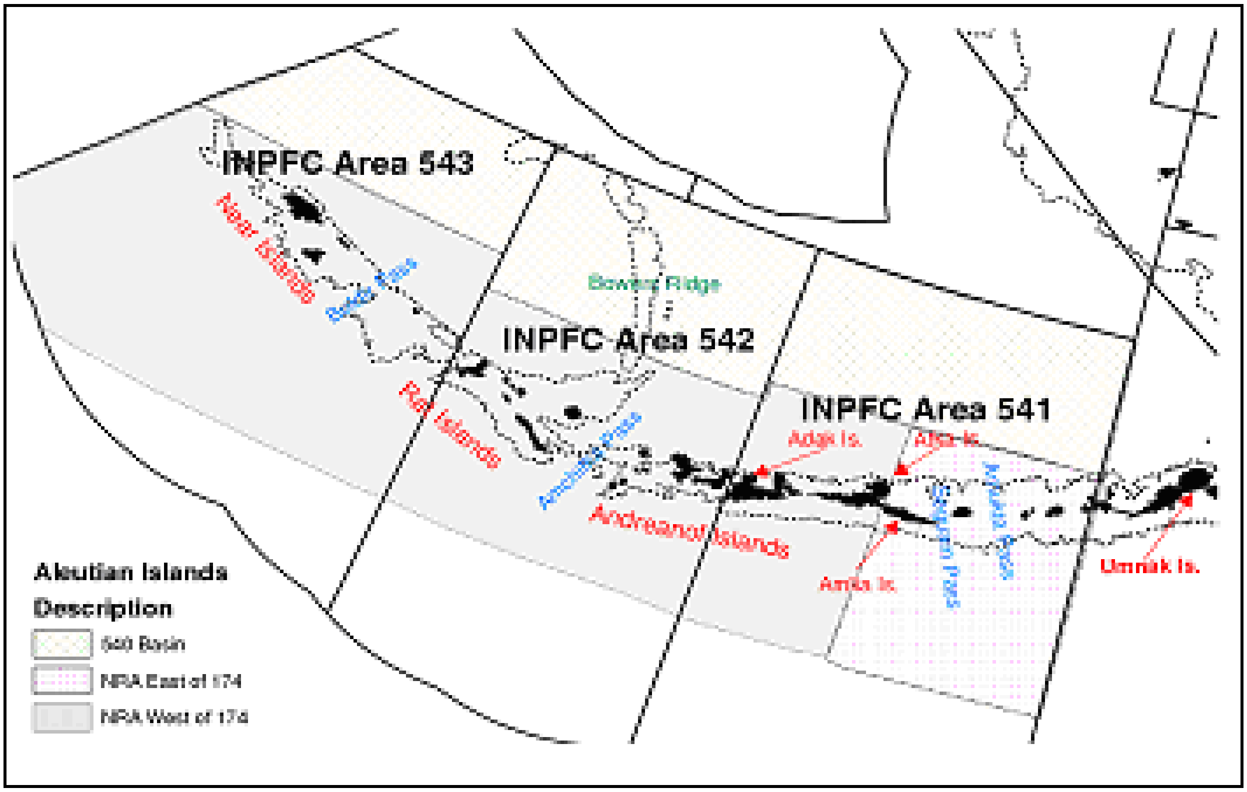


Figure 3.2-2 Observed foreign and JV (1978-1989), and domestic (1989-2002) pollock catch in the Aleutian Islands Area summed over all years and 10 minute latitude and longitude blocks. Both maps use the same scale (maximum observed catch per 10 minute block: foreign and JV 8,000 t and Domestic 19,000 t). Catches of less than 1 t were excluded from cumulative totals.

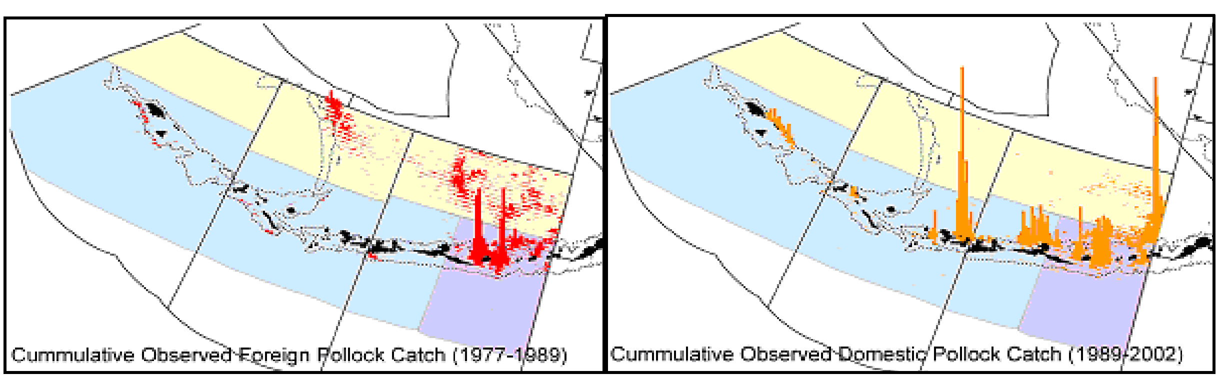


Figure 3.2-3 Time series of pollock biomass in the NRA region west of 174° W from Model A10 with approximate 95% confidence intervals.

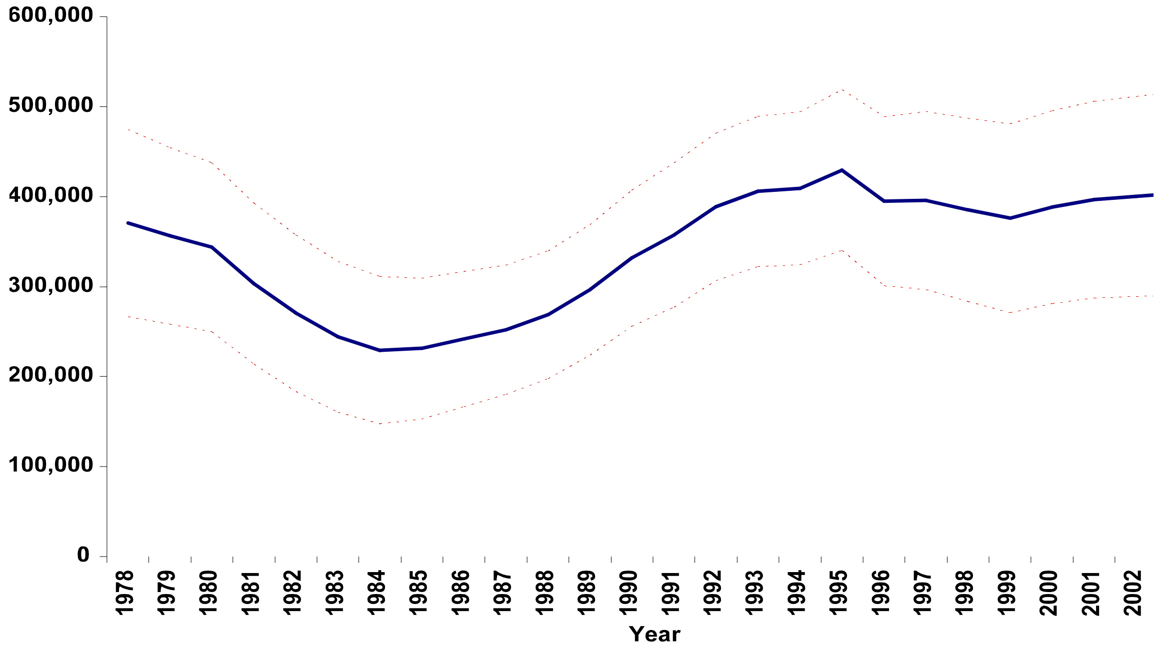


Figure 3.2-4 Estimated time series of exploitation rate (catch biomass / age 3+ biomass estimates) for pollock in the NRA west of 174˚W based on the 2003 reference model.

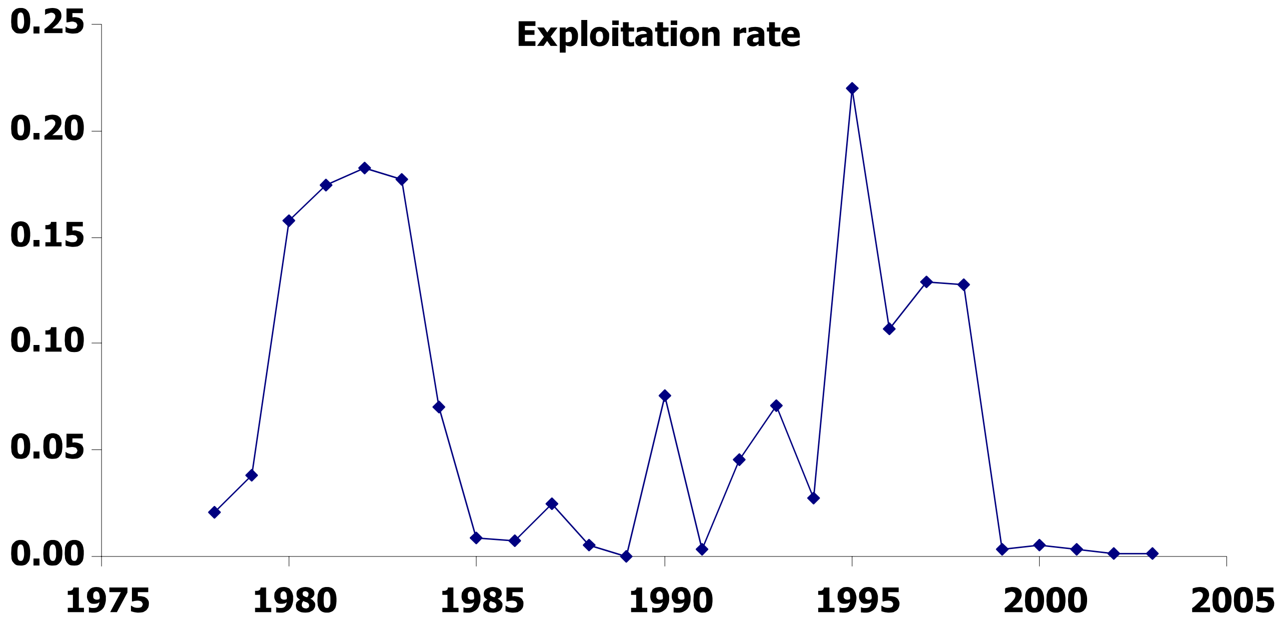


Figure 3.2-5 Aleutian Islands area with 20 nm Steller sea lion critical habitat areas.

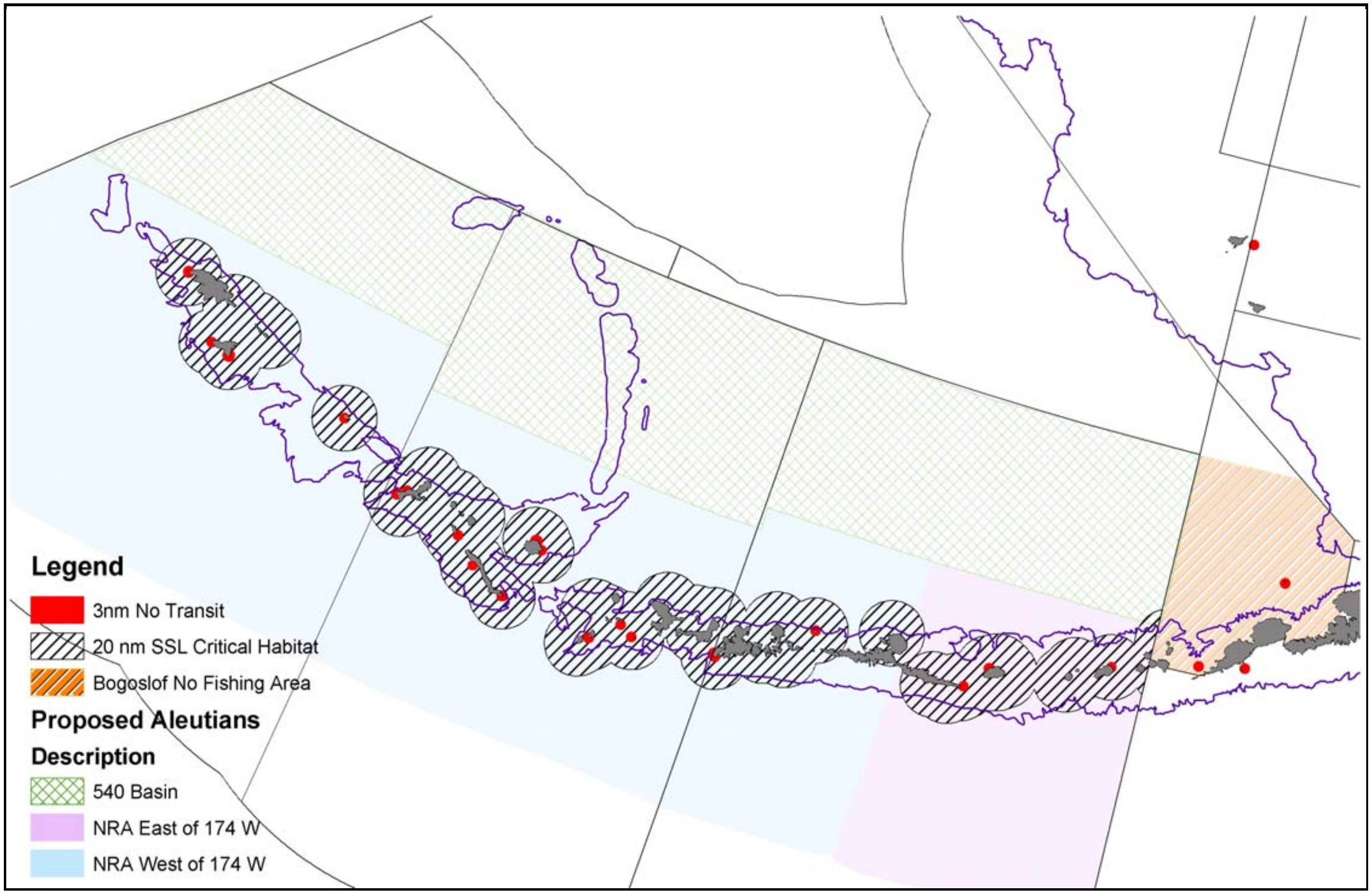


Figure 3.2-6 Locations of observed pollock catches in the Aleutians, 1989-2003.

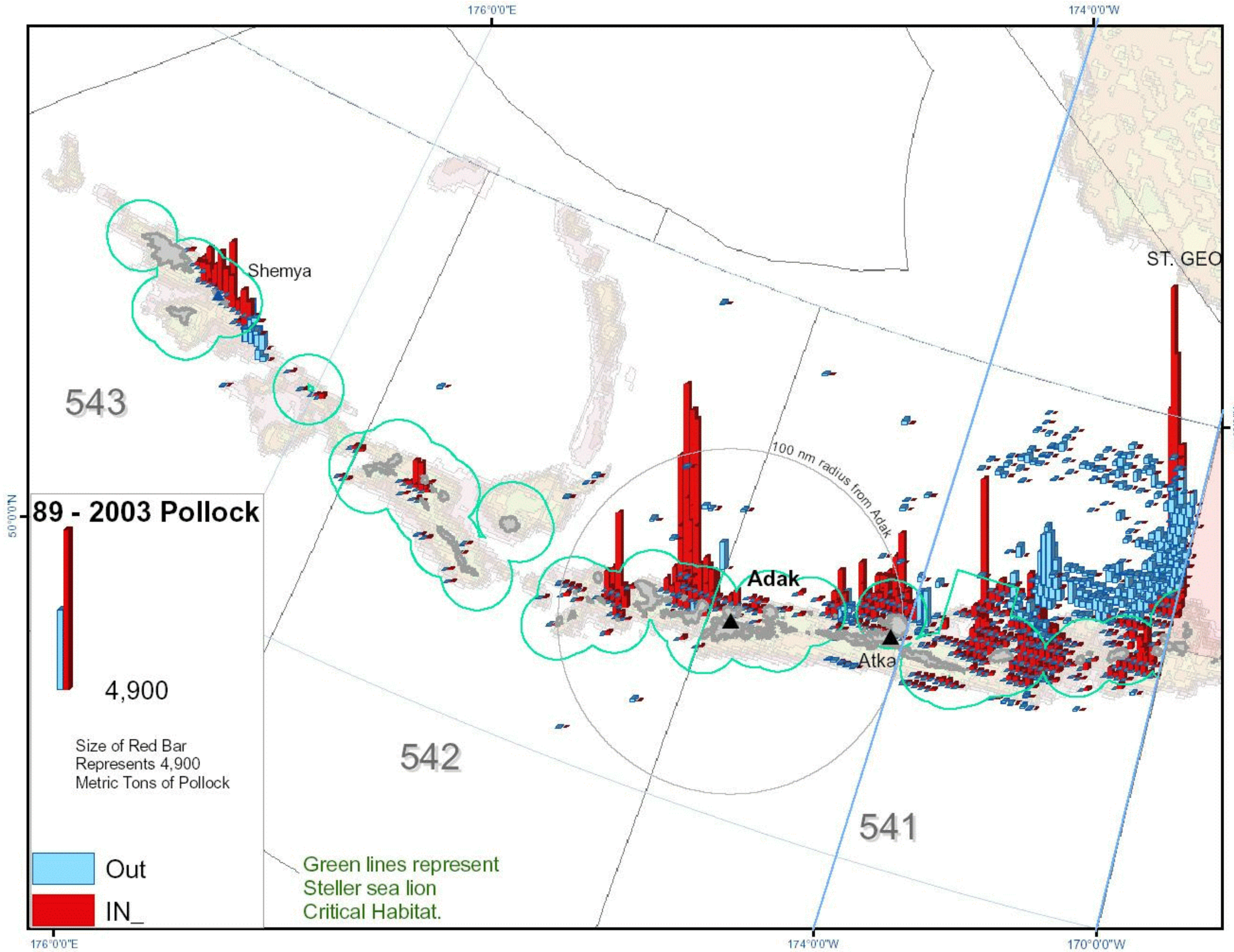
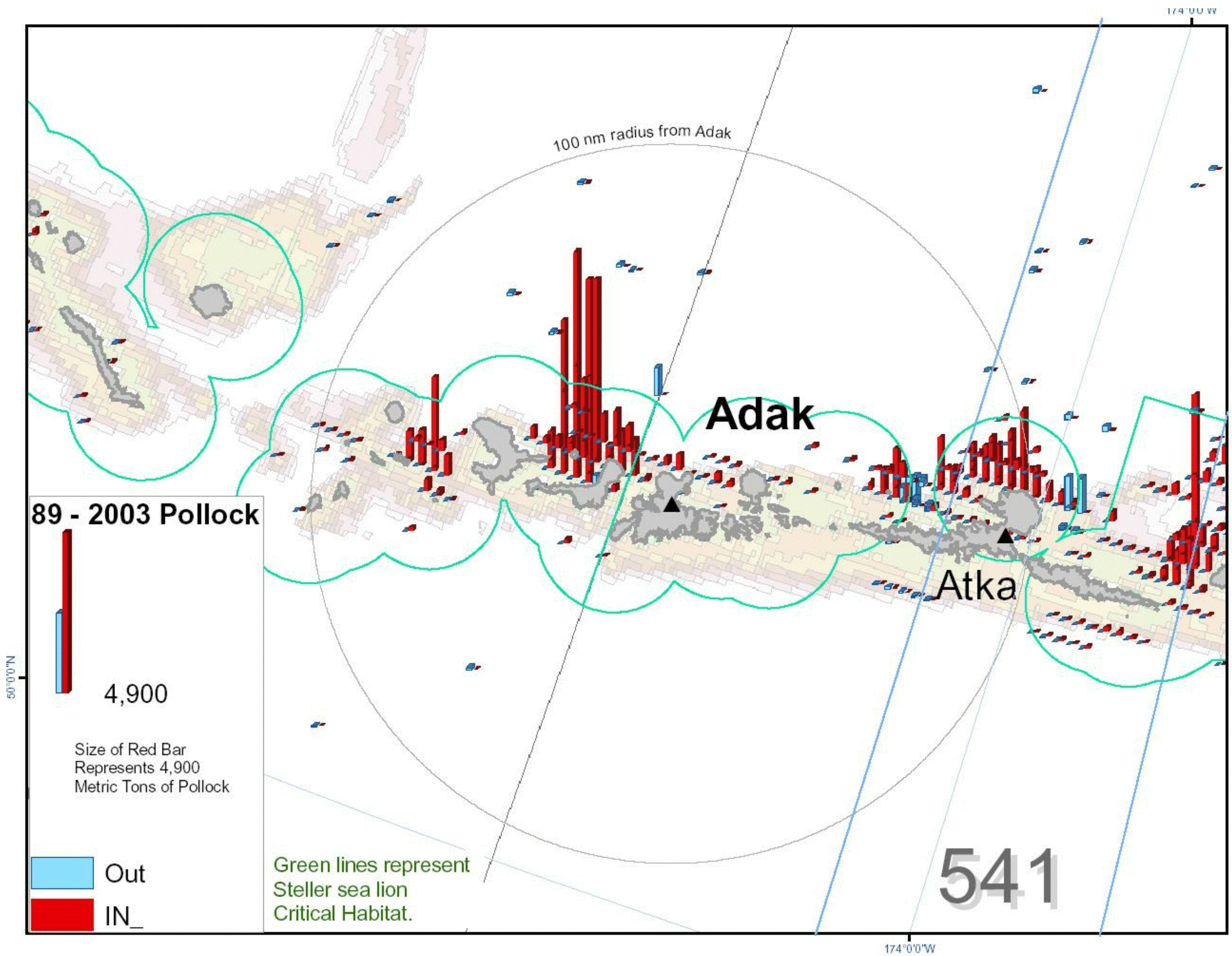


Figure 3.2-7 Locations of observed pollock catches near Adak, 1989-2003.



3.3 Adak and the Aleut Corporation

Location

The city of Adak is located on Adak Island which is part of the Aleutian Island chain. It is situated on Kuluk Bay and is about 1,300 miles southwest of Anchorage and about 350 miles west of Unalaska. It is the southern-most community in Alaska and is on the same latitude as Vancouver Island in Canada. The area of Adak includes 122.4 square miles of land and 4.9 square miles of water.

Demographic Profile

In 2000, Adak had a recorded population (U.S. Census) of 316 people and of those 64.9% were male and 35.1% were female. By the year 2002, the population was 149 people, according to a state demographer. The population of Adak has fluctuated quite extensively over the years due to changing military activities. In 1944, there were more than 30,000 people in Adak, because of the military presence in the Aleutian Islands during World War II. A population was first recorded by the U.S. Census in 1970, at which time there were 2,249 inhabitants, but with the closing of the naval facility the population decreased by about 2,000 persons.

Approximately 49.7% of the 316 people recorded by the 2000 U.S. Census were White in race, 35.1% were Alaska Native or American Indian, 9.8% were Asian, 1.9% were Hawaiian Native, 1.3% were Black, and about 2.2% were recorded as being two or more races. Of the 9.8% of the population that was classified as Asian, all were identified as Filipino. The total percent of people in Adak who were Alaska Native alone or in combination with one or more races was 37.3%. About 5.1% of the population was of Hispanic origin. The median age for Adak in the year 2000 was 35.2 years whereas the national age median was 36.5 years old. No percent of the population lived in group quarters in Adak in 2000, a change from the 1990 Census which describes 30% of the population living in group quarters, due to the fact that the navy base was still in operation on the island at that time. Approximately 96.1% of the population of those people age 25 years or older had graduated from high school or obtained higher degrees. Of those age 25 or older, 10.3% had obtained a Bachelor's degree or higher.

History

The Aleutian Islands "drew humans to the island chain as early as 8,000 years before the present" (National Park Service 2003). The historical inhabitants of the Aleutian Islands area are known today as Aleuts (Unangan) and the native Aleut people once heavily populated the island of Adak. The island was abandoned in the early 18th Century when Aleut hunters followed the Russian fur trade eastward and famine set in on the Andreanof Island group. The Native people continued to use the island as a place to fish and hunt until the beginning of World War II. In the 1940s, however, the island became "a key operations and supply location for United States military forces after the Japanese occupation of Kiska and Attu Islands during World War II" (EPA 2002). Adak's population in the spring of 1944 was made up of at least 32,000 military personnel.

After World War II, Adak was developed into a Naval Air Station and played an important role during the Cold War as a submarine surveillance center. The navy base housed 6,000 personnel and their families during its peak, but cut-backs occurred in 1994 and navy family housing and schools were closed. Adak naval station officially closed on March 31, 1997. The EPA has been performing Superfund clean-up and restoration of Adak because over a 40-year period hazardous substances were disposed of on the island including materials such as transformer oils containing PCBs, petroleum, chlorinated solvents, and batteries. Unexploded explosives were also present on the island and the navy neither confirms nor denies that the island was the site of nuclear depth charges and torpedoes. There were large earthquakes on the island in the years of 1957, 1964, and 1977.

Adak Island was designated a Federal wildlife refuge in 1913, and was included within the Alaska Maritime National Wildlife Refuge established by Congress in the Alaska National Interest Lands Conservation Act (ANILCA) in 1980. Adak Island remains part of that refuge today, and thus, the lands withdrawn for military purposes during World War II will revert back to U.S. Department of Interior (DOI) ownership and U.S. Fish and Wildlife Service (USFWS) management. This is a multi-step endeavor under the base closure and realignment process. Early in the closure process, the Aleut Corporation, the Alaska Native regional corporation of the Aleutian/Pribilof region, expressed interest in exchanging some of its real property interests elsewhere in the Aleutian Islands for property at Adak. Given that the DOI sought opportunities to enhance the wildlife refuge, it was agreed that upon receipt of its previously withdrawn lands on Adak Island, the DOI would convey a portion of the northern half of Adak to the Aleut Corporation, in exchange for more valuable wildlife habitat owned by the corporation in the eastern Aleutians. Thus, while a portion of the island will remain under U.S. Fish and Wildlife Service management, the land exchange will eventually result in approximately 47,000 acres of the northern portion of Adak being transferred to the Aleut Corporation.[17] From this, some lands in and around the community will be subsequently transferred to the City of Adak. The community incorporated as a Second Class City in April 2001.

A land transfer agreement was recently concluded between the DOI and the U.S. Navy/Department of Defense, passed through Congress, and is awaiting Presidential signature. Because Adak is within the wildlife refuge, special Congressional legislation is necessary to convey Adak property to the Aleut Corporation.[18] The final land transfer to the Aleut Corporation is anticipated on March 17, 2004.

Establishment of a non-military community on Adak has preceded formal land transfer. Members of approximately 30 families relocated to Adak in September 1998 to start a civilian community on site.

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[17]Not all lands that were controlled by the military on the northern portion of the island will pass into Aleut Corporation (or other private) ownership. A significant portion of land on the southeastern edge of the former military controlled area will be retained as Federal land. This area has high wildlife value and is contiguous with the USFWS retained southern portion of the island.

[18]Source: Statement of H.T. Johnson, Asst. Secretary of the Navy, before the Subcommittee on Public Lands and Forests of the Senate Committee on Energy and Natural Resources, May 9, 2002.

Most of these original relocating residents were Aleut Corporation shareholders, and a school was reopened to support this population. This outreach program by the Aleut Corporation brought people to the island early in the transition process, and included employment related to transition, maintenance, and operation of the initial service enterprises. According to the Aleut Enterprise Corporation, this served to expose people to living on the island and the opportunities that were available there, which has increased retention. Non-shareholder related residents have come to the community primarily through contractor employment as well as through government and fishery related employment. At least a couple of current residents of Adak were stationed on the island during previous military service, and at least some had local experience as contractors to the military prior to conversion to a civilian community. Although the contemporary population does not have an Aleut majority, the community is very much an Aleut community by virtue of the driving role of the Aleut Corporation in its foundation and development, and the predominant role of Aleut individuals in local governmental positions. Note that Adak did not qualify as an Alaska Native village under the terms of the Alaska Native Claims Settlement Act, due to the fact that it was essentially a non-Native community at the time of the passage of the Act (1971).

While there has been a continuity of the physical structure of the community - structures built by and for the military are housing current residents and businesses - the community has seen a population turnover with conversion to a civilian settlement, such that the present population of the community comes from an entirely different set of socioeconomic and cultural circumstances than those who built the physical community.

The Aleut Corporation and the Aleut Enterprise Corporation

Since the closure of the naval facilities at Adak there has been an attempt to reinvent the industry of the city by the Aleut Corporation. As stated previously, the Aleut Corporation is one of the thirteen regional Native corporations established in 1972 under the terms of the Alaska Native Claims Settlement Act (ANCSA). The Aleut Corporation received a settlement of $19.5 million, 66,000 acres of subsurface lands, and 1.572 million acres of surface estate. The lands selected by the Aleut Corporation under ANCSA include areas on the Alaska Peninsula and the Aleutian, Shumagin, and Pribilof Islands. Among the Corporation's holdings is the village site of Attu and numerous historical and cemetery sites throughout the Aleut Region (Aleut Corporation website, Feb 2004). The Corporation began negotiating with the U.S. government to acquire the closed military facility on Adak Island, which, historically, was an early Aleut community. The Aleut Corporation's purpose is "to maximize dividends and choices to our shareholders," and its goals include "to create a healthy corporation, generate revenues with substantial profits, provide significant dividends and benefits to shareholders, and create meaningful linkage to the Aleut "Unangan" people." (Aleut Corporation website, Feb. 2004).

The Aleut Enterprise Corporation (AEC) was formed in 1997 as a for-profit subsidiary of the Aleut Corporation, in order to use the infrastructure and property assets of Adak as a foundation for further economic development in Adak and the surrounding region. The three major infrastructure assets of Adak remain the fuel farm, the port and associated services, and the airport. The long-term plan of the AEC states that its mission is to optimize returns to the Aleut Corporation from fuel, fisheries, and commercial lease ventures (S. Moller, personal comm. 9/23/02). The AEC has offices in both

Adak and Anchorage, and "leases commercial land, buildings, rents housing, rents vehicles, and operates port services and fuel sales" (Adak Island, Open to the World 2003) within the city. The AEC's strategy is to build Adak into a year-round fishing hub, complete with processing facilities, a small boat harbor, and a variety of shore-based services (Aleut Corporation newsletter, May 2002). Thus, the AEC is focusing its redevelopment efforts in Adak but continues to act as the economic development arm on behalf of the entire Aleut Corporation and its shareholders.

The AEC, like its parent corporation, is not strictly a community-based entity, as its operations benefit shareholders far beyond Adak, including those on the Alaska Peninsula and the Aleutian, Shumagin, and Pribilof Islands. Similarly, while the AEC has focused its operations on Adak, there are tentative plans to extend AEC business ventures (e.g. fuel services) beyond the community of Adak to other communities in the Aleutian Chain (*The Aleutian Current* May 2002). According to the Alaska Journal of Commerce as of February 2001, the Aleut Corporation "with $2.4 million in earnings last year, has already invested $2.5 million in various expenses related to Adak, although government contracts with Aleut Corporation subsidiaries have recouped some of that" (Bradner 2001).

Because it has a mission specific to the economic development of Adak and manages the majority of the commercial property on the island, it is likely that the AEC will continue to be the primary entity promoting further fisheries development in Adak. Thus, the AEC would likely manage the pollock allocation at issue in the 2004 Consolidated Appropriations Act, on behalf of the Aleut Corporation.

Current Economy

The Aleut Corporation is currently developing Adak as a commercial center and a civilian community with a private sector economy, and this development focuses heavily on the potential for commercial fishing, and support of commercial fishing activities, in the Western Aleutians area of the Bering Sea and the North Pacific Ocean. One indicator of the direct involvement of the Aleut Corporation in the community may be seen in the fact that the President of the Aleut Corporation has moved to Adak to help support these efforts. The nearest neighboring community is Atka, which also participates in commercial fishing, but with a strong focus on halibut as opposed to the broader range of fisheries pursued on Adak.

Other local economic activity in Adak includes contract work performing environmental clean-up of the former military facilities. Visitor attractions include wildlife such as seals and otters, caribou hunting, fishing, hiking and World War II military installation facilities. With approximately 16 miles of paved roads, and other gravel and dirt roads, accessibility to lands outside the immediate community is relatively good for the region.

Like other communities in the region with commercial development, Adak's economy is marked by seasonal variation. Locals report (as of 2002) that there are two main seasons on Adak: fishing season and 'contractor season.' Local fisheries activity peaks in the first few months of the year when cod effort is most intense and overlaps with crab and other fisheries. 'Contractor season' refers to the peak summer activities of Department of Defense contractors associated with environmental clean-up of the former military facilities and the disposal of unexploded ordnance from previous military use. In addition to being in transition from a former military community to a civilian settlement, Adak's economy is in transition as contractor-oriented activities decrease and fisheries activity (and other private sector activities) increase.

The local processor, Adak Fisheries, LLC, is located in the city. Four commercial fishing permits were issued in the year of 2000 to Adak residents for commercial fishing of groundfish. Subsistence salmon fishing is also of great importance to the local economy. Most full-time jobs are provided by the processing plant, municipality, Aleut Enterprise Corporation, airport, and private businesses such as the grocery, restaurant, and ship supply store.

In 2000, about 75.6% of the population were part of the total potential work force, aged 16 and above. Of the population age 16 and over, 82.0% were employed, 6.7% were unemployed, 1.7% were part of the armed forces, and 9.6% were not in the labor force. The per capita income in the year 2000 for Adak was $31,747 and the median household income was $52,727. About 4.7% of Adak's population in 2000 was below poverty level.

In April 2003, Adak "was chosen for a $900 million radar system as part of the national missile defense system" which is expected to arrive in the community by the summer of 2005 (Kenai Peninsula Online 2003). It is estimated that this facility will require approximately 80 to 95 people to operate the system, most of which will live on the platform. According to the Kenai Peninsula Online newspaper, "Sen. Ted Stevens, R-Alaska, said the decision to put the radar system on Adak will benefit the Native people who have taken over running Adak facilities." The system is expected to arrive by summer 2005 and will "[use] a finely focused beam to track incoming ballistic missiles while they are in space" (Kenai Peninsula Online 2003).

Governance

The city of Adak, established as a municipality in 2001, has a manager form of government which includes a mayor, a seven person city council, an advisory school board, and various municipal employees including a police chief and fire chief. The city is not part of an organized borough. There is a 3% sales tax in the city, as well as a $.02 per gallon fuel transfer tax.

As stated previously, the Aleut Corporation has taken a very active role in the development of the city, taking over responsibilities of almost all services to the community, the ownership of a large amount of the land, and taking action to bring new businesses to the community.

The nearest Bureau of Citizenship and Immigration Services (BCIS) office to Adak is located in Dutch Harbor and is a satellite interviewing and processing office. The closest National Marine Fisheries Service (NMFS) office is also located in Dutch Harbor and is an office of Sustainable Fisheries, as is the nearest large ADF&G office.

Facilities

The city of Adak is accessible by air or by sea. Present in the city of Adak are an airport, docks, housing facilities, restaurant, grocery and ship supply store. The airport has two 7,800' paved runways and Alaska Airlines operates passenger and cargo airline service to Adak on Tuesdays and Sundays. The approximate price according to Travelocity and Expedia to fly round trip from Adak to Anchorage is $1,124.00 (price given for date as close to September 1st 2003 as possible). There are three deep water docks and fueling facilities in Adak. Funds have been requested (and partially acquired to-date) to expand the small boat harbor, which would include new breakwaters, new moorage fleets, and a 315' dock. Because the port facilities were built to handle naval ships they can now handle a large assortment of vessels. The city has about 16 miles of paved roads and also has other dirt and gravel roads.

Aleut Corporation operates the city's landfill and the electric power is supplied by the City of Adak from diesel fuel. The City runs a piped water system from stored water tanks and also runs the sewer system. Adak Medical Clinic is located in the community and is operated by Eastern Aleutian Tribes. It is a qualified Emergency Care Center and is staffed by a physician's assistant who provides emergency care, family practice, and referral services. The police services available within the community are operated by City Public Safety. Car rentals are available at Adak Car Rentals and a hotel, Hotel Adak is present in the community, both of which are run by Aleut Enterprise Corporation. Adak School, the only school present in the community, teaches Kindergarten through 12th grade. The school had 18 students in the year of 2000 and 3 teachers. There is a weight room and a racquetball court at the high school. Also available in the community are an Olympic size swimming pool, auto hobby shop, and bowling alleys, although it is unclear if these facilities are still in operation.

Commercial Fishing

As a new civilian community, Adak does not have an established residential fishing fleet. However, the Aleut Corporation is attempting to turn the village into a fishing center for the area. In the year 2000, there were four commercial fishing permits issued to residents of Adak. There was one community member who owned a vessel participating in Federal commercial fisheries who was a resident of Adak and according to the Commercial Fisheries Entry Commission (CFEC), there were two licensed crew members from Adak in the year 2000. Of the four commercial fishing permits issued to residents of the community all were issued for the harvesting of groundfish. Of those four, one was issued for miscellaneous salt water finfish using a hand troll, one was for miscellaneous salt water finfish using a mechanical jig, one was for demersal shelf rockfish with a longline vessel under 60' in the southeast, and one permit was for demersal shelf rockfish using a mechanical jig in the southeast, although this last permit was not actually fished during that particular year. There were 49 vessels which delivered 'Other Groundfish' landings in Adak, 24 which delivered sablefish, 32 which delivered halibut, and 12 vessels which delivered Bering Sea and Aleutian Islands (BSAI) crab landings to the community. The landings in tons data for Adak for the sum of all Federal species, other groundfish, sablefish, halibut, and BSAI crab has been suppressed for reasons of confidentiality.

More recently, in 2002, there were two fishing vessels owned by full-time residents of the community, according to field interviews conducted for the recent crab rationalization analysis (Downs 2002). According to community sources, four or five <60' vessels participated in local fisheries in 2001. In general, most deliveries to the local plant are made by larger boats from outside of the area. In 2002, there were eight commercial fishing permits issued to four residents of Adak and three licensed crew members, according to the CFEC. Of the eight commercial fishing permits issued to residents of the community six were issued for the harvesting of groundfish, and two for halibut. Of the six groundfish permits, one was issued for miscellaneous salt water finfish using a hand troll, two were for miscellaneous salt water finfish using a longline vessel <60' (only one permit was fished), and two were for miscellaneous finfish using a mechanical jig, although neither of these last two permits were fished. In addition, one permit was issued and fished for sablefish using a longline vessel <60'. Only four of the eight permits issued were fished, by two fishermen. All data on pounds landed and estimated gross earnings is confidential because of the low number of permits and permit holders.

The community of Adak is identified to receive a direct allocation of the Western Aleutian Islands golden king crab fishery under the BSAI Crab Rationalization Program developed by the Council in 2002 - 2003. This action would allow for the percentage of the difference between the GHL and actual catch of WAI golden king crab that was not harvested during the base period for crab allocations (up to 10%) to be allocated to the community of Adak. The allocation is to be made to a non-profit organization representing the community of Adak, but in the interim and for up to two years, the shares would be held in trust and used by the AEC. The allocation is intended to provide the community of Adak with a sustainable allocation of crab to aid in the development of local seafood harvesting and processing activities. In Section 801 of the Consolidated Appropriations Act of 2004, Congress mandated implementation of the crab rationalization program, including this allocation of crab to the community of Adak by 2005.

The city of Adak was also recently granted $88,547.52 by the Southwest Alaska Municipal Conference as part of the Steller Sea Lion Mitigation program "in recognition of the negative economic impacts of federal measures to protect the Steller sea lion" with money which had been allocated by the United States government (Southwest Alaska Municipal Conference 2003).

Sport Fishing

The tourism industry in Adak is currently made up of visitors attracted by sightseeing on cruise vessels, but there is no recent evidence of sport fishing. It is expected that tourism will grow in Adak in the next few years and the accommodations exist to make the sport fishing industry a possibility in the future. No sport fishing permits were sold in the year 2000 in Adak.

Subsistence Fishing

In recent history, Adak has been considered a Federal non-rural area because of the naval base which was present on the island and the larger population on the island at that time. As recent as the establishment of the 2003-2004 Federal Subsistence Fishery Regulations, Adak was still considered a non-rural area with respect to Federal subsistence. In order to have the right to harvest subsistence wildlife, fish, and shellfish on Federal lands, a status of rural must be granted. Rural status has been requested by Adak, but has not been granted to-date. Therefore, residents of Adak are not allowed to harvest resources for subsistence on Federal lands. However, Adak is considered rural by the State of Alaska and residents are thus eligible to harvest subsistence resources on State lands. Based on the island's location, history, isolation, ethnic make-up, and salmon harvests, it may be surmised that Adak residents are engaging in a variety of subsistence activities. However, there is no information available from the Alaska Department of Fish and Game for any species other than salmon because of the non-rural designation.

Regarding salmon subsistence, prior to the year 1988, the non-commercial salmon net fishery at Adak was classified as a subsistence fishery. In 1988, it became a personal use fishery, but was reclassified as a subsistence fishery again in 1998 (Division of Subsistence ADF&G 2001). In 1999, all fresh water on Adak Island and all salt water within 100 yards of a stream terminus were closed to subsistence fishing for salmon because of the Federal position on non-rural subsistence. In the Adak district in 1999, it is estimated that five subsistence salmon permits were issued by the State and that 164 sockeye and 4 chum salmon were harvested. In the community of Adak itself, one household salmon permit was issued in 1999. In 2003, NOAA Fisheries began a program to distribute subsistence halibut permits to rural residents in Alaska that met the program's criteria for eligibility. Because the NOAA Fisheries program uses the State designations of rural, residents of Adak were classified as eligible for the purposes of the halibut subsistence program and can register and hold Subsistence Halibut Registration Certificates issued by NMFS. The application process for this fishery began in May 2003 and is ongoing.

Seafood Processing

At present, there is a single shore processing plant in Adak, and despite a short history of operations it has seen a number of ownership changes since its inception. The plant was started by a partnership of two individuals who responded to an invitation for proposals from the Aleut Corporation. Operating as Adak Seafoods, the first processing took place in this plant in late February 1999. The plant continued to operate under this name until the summer of 2000. In mid-July 2000, Norquest became a partner in the operation with one of the original owners, and the plant did business in this manner until late July 2001. The individual still active from the original partnership took the plant back over for period of August through December, 2001. In January 2002, Icicle Seafoods became a partner in the operation, which is currently operating as Adak Fisheries, LLC. In mid-2004, Icicle Seafoods partnership was replaced by Aleutian Spray Fisheries. Despite these changes, one of the two individuals who started the plant is still active in its ownership and operation.

The plant leases its land from the AEC, and the plant operates in two 150' by 180' leased bays in the "Blue Shed" building adjacent to Pier No. 5 on the north shore of Sweeper Cove at the south end of the main community area. Adak Fisheries also leases cold storage space in a building just east of the Red Shed along Sea Wall Road. Cold storage capacity is supplemented by the use of vans or containers stored adjacent to the processing facility, both for additional space and to help control utility costs.

It appears that the 1999/2000 operation primarily bought and processed cod, with some crab as well. In 2000/2001 the crab component (in terms of percentage) was increased and the overall amount of cod (in absolute terms) was increased as well. For 2001/2002 the operation has again increased its throughput, especially for cod once Icicle acquired its interest in the plant. During 2002, the main species processed at the plant are Pacific cod, crab, and halibut. Pacific cod is characterized as the major species run by the plant, followed by crab, then by halibut and black cod.

In terms of employment cycles, during 2001-2002, approximately 98 employees were utilized during the busy January through March period, with about 23 or 24 employees being on site the balance of the year, except for when employment dropped down to about 8 cleanup, maintenance, and preparation personnel who are present when the plant is closed from about the third week of December through the first week of January or so. Housing is provided in approximately 30 former military housing units rented from the Aleut Corporation, with approximately 4 workers housed in most of the units during peak times. The processor does not have mess hall facilities, but receive a weekly food allowance and have kitchen facilities in their housing units. Workers are typically hired out of Seattle on a 6-month contract basis with many employees finding the company by word of mouth.

There have been a number of changes each year during the relatively short period of time the plant has been operating in Adak, so there is some difficultly with characterizing a "typical" year. For example, during the 2002 winter season, Icicle’s first year for cod in Adak, the shore plant was supplemented with a floating processing capacity (the Discovery Star) during the cod season. The shore plant was used to dress out all the cod landed, but lacked sufficient freezing capacity, which was supplied by the floater. The floater was in Adak for 6 weeks, and during this time it served as a work platform for a good part of the “extra” or peak labor force. (It also served as a mess hall for the processing crew during their shift when there was not time for normal eating arrangements.) The floater was also used to load finished product onto a tramper alongside, easing temporary storage and transfer logistics. After cod, when the need for labor was reduced, and the floater moved on to pursue herring elsewhere, taking its workforce with it. This was a short-term solution to the lack of freezing capability, and it is expected that it will be repeated only once or twice before new facilities are in place.

Local plant officials reported that approximately 7 crab vessels have been delivering to the plant on a regular basis, with others less frequently. The cod delivery fleet includes a range of different vessel types. Several of the vessels delivering cod in 2001-2002 were 58' vessels from Sand Point. A rough estimate of ten AFA-qualified trawlers (90 to 130 feet) fish their cod sideboards and deliver to Adak. Also as a rough estimate, about two-thirds of the cod landed locally was delivered by the AFA-qualified vessels. Boats from the Aleutian/Alaska Peninsula region deliver halibut and sablefish, as do vessels from outside the area, but information on the number of vessels and IFQ holders selling to the plant is imprecise. The pattern described is one where several IFQ holders will essentially pool their shares and fish them on one boat, to minimize expenses and maximize profits. The boat(s) fished can vary from trip-to-trip.

Support Services

Adak is in the process of developing support service capabilities for the fishing fleet. According to the AEC, the initial transition to a civilian community took place in phases as the Aleut Corporation and it subsidiaries took over support service infrastructure, starting with fueling and then moving into housing, followed by port facilities. One challenge the community faces is that, according to local business owners, vessels that have fished in the Adak area in past years are used to being self-sufficient, and may not realize that supplies and services are now available locally or, even if they do have an awareness of availability, still have established relationships elsewhere.

Adak has become the main marine refueling station the adjacent portion of the North Pacific. The island's underground tank farm has a storage capacity of approximately 22 million gallons of marine diesel, bunker grade fuel, gasoline and jet fuel. Local fuel services are run by the AEC. Although the AEC formerly was engaged in a number of different enterprises, and still rents out vehicles in the community, it is now reportedly focusing primarily on fuel sales and is attempting to divest itself of what are considered to be more tangential ventures. In addition to fuel sales, the Adak facility also stocks oil and filters for vessels, and it can take used oil from vessels as well.

Constructed to accommodate U.S. Navy vessels, the port facilities on Adak consisting of three deep water docks and fueling facilities, can support a wide variety of civilian vessels. Research ships, station work vessels, cruise ships, factory trawlers, and fishing boats use the port facilities at Sweeper Cover and Kuluk Bay. At-sea processors have used the port for transfer of product as well as a supply stop, and this has generated opportunities for shippers.

Adak's aviation infrastructure also benefits from its military airfield history. Its airport, Mitchell Field, is the largest airport in the Aleutians, and is equipped with IFR electronic navigation and weather reporting systems. Support features include control tower and terminal buildings, paved taxiways and aircraft parking areas, maintenance hangers, and a fire and crash station. During the current transition period the airport is managed and run by the Adak Reuse Corporation,[19] although plans call for this entity to dissolve upon successful transfer of lands to the Aleut Corporation.

In terms of direct support to the fleet, in addition to basic port services, Adak offers a limited number of "soft" support services such as facilities for crew transfers, and storage for supplies and product. A full support sector with entities providing a wide range of services such as hydraulic, electronic, and electrical systems service and repairs has not yet developed.

The local housing supply also functions as a direct fishery support service as, for example, Adak Fisheries/Icicle Seafoods was using several of the housing units in the community. There is also a local general store, a restaurant, and the VFW hall and bar, all of which see a considerable amount of fishery related business. Unlike most other shore based processors in the region, the Adak

[19]The Adak Reuse Corporation was organized as a non-profit entity and recognized as the official Local Redevelopment Authority in Adak subsequent to military base closure. The ARC will dissolve upon final transfer of land to the Aleut Corporation.

processor does not have a mess hall or other food service facilities for its employees. Rather, processing workers are given a weekly food stipend and have cooking facilities in their housing units.

3.4 Comparison of the Aleut Corporation and the CDQ groups

There are several fundamental differences between the general structure of the western Alaska CDQ Program and the Aleutian Islands (AI) pollock allocation to the Aleut Corporation. This section briefly outlines the overall differences between programs with respect to several key program elements. A comparison of these program elements is also provided in Table 3.4-1. This section focuses on a comparison of the components of the CDQ Program and the Aleutian Islands pollock allocation, due to the similarities in the economic development mandate of the two programs and in response to the options discussed in Section 4.6 of this document, which consider requiring that the Aleut Corporation provide an annual report about how it uses this allocation for economic development in Adak. Option 3 in Section 4.6 would require the Aleut Corporation to submit an annual report similar to the reports provided by the CDQ groups.

Purpose and Statutory Authority

The purposes of the CDQ Program and the AI pollock allocation to the Aleut Corporation are somewhat similar. As stated in Federal regulations for the CDQ Program (50 CFR 679.1(e)):

> The goals and purpose of the CDQ program are to allocate CDQ to eligible Western Alaska communities to provide the means for starting or supporting commercial fisheries business activities that will result in an ongoing, regionally based, fisheries-related economy.

While stated somewhat differently, the purpose and scope provided in the BSAI FMP (Section 5.4.7.4) for the CDQ Program conveys a similar purpose. This purpose has remained unchanged since the implementation of the program in 1992. However, the Council took action on the policy and administrative aspects of the CDQ Program in June 2002 (BSAI Amendment 71), part of which was to revise the purpose of the program to be consistent with the need to provide for a limited level of investment in the non-fisheries related economy in the CDQ region. Thus, while the first priority of the program continues to be to provide for fisheries- related economic development, a secondary priority will be to strengthen the non-fisheries related economy in the region. This modified purpose statement will be in the BSAI FMP and in the final regulations implementing the components of Amendment 71.

Similarly, the stated purpose of the Aleutian Islands pollock allocation to the Aleut Corporation is "for the purposes of economic development in Adak, Alaska, pursuant to the requirements for the Magnuson-Stevens Fishery Conservation and Management Act" (Section 803(d) of Title VIII of the Consolidated Appropriations Act, 2004). Thus, both programs focus on providing allocations of a specific fishery or fisheries to a managing organization for the purposes of economic development in coastal Alaskan communities. Both programs are also provided for in Congressional legislation, which solidifies their status in the fishery management plans of the Council unless further statutory action is taken. The CDQ Program was included in the Sustainable Fisheries Act amendments to the MSA in 1996.

Administrative Entity Representing Eligible Communities

Both the CDQ Program and the AI pollock allocation were developed to benefit specific Alaskan communities through the harvest allocations. The CDQ Program has established criteria in the MSA, Federal regulations, and the BSAI FMP to determine eligible communities, and this serves to limit the number of communities that may directly benefit from the program. As stated in the statutory language, the AI pollock allocation was provided to directly benefit the economic development efforts in Adak. Since there is only one community targeted by this program and it is explicitly identified in the statutory language, eligibility criteria are unnecessary.

In addition to the issue of eligible communities participating in the program, these communities must have a legal entity to represent them in a fishery allocation program. NMFS must qualify or certify an administrative entity prior to it receiving an allocation. Most of the associated regulations then apply to this entity. In the CDQ Program, the regulations specify that the qualified applicant to receive allocations is the CDQ group (50 CFR 679.2). All six of the current CDQ groups are organized as non-profit corporations that serve as the managing organization for implementation of the Community Development Plans (CDPs).[20] For the purposes of the program, regulations require that the CDQ group be a local fishermen's organization or a local economic development organization that is incorporated under the laws of the State of Alaska or Federal law. The CDQ group must also have a Board of Directors comprised of at least 75 percent resident fishermen of the eligible communities. Other members of the board may be representatives of industry, members of non-eligible communities, or other individuals.

Typically there is an executive director assigned for day-to-day management of the organization, and the CDQ groups also hire staff members to carry out the directives of the executive director and conduct the business activities for the CDQ groups. Other committees may be formed from the board membership for specific activities such as business or educational development. The groups also have service contracts for management assistance with industry consultants and other professionals. There are several different business types the groups have created to correspond to the type of activity they are engaged in, specifically, for-profit corporations, non-profit corporations, and limited liability companies. These businesses report both financially and/or operationally to the CDQ non-profit corporation level.

In the CDQ Program, a qualified applicant (CDQ group) may apply for CDQ allocations by submitting a proposed CDP to the State during the CDQ application period. NMFS reviews the CDPs and the State's recommendations and approves those that it determines meet all of the applicable requirements. As part of the application, the CDQ group must also provide a letter of support from each of the communities it represents.

In contrast, the legislation developed for the AI pollock allocation specifically identifies the Aleut Corporation as the entity to receive the allocation for purposes of economic development in Adak. Thus, no implementing regulations are necessary to further define the qualified entity to receive and

[20]There is no Federal regulatory requirement that a CDQ group be a non-profit entity, however, State regulations (6 AAC 93.025(a)(1)) require that the CDQ groups be non-profit corporations formed under AS 10.20.

manage the AI pollock allocation. The Aleut Corporation formed the Aleut Enterprise Corporation (AEC) in 1997 as a for-profit subsidiary of the Aleut Corporation, in order to use the infrastructure and property assets of Adak as a foundation for further economic development in Adak and the surrounding region. The AEC's strategy is to build Adak into a year-round fishing hub, complete with processing facilities, a small boat harbor, and a variety of shore-based services (Aleut Corporation newsletter, May 2002). Thus, the AEC is focusing its redevelopment efforts in Adak but continues to act as the economic development arm on behalf of the entire Aleut Corporation and its shareholders. Because it has a mission specific to the economic development of Adak and manages the majority of the commercial property on the island, it is likely that the AEC will continue to be the primary entity promoting further fisheries development in Adak. More detailed information on the Aleut Corporation and the Aleut Enterprise Corporation is provided in Section 3.3.

Allocation Process

One of the critical differences between the proposed AI pollock allocation and the CDQ Program relates to the allocation process. This process, in turn, relates to the level of administrative oversight required. As stated previously, allocations of multi-species CDQ are made to the six CDQ groups, representing one or more communities, on the basis of the groups' approved Community Development Plans. CDQ allocations are based on the State's allocation recommendations, after considering evaluation criteria in State regulations, which include but are not limited to, population, number of communities, past performance, and future plans for the use of the allocations. Federal regulations explicitly state that the CDQ allocations are harvest privileges that expire upon expiration of a CDP; thus, when a CDP expires, further CDQ allocations are not implied or guaranteed (50 CFR 679.30 (a)).[21] Each proposed CDP includes a list of new and existing projects and a request for quota with which to support those projects. Because the groups typically request more than the available quota, it is a very competitive process in which the groups vie for a limited amount of CDQ.

The Adak allocation is different in that it is a direct allocation of one species to a specific entity for the purpose of economic development in one community, absent any competition from other communities. The absence of competition, combined with not having to apply for the quota on a continual basis, creates a much different environment than that of the CDQ Program.

Administrative Oversight

Government oversight in the CDQ Program has two primary elements: 1) requirements to provide information to the government about the activities of the CDQ groups, their affiliated businesses, and vessels and processors participating in the CDQ fisheries, and 2) requirements that certain activities by the CDQ group and their subsidiaries be approved by the State and NMFS before they are undertaken. The CDQ Program has substantial reporting requirements and restrictions on the use of the allocations unique to that program. This section generally outlines those provisions in order to provide contrast to the options under consideration by the Council for the AI pollock allocation.

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[21]The Council's recommendation for BSAI Amendment 71 (approved June 2002), when implemented, will establish a three-year allocation cycle in Federal regulations.

The Council originally intended, and reconfirmed through its June 2002 action on the CDQ Program, that the State take primary responsibility for reviewing and making recommendations on the CDPs. The State was deemed the entity responsible for applying the evaluation criteria and procedures and for ensuring that each group meets the steps outlined in the allocation process. The Council is consulted on the State's initial recommendations, and the Secretary holds final approval authority and releases quota to the CDQ groups as appropriate. Under the structure of the AI pollock allocation, there is no competitive allocation process and thus no State role outlined for the purpose of making the allocation. The allocation would be made by the Secretary of Commerce to the Aleut Corporation, as directed by the Magnuson-Stevens Act and the Consolidated Appropriations Act of 2004.

Under the CDQ Program regulations, a CDP must include a community eligibility statement, community development plan, business plan, statement of the applicant's qualifications, and a description of the managing organization (50 CFR 679.30 (a)). All of this comprises a comprehensive CDP, and as specified, is submitted to the State of Alaska for recommendation to the Secretary of Commerce. In addition, each CDQ group must submit quarterly reports, an annual progress report (including an audited financial statement), annual budget report, annual budget reconciliation report, and any amendments to the approved plan mid-cycle. These reports, in combination with the CDP, encompass the fundamental information requirements in the current CDQ Program. Under the Council's recommendation in June 2002 (BSAI FMP Amendment 71) the allocation cycle would be a three-year cycle, meaning a CDP would be required to be submitted for each three-year period.

Related to the competitive nature of the CDQ Program is the need to evaluate the CDPs based on a set of criteria. The criteria are used to determine whether the CDQ groups are using their allocations to achieve the program goals. As stated previously, the CDQ allocations are intended as a privilege which may be revoked or suspended, thus there must be standards by which to measure the groups' success. The CDQ Program uses the evaluation criteria in State regulations as a basis for its CDQ allocation recommendations, and to evaluate how well each group is providing benefits to its communities and meeting the milestones identified in its plan.

By contrast, the statutory language does not address whether a similar reporting standard should be required of the Aleut Corporation with regard to its economic development activities. This remains a decision point for the Council, however, and is represented by three options discussed in Section 4.6 of this document. The options for reporting requirements under consideration by the Council would allow for either no reporting requirement (Option 1), an annual report to the Council describing how it is using the AI pollock allocations (Option 2), or an annual report to NMFS similar to the reports provided by the CDQ groups (Option 3).

The other primary element of government oversight of the CDQ Program is the requirement that certain activities by the CDQ group and their subsidiaries be approved by the State and NMFS before they are undertaken (i.e., prior approval). It is through the initial approval of the proposed Community Development Plan and through substantial plan amendment requirements that the State and NMFS exercise the authority to review and approve investments before they are made. While options exist to require an annual report to be submitted by the Aleut Corporation at varying levels of detail, there are no options currently proposed by the Council which would require the Aleut Corporation to seek approval from NMFS prior to making an investment using revenues generated by the AI pollock allocation.

In sum, the information and reporting requirements, including the requirement for prior approval, make up the critical elements of government oversight within the CDQ Program. None of these requirements are explicitly required in the authorizing legislation for the AI pollock allocation to the Aleut Corporation, yet the Aleut Corporation is required to use the revenues derived from the allocation to further economic development in Adak. Given that mandate, the Council may choose to require some level of reporting, in order for the Council and NMFS to determine whether the allocation is being used as intended by the legislation. Thus, the level of administrative oversight included in the AI pollock allocation appears to represent a policy decision for the Council and is addressed by the current options. As stated previously, a prior approval requirement is not included in the proposed options.

Ownership and Transfer Restrictions

Federal regulations exist to govern the transfer of quota among CDQ groups (50 CFR 679.30(e)), as groups may request that NMFS transfer CDQ allocations, CDQ, prohibited species quota allocations, or prohibited species quota, from one group to another. The mechanism provided for in regulations in that each group must file an appropriate amendment to its CDP. No permanent quota transfer (sale) is allowed outside the CDQ Program, thus, transfer is limited to the qualified CDQ groups. The CDQ groups lease their quota to individual fishermen and/or fishing companies under contract and receive a royalty payment, and these entities harvest the quota on behalf of the CDQ group. The quota itself is not transferred to these vessels at any time. The CDQ groups are not restricted by regulation or statute as to who they lease the quota to, as long as the entities meet the applicable Federal fisheries regulations. While there is no requirement that CDQ groups must lease quota to resident fishermen engaged in local fisheries off the coast of the eligible CDQ communities, this process does occur primarily in the crab and halibut fisheries, and provides benefits in the form of income and employment to residents of the eligible communities.

By contrast, the statutory language for the AI pollock allocation provides that any directed AI pollock fishery allowance shall be allocated wholly to the Aleut Corporation or its authorized agent. Also included are statutory provisions which direct how the allocation can be used, specifically what type of vessel may lease the annual allocation. The Aleut Corporation is allowed to form partnerships to harvest the pollock allocation only with ≤60' vessels or vessels that are eligible to harvest pollock under the American Fisheries Act (AFA). Further limits exist regarding the amount of pollock allocation that can be harvested by vessels ≤60': up to 25% in 2004 - 2008, and up to 50% in 2009 - 2013. After the year 2012, 50% of the allocation must be harvested by vessels ≤60', and 50% must be harvested by AFA vessels.

Similar to the CDQ Program, there is no requirement that the Aleut Corporation lease quota to qualified resident fishermen of Adak. As a relatively new civilian community, Adak does not have an established residential fishing fleet. However, the requirement that at least 50% of the pollock allocation must be harvested by small boats in the future is likely intended to provide for the same types of benefits that are sought in the small boat, local fisheries in the CDQ Program. While not required, it is likely that at least some of the small boat pollock allocation will be allocated to resident fishermen of Adak, should this fleet develop, and represent employment and economic benefits to the community of Adak. Thus, while the provisions differ with respect to the small vessel pollock harvest requirement, the effect may be similar to the CDQ Program.

Use of Revenues

There are significant regulations that govern permissible activities or expenditures by the CDQ groups. The CDQ groups must invest revenues derived from the CDQ allocations primarily in fisheries-related projects, but a smaller portion of their revenues are spent on financial instruments, education projects and scholarships, charitable contributions, employee training, and administrative expenses. Because there are currently no absolute limits provided in regulation to govern the amount of revenues that may be spent on non-fisheries related projects, the CDQ allocation process has been the primary mechanism to enforce this fundamental provision of the CDQ Program. The regulations are in the process of being revised (BSAI FMP Amendment 71) to allow for a limited level of investment by each group in non-fisheries related projects.[22]

It is also important to note that while the number of participating CDQ communities is limited by the eligibility criteria, the CDQ groups are not limited to investing in fisheries-related projects only in CDQ communities.

The only restriction on the use of revenues associated with the AI pollock allocation to the Aleut Corporation is that it be used for the purpose of economic development in Adak. Given that there is no further restriction on the type of economic development projects undertaken, this may include a fairly broad scope of projects. Another notable difference from the CDQ Program, however, is that the allocation is specifically for economic development in the community of Adak. While this may not mean that all revenues must be spent in Adak in order to further economic development in Adak, it does imply that there must be a strong link between the revenues generated by the AI pollock allocation and the community. The CDQ Program does not require that all fisheries related projects be located in the CDQ communities, but only that the eligible communities must benefit overall from the allocations. In effect, fisheries projects elsewhere in Alaska may be approved for their benefit to the whole of the CDQ region, or they may create additional revenues that can be used to benefit the CDQ communities. Thus, while there is much greater flexibility in the type of project undertaken in the Adak program, there is likely less flexibility as to the location of the project. In addition, given that the CDQ groups must ensure that benefits from the CDQ allocations flow to the eligible CDQ communities, the regulatory flexibility in the location of the CDQ projects may be more limited than it appears.

Use Caps or Allocation Limits

There are specific limits in regulation and/or statute as to how much of each TAC the CDQ Program receives in the form of CDQ allocations. The CDQ Program is allocated 10% of Bering Sea pollock, 7.5% of all other groundfish species and crab species, 20% of sablefish, and 20% - 100% of the halibut TACs or quotas in the BSAI. Portions of the CDQ and prohibited species quota reserves for each sub-management area are allocated on a competitive basis to the CDQ groups, in accordance with their CDPs. Thus, the percentage of multi-species CDQ reserve allocated to each CDQ group

[22]Under the Council's motion on Am. 71, each CDQ group may invest up to 20% of its previous year's pollock CDQ royalties on non-fisheries related projects. Any non-fisheries related investments must be made in economic development projects in the region of Alaska represented by the CDQ groups and be self-sustaining.

is subject to change with each allocation cycle. NMFS can allocate no more than 33% of the total CDQ for all sub-management areas and districts combined to any one CDQ group. The amount of the TAC remaining is allocated to non-CDQ fisheries. Any changes to the amount of quota allocated to the CDQ Program would be made through the Federal rulemaking process or statutory change.

By contrast, the Congressional legislation authorizing the AI pollock allocation requires that any and all of a directed AI pollock fishery will be allocated to the Aleut Corporation or its authorized agent. Thus, pending any statutory change, 100% of the AI pollock directed fishing allowance will be allocated to the Aleut Corporation upon implementation.

Table 3.4-1 Comparison of program elements in the CDQ Program and the AI pollock allocation.

Program	Western Alaska CDQ Program	Adak Aleutian Islands Pollock Fishery
Status and Purpose	Existing program (implemented in 1992) is being revised per BSAI Am. 71. The CDQ Program is allocated a percentage of the BSAI TACs (CDQ reserves). Applies to all species except squid. The purpose of the program is to help western AK communities to increase their participation in the BSAI fisheries and to help diversify their local economics and provide opportunities for stable, long-term employment.	Approved by Congress in January 2004 as Section 803 of the 2004 Appropriations Act. Allows for a directed AI pollock fishery, with any directed fishing allowance (the TAC reduced by any incidental catch allowance in other directed fisheries) allocated to the Aleut Corp. FMP amendment being developed to establish the structure of the allocation, annual specs analysis will provide for specific AI pollock TAC setting. Final action on FMP amendment expected June 2004; specs analysis action in Dec. 2004 for 2005 fisheries. The purpose of the allocation to the Aleut Corp is to support economic development in Adak.
Allocation vs. right to purchase quota share	Allocation	Allocation
Program Elements **1. Eligible communities.** Specific eligibility criteria would be in regulation and could also be in the FMP or MSA.	Eligibility criteria in regulation and MSA. Regulations include the eligibility criteria and a list of eligible communities.	Act provides for allocation directly to the Aleut Corporation (not the community of Adak). Aleut Corp has much broader regional boundaries than Adak, although the legislation states that the allocation to the Aleut Corp is for the purposes of economic development in Adak.
2. Administrative entity. Communities must have a legal entity that represents them in a fishery allocation program. Most regulations apply to this entity.	"Qualified applicant" for CDQ allocations must be: a local fishermen's organization or economic development organization incorporated under State or Federal law. The BOD must be at least 75% resident fishermen and each community must have at least one representative board member. A CDQ group is a qualified applicant with an approved CDP.	Aleut Corporation is the entity receiving the allocation.
3. Qualification of administrative entity. NMFS must qualify or certify an administrative entity prior to it receiving or purchasing QS.	A qualified applicant may apply for CDQ allocations by submitting a proposed CDP to the State during the CDQ application period. NMFS reviews the CDPs and approves those that it determines meet all applicable requirements. The applicant must also provide a letter of support from its member communities.	No qualification process necessary – allocation is made directly to Aleut Corporation.

4. Administrative Oversight. Entities representing communities must submit information to NMFS.	Two main components are 1) information requirements, and 2) prior approval of CDQ projects. The CDQ group must submit a community development plan, amendments to the plan, annual audited financial statements, annual budget report, and annual budget reconciliation report to NMFS and the State. The main role for NMFS is to determine whether the report is submitted , contains the required information, and is consistent with the goals of the program. The State has the primary role in daily administrative oversight. NMFS must approve the CDPs and amendments prior to implementation of the CDQ project.	Option included to require an annual report, based on the intent in statutory language that the revenues from the pollock allocation be used for economic development in Adak. Analysis will develop options for various levels of reporting requirements and government oversight.

Table 3.4-1 continued.

Program	Western Alaska CDQ Program	Adak Aleutian Islands Pollock Fishery
5. Ownership and transfer restrictions. Regulations may govern the ownership and transfer of quota between communities and other QS holders in a program.	Federal regulations exist to govern the transfer of quota among CDQ groups. No quota transfer is allowed outside the CDQ Program. The CDQ groups lease the quota to individual fishermen/companies under contract or they allow resident fishermen to harvest CDQ allocations directly with no leave fee.	The Aleut Corporation can form partnerships with <60' vessels or AFA vessels to harvest the AI pollock quota. Limits exist on how much can be harvested by small vessels: up to 25% in 2004 - 08; up to 50% in 2009 - 2013. Requirements for 50% of the allocation to be harvested by <60' vessels and 50% to be harvested by AFA vessels, starting in 2013. It is anticipated that the Aleut Corp could lease the quota to individual fishermen/companies under contract or authorize vessels to harvest pollock with no lease fee.
6. Use of revenues. Regulations may govern permissible activities or expenditures by a community entity.	CDQ groups must invest primarily in fisheries-related projects, but a smaller portion of their revenues may be spent on financial instruments, education, charities, training, and administrative expenses. The CDQ allocation process has been the primary mechanism to enforce this provision. The regulations are currently being revised to allow for some level of non-fisheries related investments.	Revenues are to be used for the purposes of economic development in Adak.
7. Use caps or allocation limits. Regulations may limit the amount of QS allocated to a community program or purchased by a community entity.	The CDQ Program is allocated 10% of pollock, 7.5% of crab and all other groundfish species, 20% of sablefish, and 20 - 100% of the halibut TACs in the BSAI. Portions of the CDQ and PSQ reserves for each subarea are allocated to CDQ groups in accordance with approved CDPs. NMFS can allocate no more than 33% of the total CDQ for all subareas and districts combined to any one CDQ group.	No limitations. Could not acquire more of the AI pollock directed fishing allowance, as the entire directed fishing allowance must be allocated to the Aleut Corporation.
8. Accountability. Related to administrative oversight. Mechanisms included to modify the allocation level based on the performance of the community entity.	The CDQ Program is a competitive allocation process among 6 CDQ groups. CDQ allocations are based on the State's recommendations after considering evaluation criteria in State regulations, which include population, number of communities, past performance, and future plans for use of allocations. NMFS approves the final allocations. Pending regulations would make this cycle 3 years.	The legislation does not explicitly require government oversight of how the Aleut Corporation uses the allocations to provide economic development in Adak. The Council will recommend whether no accountability is necessary, or if some level of reporting from the Aleut Corporation is appropriate. The Council may also recommend any consequences if the Council or NMFS determines that the Aleut Corporation is not using its allocations consistent with the requirements of the statute.

3.5 Steller sea lion issues

On November 26, 1990, the Steller sea lion was listed as threatened under the ESA (55 FR 40204), and on August 27, 1993 (58 FR 45269) critical habitat was designated based on observed movement patterns. In 1997 the Steller sea lion population was split into two separate stocks (western and eastern stocks) based on demographic and genetic dissimilarities (Bickham *et al.* 1996, Loughlin 1997)(62 FR 30772). Due to the continued decline, the status of the western stock was changed to endangered, while the status of the increasing eastern stock was left as threatened. Since 1977 the western population has continued to decline while the eastern population has maintained steady increases and may be considered for de-listing over the next few years if the positive trend continues. However, in 2002, the first increase in the non-pup western population was observed during the biennial range-wide counts.

The two listed populations and their critical habitat are:

Western Population of Steller Sea Lion (*Eumetopias jubatus*; listed as threatened on November 26, 1990 [55 FR 40204]; listed as endangered on May 5, 1997 [62 FR 30772]; critical habitat designated on August 27, 1993 [58 FR 45269])

Eastern Population of Steller Sea Lion (*Eumetopias jubatus*; listed as threatened on November 26, 1990 [55 FR 40204]; critical habitat designated on August 27, 1993 [58 FR 45269])

Further information on the background of the species and their critical habitat can be found in the 2000 BiOp and the 2001 BiOp and its Supplement.

The latest information on the status of the species can be found in the Supplement at Tables I-1 and I-2 (reprinted here as Tables E-1 and E-2). The most recent non-pup count in 2002 yielded 19,340 animals in the western DPS and 9,951 in southeast Alaska (a subset of the eastern DPS of Steller sea lion). A detailed description of these counts can be found in Sease and Gudmundson (2002). The next range wide survey is scheduled for the summer of 2004.

The western Aleutian Islands sub-population continues to be the area of most concern for NMFS. Non-pup counts have declined from 14,011 in 1979, to just 817 animals in 2002 (Table 3.5-1). Although all other sub-populations in the western DPS increased from the 2000 to the 2002 count, the western Aleutian Islands area group decreased by 23.7% in just two years (Table 3.5-2). A map of these sub-population areas can be found in Sease and Gudmundson (2002; their Figure 1). The cause of the steep decline in the Aleutian Islands subarea is unknown, although some researchers are finding links between prey composition and area (Sinclair and Zeppelin, 2002). Other hypotheses involve changes in oceanic conditions such as salinity and temperature which may result in bottom up changes (Trites, pers. comm.). Other possibilities for this sub-population include the taking of animals in Russian fisheries (e.g., herring)(Burkanov, pers. comm.).

During the April 2004 Council meeting, the SSC suggested examining the non-pup data for the period 1998-2002 (headings are the same as Table 3.5-2):

% change	EGOA	CGOA	WGOA	EAI	CAI	WAI	KK	WDPS	SE
1998-2002	N/A	-2.9	-4.1	+3.0	-4.7	-	-2.4	-5.4	+14.5

In some areas, sub-populations show a decline rather than a gain when compared with the 2000-2002 period (e.g. central and western GOA, central AI, and Kenai to Kiska). For sub-populations showing decline over 2000-2002, declines are greater for the 1998-2002 period (e.g. western AI). Overall, the western DPS decline over 1998-2002 was 5.4%. In all cases, the decline over 1998-2002 was less than declines observed over 1991-2002.

Additional information on the Steller sea lion and potential interactions between sea lions and groundfish fisheries was provided in NPFMC and NMFS (2004). Figures 3.5-1 to 3.5-4 illustrate the chronological sequence of imposition of SSL-related fishing restrictions in the AI region.

Table 3.5-1 **Counts of adult and juvenile (non-pup) Steller sea lions at rookery and haulout trend sites by region (Sease and Gudmundson 2002).** For the GOA, the eastern sector includes rookeries from Seal Rocks in Prince William Sound to Outer Island; the central sector extends from Sugarloaf and Marmot Islands to Chowiet Island; and the western sector extends from Atkins Island to Clubbing Rocks. For the Aleutian Islands, the eastern sector includes rookeries from Sea Lion Rock (near Amak Island) to Adugak Island; the central sector extends from Yunaska Island to Kiska Island; and the western sector extends from Buldir Island to Attu Island.

Year	Gulf of Alaska			Aleutian Islands			Kenai to Kiska	Western DPS US	Southeast Alaska
	Eastern (n=10)	Central (n=15)	Western (n=9)	Eastern (n=11)	Central (n=35)	Western (n=4)	(n=70)	(n=84)	(n=10)
1975				19,769					
1976	7,053	24,678	8,311	19,743					
1977				19,195					
1979					36,632	14,011			6,376
1982									6,898
1985		19,002	6,275	7,505	23,042				
1989	7,241	8,552	3,800	3,032	7,572				8,471
1990	5,444	7,050	3,915	3,801	7,988	2,327			7,629
1991	4,596	6,270	3,732	4,228	7,496	3,083	21,726	29,405	7,715
1992	3,738	5,739	3,716	4,839	6,398	2,869	20,692	27,299	7,558
1994	3,365	4,516	3,981	4,419	5,820	2,035	18,736	24,136	8,826
1996	2,132	3,913	3,739	4,715	5,524	2,187	17,891	22,210	8,231
1997		3,352	3,633						
1998		3,467	3,360	3,841	5,749	1,911	16,417	20,438[1]	8,693
1999	2,110								
2000	1,975	3,180	2,840	3,840	5,419	1,071	15,279	18,325	9,862
2002	2,500	3,366	3,221	3,956	5,480	817	16,023	19,340	9,951[2]

[1] 1999 counts substituted for sites in the eastern Gulf of Alaska not surveyed in 1998.

[2] 2002 counts for Southeast Alaska are preliminary.

Table 3.5-2 Trends in sub-populations of Steller sea lions from 1991 to 2002 (Sease and Gudmundson 2002).

Year	Gulf of Alaska Eastern (n=10)	Gulf of Alaska Central (n=15)	Gulf of Alaska Western (n=9)	Aleutian Islands Eastern (n=11)	Aleutian Islands Central (n=35)	Aleutian Islands Western (n=4)	Kenai to Kiska (n=70)	Western DPS (n=84)	Southeast Alaska (n=10)
% change 1991 to 2002	- 45.6	- 46.3	- 13.7	- 6.5	- 26.9	- 73.5	- 26.26	- 34.24	+ 15.4
% change 2000 to 2002	+ 26.6	+ 5.8	+ 13.4	+ 2.9	+ 1.1	- 23.7	+ 4.85	+ 5.52	+ 0.9
est. annual % change 1991 to 2002	- 7.0	- 6.3	- 2.2	- 1.6	- 2.3	- 11.4	- 3.09	- 4.15	+ 1.8

Figure 3.5-1 Steller Sea Lion Management Measures, 1991-1998

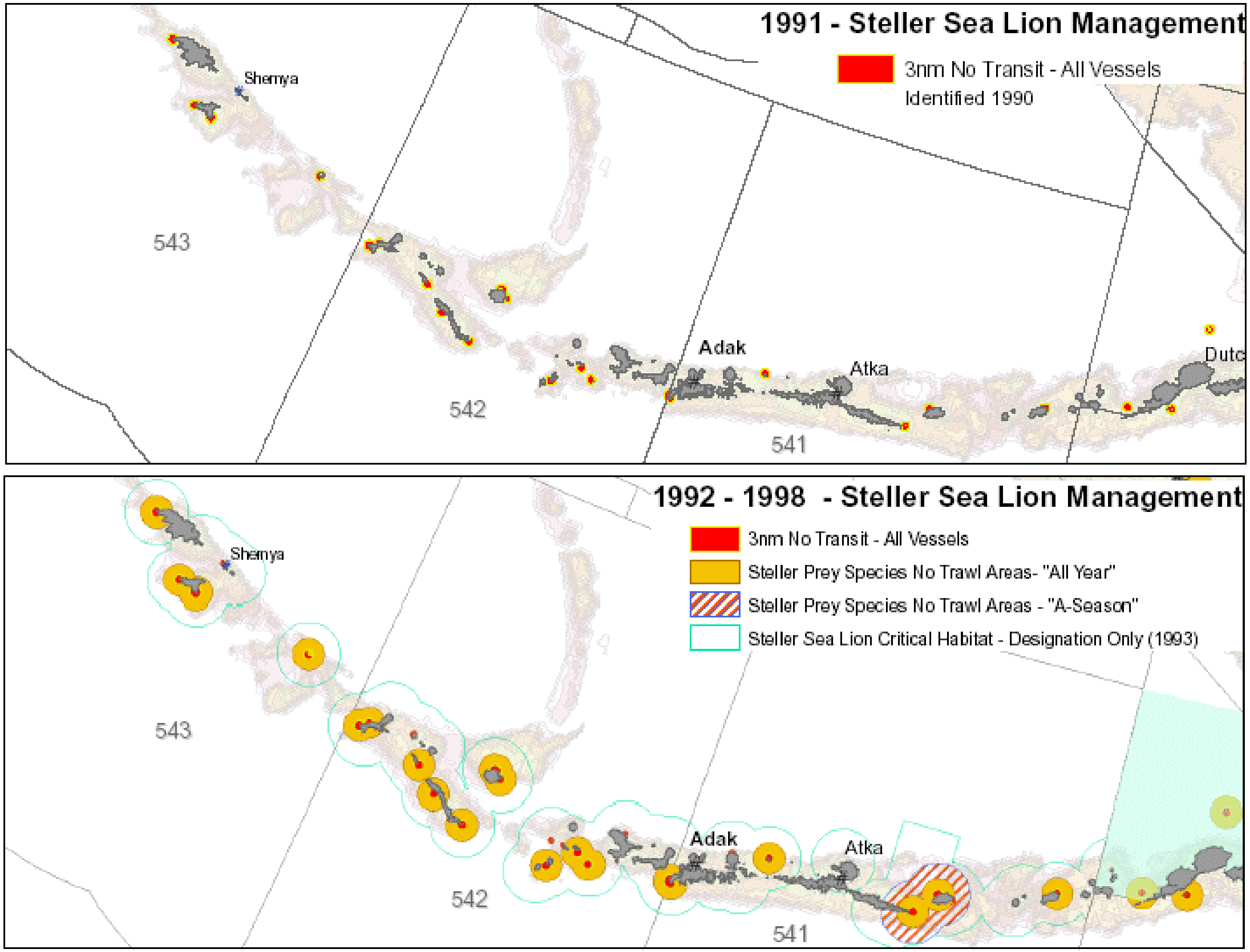


Figure 3.5-2 Steller Sea Lion Management Measures, 1999-November 2000

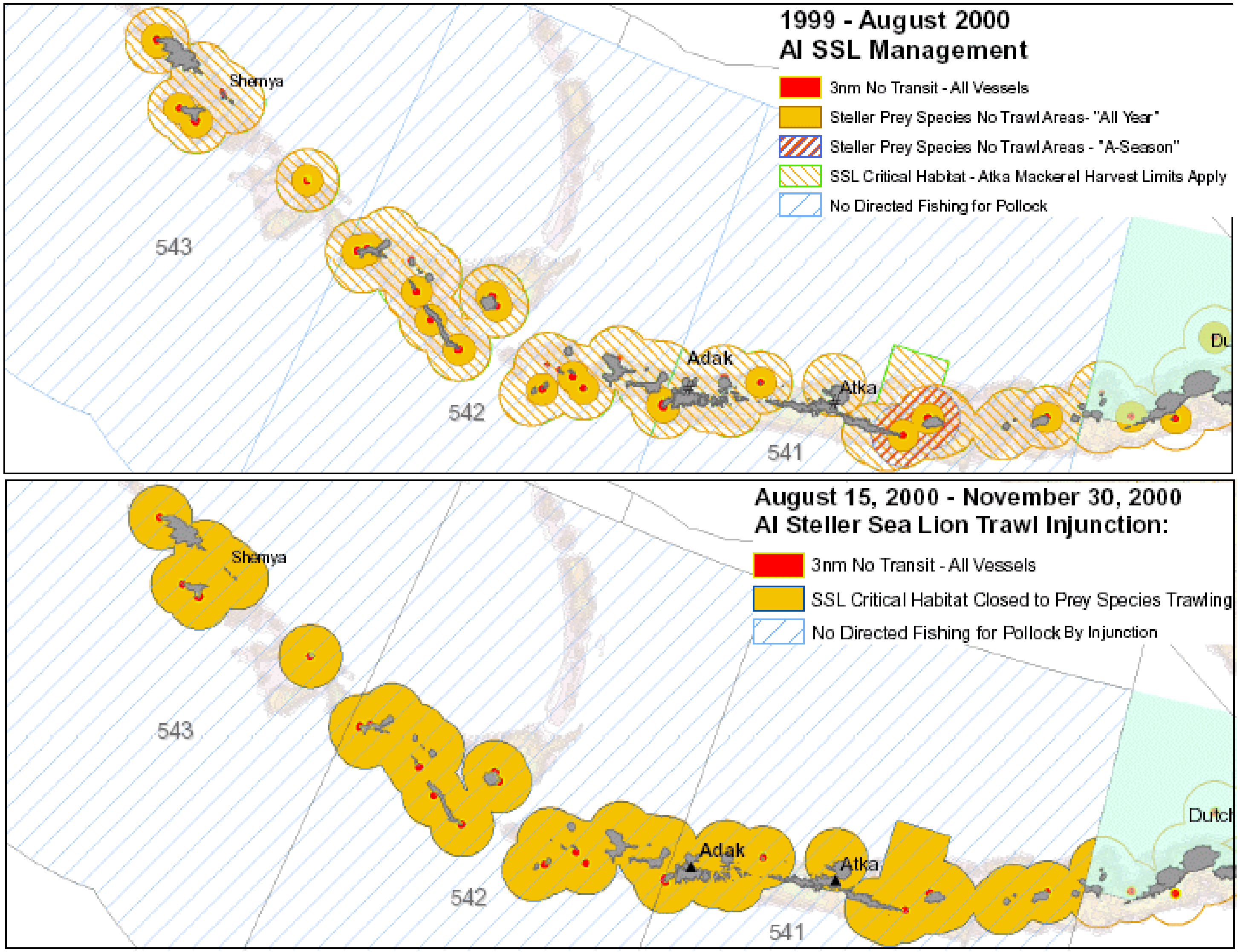


Figure 3.5-3 Steller Sea Lion Management Measures, November 2000 to June 2001

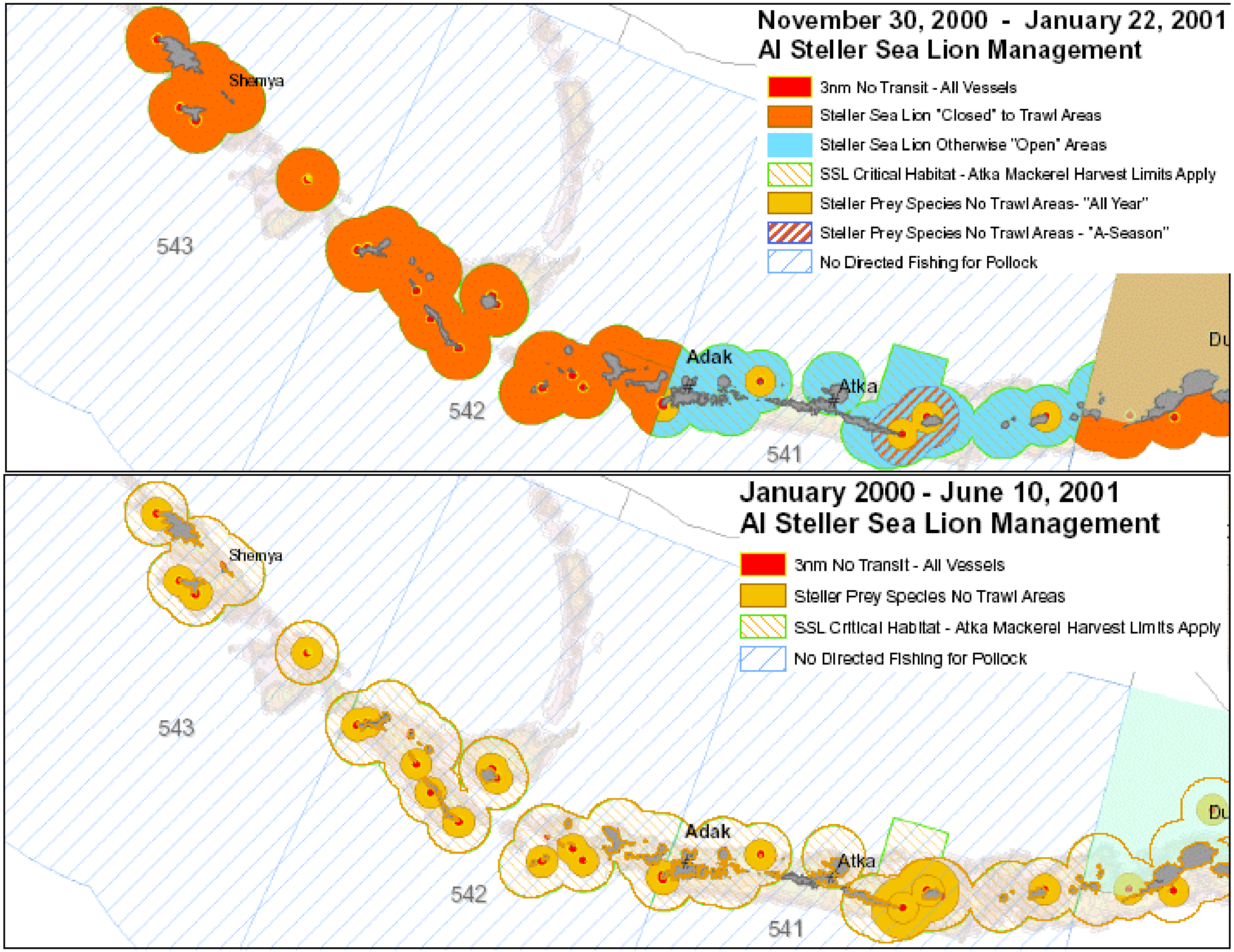
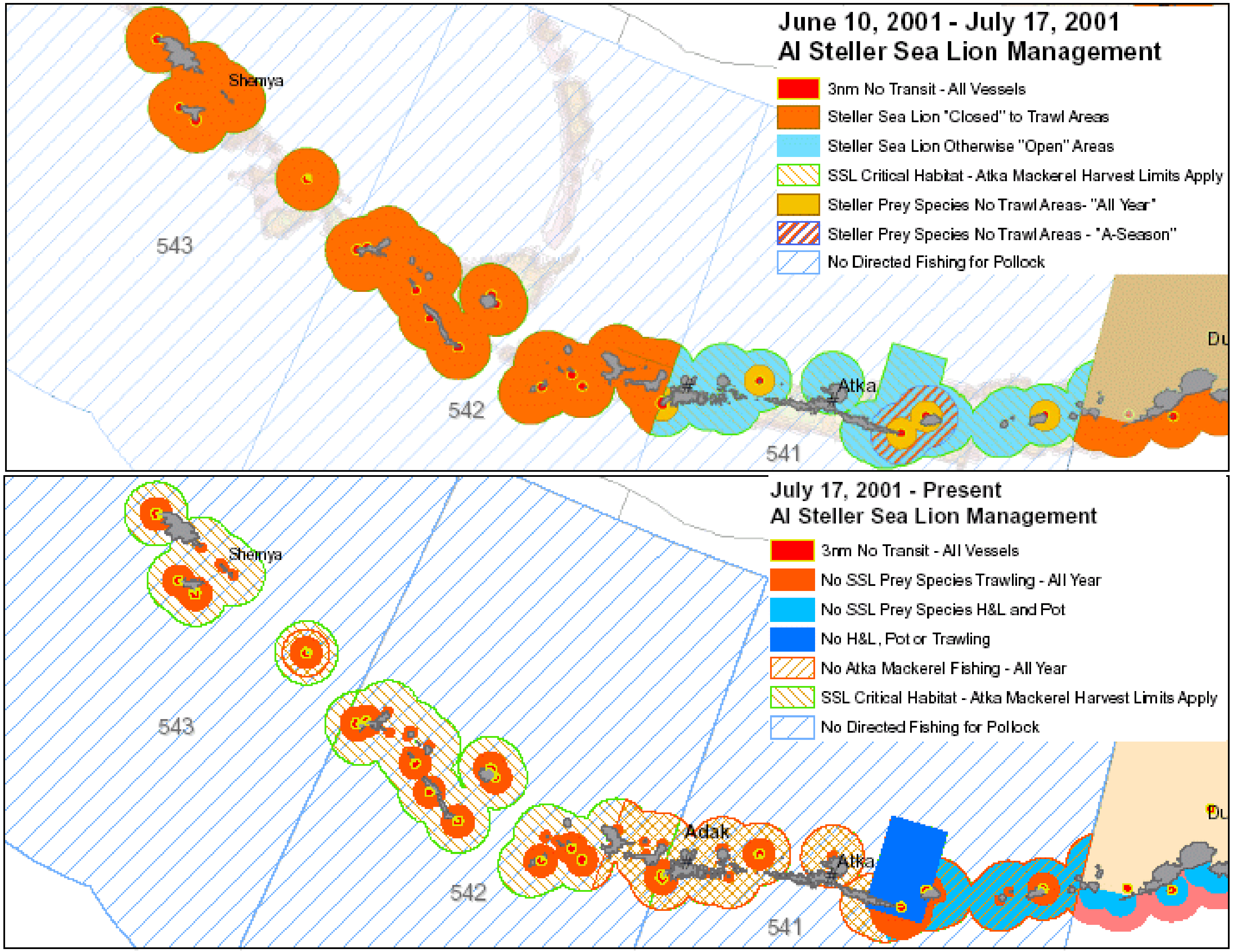


Figure 3.5-4 Steller Sea Lion Management Measures, June 2001 to present



3.6 Existing monitoring and enforcement requirements

This section describes the monitoring and enforcement requirements to which vessels fishing in the Aleutian Islands pollock fishery would be subject if there were no change in the regulations.

These requirements are described separately for non-AFA and AFA vessels. Section 803 of the statute requires the Council to allocate the directed pollock fishery in the Aleutian Islands to the Aleut Corporation. It allows the Aleut Corporation or its authorized agent to contract with vessels under 60 feet, or with AFA vessels, to harvest this allocation. However, the statute merely identifies the AFA vessels as vessels that are eligible to fish for the Aleut Corporation. The statute also provides for a phase-in of small vessels over the period 2004 through 2012, after which date (i.e. on January 1, 2013) 50 percent of the Aleut Corporation allocation must be fished by vessels < 60 feet LOA and 50 percent by AFA vessels. The actual allocation is given to the Aleut Corporation.

The following describes the current fishery monitoring program with which the proposed Aleut Corporation pollock fishery would have to comply, where appropriate. Since both AFA vessels and vessels under 60 feet LOA are identified as the only two "classes" of vessels authorized to participate in this fishery, the regulations and requirements for monitoring these two "classes" of vessels is provided below - i.e. non-AFA vessel fisheries and AFA vessel fisheries.

3.6.1 Non-AFA status quo

Catch Documentation

Shoreside and stationary floating processors must complete a State of Alaska "fish ticket". Additionally, they must either maintain a NMFS approved logbook which documents vessel position and estimated catch and submit a weekly production report (WPR) or use a shoreside processor electronic logbook report (SPELR). Motherships must maintain a NMFS approved logbook, submit a WPR, and complete a State of Alaska fish ticket.

Catcher/processors must maintain a NMFS approved logbook, submit a WPR, and, if fishing within 3 miles of the shore of the State of Alaska or in a State of Alaska fishery, complete a fish ticket. All vessels over 60 feet must maintain a NMFS approved logbook.

Vessel Monitoring System (VMS)

The VMS system is a method of periodically reporting-through satellite communications-the location and identity of boats.

Effective June 10, 2002, vessels whose Federal Fisheries Permit is endorsed for Pacific cod, pollock or Atka mackerel must have on board, and use, a VMS, while operating off Alaska whenever a fishery for which they are endorsed is open. When a vessel activates its VMS transmitter for the first time, NMFS Office of Law Enforcement must be notified by fax at least 72 hours before the vessel leaves port.

Observer Requirements

The current domestic observer program was authorized in 1989 when the Secretary approved Amendments 13 and 18 to the groundfish FMPs for the BSAI and GOA, respectively. An Observer Plan to implement the program was prepared by the Secretary in consultation with the Council and implemented by NMFS, effective February 7, 1990 (55 FR 4839, February 12, 1990). An EA/RIR prepared for Amendments 13/18 examined the environmental and economic effects of the new program.

Observer coverage requirements, for the most part, have remained unchanged since 1989. The Groundfish FMPs for the BSAI and GOA set observer coverage levels for different sectors of the fishery. Observer coverage requirements are vary depending on vessel or processor type, target fishery, gear type and time of year. Generally, coverage levels are set at one of four levels: 200 percent coverage (with two observers aboard the vessel simultaneously and all hauls are sampled), 100 percent coverage, 30 percent coverage, or no coverage. With the exception of vessels using trap (pot) gear, all coverage levels are based on days fished in a calendar quarter. Exact regulatory language dictating observer coverage levels can be found in 50 CFR 679.50 Subpart E – Groundfish Observer Program.

The NMFS Regional Administrator can alter observer coverage levels at any time to improve accuracy, reliability, and availability of observer data if there has been a change in the bycatch composition of a specific component of the fleet or if additional observer coverage is needed to meet specific fishery management objectives. In the past, the Agency has only pursued a change to observer coverage requirements through a change to the Code of Federal Regulations and with the approval of the Council. This process can be lengthy, but allows the public to comment on the proposed change.

Processing Plants

Processing plants include both shoreside and stationary floating processors. These facilities receive sorted and unsorted groundfish deliveries from catcher vessels using all types of gear. These groundfish are then processed into various products.

Observer coverage levels for processing plants are determined by the amount of groundfish processed each calendar month. A processing plant processing 1,000 metric tons (mt) or more of groundfish in a calendar month is required to have an observer present each day it receives or processes groundfish during that month. Plants processing between 500 mt to 1,000 mt of groundfish are required to have observer coverage for 30 percent of the days they receive or process groundfish during the month. Plants which process less than 500 mt of groundfish in a month are not required to obtain observer coverage.

In early 2003, coverage requirements for plants receiving pollock or Pacific cod were changed to reduce coverage during months when a directed fishery for these species closes. During these months, plants receiving less than 250 mt of groundfish per week may reduce their coverage to 30 percent of the days in which fish is received or processed. If the 250 mt limit is exceeded during a week, the plant must return to normal coverage requirements until all fish are processed. The plant can then return to the reduced coverage for the remainder of the month.

Motherships

A mothership is a processing vessel that receives only unsorted catch from other vessels by way of a codend transfer. A mothership that processes 1,000 mt or more of groundfish in a calendar month is required to have an observer aboard each day it receives or processes groundfish during that month. A motherships that processes between 500 mt and 1,000 mt of groundfish in a month must carry an observer at least 30 percent of the days it receives or processes groundfish during that month. A mothership processing less than 500 mt of groundfish in a month is not required to carry an observer. In 2002, all observed motherships were participating in the pollock fishery regulated under the AFA and therefore carried additional observer coverage to meet AFA requirements. On these vessels, the lead observer aboard must have an additional certification specific to AFA and Community Development Quota (CDQ) fisheries. This specialized training, called level 2 certification, is discussed in detail in the CDQ section that follows.

Observers aboard motherships treat the delivered codends as if they were caught by the mothership. Their data collection duties are the same as for any trawl catcher/processor in the fishery in which the vessel is participating. Because the observers aboard the mothership collect all necessary data, most vessels delivering unsorted codends to motherships do not carry observers.

Trawl and Longline Vessels

In open access and Individual Fishing Quota (IFQ) groundfish fisheries, observer coverage requirements for trawl and longline vessels are determined by vessel length. Vessels greater or equal to 125 feet (ft) in length overall (LOA) are required to carry an observer for all of their fishing days. Vessels greater or equal to 60 ft LOA but less than 125 ft LOA that participate in a directed fishery for more than three fishing days in a calendar quarter are required to carry an observer for at least 30 percent of their fishing days in that quarter. Additionally, at least one fishing trip in each calendar quarter for each fishery these vessels participate in must be covered. Vessels less than 60 ft LOA are not required to carry an observer.

Multi Species Community Development Quota Fishery

The CDQ Program began in December of 1992 with the goal of promoting fisheries related economic development in western Alaska. The advent and expansion of this program has greatly affected the North Pacific Groundfish Observer Program (NPGOP) and its priorities.

Unlike open-access fisheries, at-sea observer data are used exclusively to manage groundfish and halibut CDQs aboard catcher-processor vessels. Therefore, these vessels are required to have every CDQ haul sampled by an observer. Trawl catcher vessels equal to or greater than 60 feet are required to have at least one observer on board at all times, and all CDQ species must be delivered to a processor. Non-trawl catcher vessels that are harvesting CDQ and are equal to or greater than 60 feet are required to have an observer on board at all times. Operators of non-trawl catcher vessels have two options for catch accounting. Under option 1, they must retain all CDQ species and deliver them to a processing plant. At the plant, the catch is sorted and weighed. Under option 2, they may discard some CDQ species, but the vessel must have an approved observer sampling station (described below and at 50 CFR 679.28(d)(8)) and each haul must be sampled by the observer on board. For each option, observer data are used to determine discarded species and delivery weights to determine retained catch.

Observer Experience and Training Requirements

In order to meet the data needs required to manage CDQ fisheries, Observer Program Office (OPO) staff worked with the Alaska Regional Office to develop CDQ-specific observer experience and training, vessel equipment, and observer coverage requirements. While these requirements were originally developed for the CDQ fisheries, they are now also used to ensure quality data collection aboard vessels operating under the AFA. Since this change was made, much of the language regarding specialized "CDQ observers" has been changed to "level 2 observers" to reflect both fisheries.

Since 1998, NMFS has required that all observers deployed in CDQ fisheries have prior observing experience and each must complete a level 2 training course. The amount and type of experience each observer has determines whether the observer is qualified to serve as a lead level 2 observer. Lead observers serve as the primary point of contact for observer issues aboard the vessel for both crew and NMFS personnel. Lead observers are also responsible for returning the data to NMFS and carrying the data through the debriefing and editing process.

To qualify as a level 2 observer, an observer must have at least 60 days of data collection for which they received an acceptable evaluation from staff at the OPO. They must also successfully complete the level 2 training class. A lead level 2 observer must have additionally completed two observer cruises and sampled a defined number of hauls aboard a particular vessel type. Staff at the OPO and the North Pacific Observer Training Center have designed the level 2 training course to build upon an observer's existing skills. Much of the training consists of ensuring observers know and understand the additional regulations in place to manage the CDQ and AFA fisheries.

Equipment and Operational Requirements

While the NPGOP made changes in training and certification requirements for CDQ observers, the fishing industry also responded to the need for increased data accuracy aboard these vessels. Catcher/processors and motherships are required to provide additional equipment to assist observers in collecting data (described at 50 CFR 679.28). These vessels must have a NMFS-certified observer sampling station that meets safety, space and access to unsorted catch requirements, and is equipped with an electronic, motion-compensated platform scale, a table, and running water. Additionally, trawl and mothership catcher/processors are required to have electronic, motion-compensated flow scales that are capable of weighing total catch. All NMFS-approved scales must be inspected by NMFS annually, and flow scales must be tested daily when their use is required.

Observer Coverage Requirements

Observer coverage levels for CDQ vessels are determined by the vessel type and the amount of work an observer can be expected to do. Regulations require that every CDQ haul be sampled aboard catcher/processor and mothership vessels. Trawl catcher/processors and motherships generally operate 24 hours per day, making it impossible for a single observer to complete all sampling duties. These vessels are, therefore, required to carry two level 2 observers, one of whom must be lead qualified for that gear type. Catcher/processors using fixed gear may carry one lead level 2 observer if they have an alternative fishing plan approved by NMFS. Catcher vessels delivering unsorted catch to a processing plant are required to carry one level 2 observer. The processing plant receiving CDQ catch must also have a level 2 observer present.

3.6.2 AFA status quo

Observer and Equipment Requirements for Vessels

Catcher vessels participating in the AFA pollock fishery are not subject to additional observer coverage requirements. Catcher vessels listed in the AFA that are 60 feet LOA or greater, but less than 125 feet LOA are required to carry an observer for 30% of their fishing days in any calendar quarter and at all times during at least one fishing trip during that quarter. Catcher vessels listed in the AFA which are 125 feet LOA or greater must carry an observer at all times they are harvesting groundfish. AFA listed catcher/processors and motherships must carry at least 2 observers at all times when the vessel is used to harvest, process, or receive deliveries of groundfish. At least one of these observers must be certified as a lead level 2 observer. Additionally, observer workloads are constrained similarly to CDQ requirements. One mothership receives such high volumes of catch that they choose to carry 3 observers at all times.

Catcher/processors and motherships must also provide NMFS-approved observer sampling stations and scales as described above. AFA-listed catcher/processors and motherships must weigh all groundfish harvested off Alaska, including fish harvested in non-pollock fisheries. The single unlisted AFA catcher/processor, the *Ocean Peace*, is only required to weigh all groundfish when participating in a directed BSAI pollock fishery.

Vessel Monitoring System Requirement for all AFA Vessels Harvesting Pollock in the BSAI

All AFA catcher vessels and catcher/processors that engage in directed fishing for pollock in the BSAI are required to install and operate a NMFS-approved vessel monitoring system (VMS). The mandatory use of VMS in the pollock fishery is necessary to provide more precise information on fishing location for both observed and unobserved pollock fishing vessels. Precise position information is necessary so that cooperatives may manage their fishing inside and outside of the Steller sea lion conservation area (SCA) regardless of whether an observer is on board the vessel. The deployment of VMS aboard observed catcher vessels and catcher/processors provides additional management benefits in that the VMS position becomes the authoritative record of vessel location and resolves conflicts that may occur when locations reported by observers and vessels do not match. In addition, VMS provides a more effective tool for enforcing closed areas under co-op fishing.

Shoreside and Stationary Floating Processor Catch Monitoring and Accounting

Inshore processors are required to submit and operate under an approved catch monitoring and control plan (CMCP). The CMCP addresses those areas related to catch measurement and monitoring: plant layout and operation, observer facilities and equipment, and scale testing. Each CMCP must address the following performance standards:

- NMFS must be able to verify that all catch is sorted, weighed, and reported by species.
- All scales used to weigh groundfish species must be approved by the State of Alaska, meet minimum standards for accuracy, and must produce paper printouts of scale weights that would be retained by the plant for use by observers and for auditing and verification by other NMFS personnel.
- Each plant must develop scale testing and calibration procedures and scales must be tested upon request by NMFS-authorized personnel.
- An observer work station must be provided that contains: A platform scale with at least 50 kg capacity, a work table of at least 2 square meters, at least 4.5 square meters of floor space, is free of safety hazards, has adequate lighting, and has a secure cabinet for the observer's use.
- Each plant must have an observation area where an observer can see the entire flow of fish, or otherwise ensure that no unobserved removals of catch can occur, between the catcher vessel and the location where all sorting has taken place and each species has been weighed.
- Catch monitoring plans must be reviewed by NMFS. Plans that meet the standards are approved. After plan approval, the plant must make any required alterations to the factory and purchase all necessary scales, printers, test weights and other equipment. The plant must then be inspected to ensure that the design meets the performance standards.
- Each scale used to weigh catch must be approved annually by the State of Alaska, Division of Measurement Standards. Additionally, the plant is required to submit a scale testing plan that lists the procedures the plant uses to test each scale used to weigh catch.
- The plant must designate a plant liaison who must be available whenever pollock is offloaded or processed to assist the plant and catcher vessel observers

The plan must:

- Describe the procedure for testing the accuracy of each scale throughout its range of use;
- List the test weights and equipment needed to test each scale;
- Describe where the test weights and equipment will be stored;
- List the plant personnel responsible for conducting the test;

- Be posted in a prominent location in the scale house or observer sampling station.

With no less than 20 minutes notice, NMFS staff, or NMFS-authorized personnel, may demand that any scale used to weigh catch be tested by plant personnel at any time, provided that scale had not been tested and found to be accurate within the last 24 hours. Scales found to be inaccurate may not be used until repaired, recalibrated, or re-approved by the State of Alaska, Division of Measurement Standards. Finally, each plant is required to maintain a printed record of the total weight of each delivery.

Communication of Catch Information

AFA catcher vessels 125 feet or over, catcher processors, motherships, and all shoreside and stationary floating processors are required to install and maintain, for use by the observer, equipment as part of the observer communication system (OCS). This equipment includes a personal computer in working order that contains minimum hardware requirements and must have NMFS supplied software installed. The software is custom designed for observers to enter data, transmit the data to NMFS, provides some error checking and facilitates communication between the observer and an assigned advisor at the OPO. By receiving data in this manner, observer program staff may identify errors and ask the observer to rectify these problems, often within a couple of days, therefore providing an effective means of increasing the quality of the data before the observer's final data editing and debriefing.

Additionally, a shoreside or stationary floating processor that receives pollock deliveries must use the SPELR to report to NMFS every delivery from all catcher vessels or maintain a NMFS approved logbook and submit WPRs.

3.7 Other background

Safety

The Aleutian Islands are a remote area with extremely bad weather, especially during the winter months, when the key "A" season roe fishery is expected to take place. The Adak web page notes that

> The maritime climate on Adak is characterized by persistently overcast skies, high winds, and frequent, often violent, cyclonic storms originating in the northern Pacific Ocean and Bering Sea. Weather can be localized, with fog, low ceilings, precipitation, and clear weather all occurring within a distance of a few miles. Storms can occur during any season, although the most frequent and severe storms occur during the winter.
>
> Wind conditions are typified by local shifts and rapid changes in velocity. Average wind velocity is 15 knots, with gusts in excess of 100 knots during winter storms.

> High winds are also frequent during the summer months, with gusts over 50 knots not uncommon. The prevailing wind direction is from the southwest.

To conform with Steller sea lion restrictions, this fishery must take place at least 20 miles from most of the islands. This increases the distance boats must travel to reach safety if a storm comes up. It may increase the dispersion of pollock fishing vessels, making it more difficult for vessels to help each other. It increases the distance that external help has to travel in the case of a problem.

An AI pollock fishery raises two general safety issues: (a) the safety of the vessels that will be fishing pollock - and especially of the vessels under 60 feet; (b) the development of Adak may make fishing conditions in the Aleutians safer for fishing operations already there. Development of the airport, harbor, communications facilities, and medical facilities at Adak could make the Aleutians safer for all vessels.

The Coast Guard is assessing and evaluating the likely impact of the Aleutian Island Pollock fishery on its current makeup of search and rescue (SAR) resources. Currently the Bering Sea and Aleutian Islands have Coast Guard response assets available in the form of the Air station in Kodiak and a near continuously deployed cutter with helicopter in the Bering Sea. The Coast Guard has also forward deployed a HH-60 helicopter to Saint Paul for the Bering Sea opilio crab fishery from mid January until 10 days after the end of the season, usually 15 February and to Cold Bay for the Bristol Bay red king crab fishery from mid October until 10 days after the end of the season. This action will continue to be taken until such time as the Bering Sea crab rationalization plan takes effect and the extra SAR response unit in Saint Paul and Cold Bay are no longer warranted. The forward deployed helicopters will be able to provide enhanced SAR coverage for the Adak fishery until forward deployment is terminated. The Coast Guard will continue to closely monitor the development of the Adak pollock fishery and its ability to provide adequate SAR response consistent with existing SAR threats and requirements in the Bering Sea and Gulf of Alaska.

Prohibited Species Catch (PSC) Management

Pacific salmon are managed by the State of Alaska on a sustained yield principal. Predetermined escapement goals for each salmon stock are monitored on an in season basis to ensure long term sustainable yields. When escapement levels are low, commercial fishing activities are curtailed; when escapement levels exceed goals, commercial fishing activities are enhanced by longer open seasons. In instances where minimum escapement goals are not met, sport and subsistence fishing activities may also be curtailed.

Pacific herring are managed by the State of Alaska on a sustained yield principal. Pacific herring are surveyed each year and the Guideline Harvest Levels (GHLs) are based on an exploitation rate of 20% of the projected spawning biomass. These GHLs may be adjusted in season based on additional survey information to insure long-term sustainable yields. The ADF&G have established minimum spawning biomass thresholds for herring stocks which must be met before a commercial fishery may occur. As shown in section 3.2.2, the amount of herring harvested overall in the pollock fishery is well below the 1 percent of biomass limit. When the herring limit for pelagic trawl pollock fishery in the midwater pollock fishery category is reached the Herring Savings Areas close to directed fishing for pollock using trawl gear. The midwater pollock fishery category is defined as fishing with trawl gear during any weekly reporting period that results in a catch of pollock that is 95 percent or more of the total amount of groundfish caught during the week.

The International Pacific Halibut Commission (IPHC) is responsible for the conservation of the Pacific halibut resource. The IPHC uses a policy of harvest management based on constant exploitation rates. The constant exploitation rate is applied annually to the estimated exploitable biomass to determine a constant exploitation yield (CEY). The CEY is adjusted for removals that occur outside the commercial directed hook-and-line harvest (incidental catch in the groundfish fisheries, wastage in halibut fisheries, sport harvest, and personal use) to determine the commercial directed hook-and-line quota. Incidental catch of halibut in the groundfish fisheries results in a decline in the standing stock biomass, a lowering of the reproductive potential of the stock, and reduced short and long term yields to the directed hook-and-line fisheries. To compensate the halibut stock for these removals over the short term, halibut mortality in the groundfish fisheries is deducted on a pound for pound basis each year from the directed hook-and-line quota. Halibut incidentally taken in the groundfish fisheries are of smaller average size than those taken in the directed fishery, this results in further impacts on the long term reproductive potential of the halibut stock, this impact on average is estimated to reduce the reproductive potential of the halibut stock by 1.7 pounds for each 1 pound of halibut mortality in the groundfish fisheries.

Alaska king, Tanner, and snow crab stocks in the BSAI are protected by area trawl closures and PSC limitations. Minimum stock size thresholds (MSST) have been established for these crab species stocks to help prevent overfishing.

Background on the Management of Prohibited Species in the BSAI Groundfish Fisheries

Catch limits have been implemented for prohibited species in many groundfish fisheries. These include all species of salmon, steelhead, crabs, Pacific halibut and Pacific herring. Prohibited species cannot be retained, and must be returned to the sea as soon as possible after they are caught. One exception to this is the program to have salmon and halibut retained and donated to food bank programs. Reaching a prohibited species catch (PSC) limit maybe result in closures of a target fishery, area, or season. Because of these closures, prohibited species catch can have significant economic implications for the groundfish fisheries. Regulations at 679.21(e) address PSC limits for the BSAI pollock fishery.

The effects of the groundfish fisheries in the BSAI and GOA on prohibited species are primarily managed by conservation measures developed and recommended by the Council over the entire history of the FMPs for the BSAI and GOA and implemented by federal regulation. These measures can be found at 50 CFR part 679.21 and include prohibited species catch (PSC) limitations on a year round and seasonal basis, year round and seasonal area closures, gear restrictions, and an incentive plan to reduce the incidental catch of prohibited species by individual fishing vessels.

Any amount of red king crab, *C. bairdi*, *C. opilio*, or halibut that is incidentally taken in the midwater pollock fishery will be counted against the PSC limits specified for the pollock/Atka mackerel/"other species" category. When a PSC limit specified for the pollock/Atka mackerel/"other species" fishery category is reached, only directed fishing for pollock is closed to trawl vessels using nonpelagic trawl gear. Since 1999 directed fishing for non-CDQ pollock using nonpelagic trawl gear has been prohibited (see 679.24(b)(4)). Therefore reaching the PSC limits for red king crab, *C. bairdi*, *C. opilio*, and halibut do not result in any closures to the pelagic trawl fishery for pollock in the BSAI.

Any amount of Chinook, non-Chinook and herring that is incidentally taken in the midwater pollock fishery will be counted against the PSC limits specified for the pelagic trawl fishery. If a Chinook, non-Chinook and herring PSC limit is reached then an area of the Bering Sea subarea closes to directed fishing for pollock. The accounting for these PSC limits is describe in the following paragraphs. None of the Chinook, Chum or Herring Savings Areas are located in the Aleutian Islands.

The Chinook Salmon Savings Area is the only savings area that the Aleutians Islands directed pollock fishery counts against its PSC limit. The Chinook Salmon Savings Area closes if the Chinook limit is caught by trawl gear while directed fishing for pollock in the BSAI. This is an annual limit so Chinook salmon accrues against it all year. If the limit is reached before April 15 then the Chinook Salmon Savings Area closes from the closure date to April 15 and from September 1 to December 31. If the limit is reached after April 15 then the Chinook Salmon Savings Area closes from September 1 to December 31. For 2004, the CDQ limit is 2,175 and the non-CDQ limit is 26,825 salmon. The non-CDQ limit was reached in 2003 and the Chinook Salmon Savings Area closed at noon on September 1.

For the Chum Salmon Savings Area only non-Chinook salmon caught by trawl gear in the catcher vessel operation area (CVOA) between noon, August 15 and noon, October 14 counts against the PSC limit. If the non-Chinook limit is reached during this period, NMFS will prohibit fishing in the Chum Salmon Savings Area with trawl gear for the remainder of the period noon, September 1 through noon, October 14. The non-Chinook limit for non-CDQ is 38,850 salmon and the CDQ limit is 3,150 salmon. Also, the Chum Salmon Savings Area is closed to trawling from August 1 through August 31 and this includes any trawl CDQ. See 50 CFR 679.22(a)(10) and 679.21(e)(7)(vii).

Recent History of Incidental Catch of Prohibited Species in the BSAI

Tables 3.7-1 and 3.7-2 summarize information on PSC incidental catch rates in the pollock fishery during the years the directed fishery operated (1993 to 1998). Figure 3.7-1 provides PSC rate information in a visual format, while Figure 3.7-2 provides information on actual PSC harvests through time.

The average halibut incidental catch rate (in kg of halibut per metric ton of pollock harvest) over the six year period, 1993 to 1998, was about 0.021. This means that on average 100 metric tons of pollock harvest was associated with about two kilograms of incidental halibut catch. Some have suggested an “A” season allocation of 15,000 metric tons of pollock for the Aleutian Islands; at this incidental catch rate, this would be associated with 0.315 metric tons of incidental halibut catch.

Table 3.7-1 shows that there was considerable variation in the annual Aleutians incidental halibut catch rate. The low was almost zero in 1996, while the high rate was 0.11 in the next year (1997). The figure also shows that there was considerable variation across NMFS areas and seasons. The highest level was about 0.237 in the Area 541 1998 “A” season. Note, however, that the Area 541 1998 “A” season harvest was quite small, raising questions about the potential reliability of this estimate.

Table 3.7-1 AI pollock fishery PSC rates, 1993-1998.

Species	Year	Rate Base	Annual Rate	541 A	B	542 A	B	543 A	B
Halibut (in kg per mt of pollock)	1993	55,775	0.00024	0.00000		0.00000			
	1994	57,973	0.00224	0.00021	0.01193	0.01788	0.00082		
	1995	64,491	0.00822	0.00000	0.00000	0.00000			
	1996	28,509	0.00000	0.00000	0.00000	0.12285			
	1997	26,016	0.11032	0.09918		0.00000		0.00000	
	1998	21,399	0.01215	0.23666		0.00000	0.00000	0.00000	
Chinook (in animals per mt of pollock)	1993	55,775	0.03402	0.03434	0.00702				
	1994	57,973	0.02150	0.02430	0.00838		0.00000		
	1995	64,491	0.02451	0.05487	0.00000	0.00126	0.00000		
	1996	28,509	0.00528	0.00741	0.10999	0.00081			
	1997	26,016	0.02263	0.06359		0.00413		0.00000	
	1998	21,399	0.00365	0.01054		0.01924	0.04956	0.00103	
Other salmon (in animals per mt of pollock)	1993	55,775	0.00378	0.00000	0.00967				
	1994	57,973	0.01141	0.00972	0.01958		0.00000		
	1995	64,491	0.02339	0.05377	0.00000	0.00014	0.00000		
	1996	28,509	0.00220	0.00000	0.02999	0.00222			
	1997	26,016	0.02201	0.03691		0.01618		0.00000	
	1998	21,399	0.15724	0.11774		0.08185	0.10946	0.16965	
Bairdi (in animals per mt of pollock)	1993	55,775	0.00000	0.00000	0.00000				
	1994	57,973	0.00041	0.00023	0.00127		0.00000		
	1995	64,491	0.00004	0.00009	0.00000	0.00000	0.00000		
	1996	28,509	0.00000	0.00000	0.00000	0.00000			
	1997	26,016	0.00773	0.02463		0.00000			
	1998	21,399	0.00022	0.00000		0.00000	0.00000	0.00026	

Notes: Base rate is the pollock harvest used as the denominator to calculate the annual bycatch rate (measured in metric tons). Annual rate is the annual bycatch rate for the PSC species throughout the Aleutian Islands. Other rates are shown for management area, year, and “A” or “B” season.

Table 3.7-2 AI pollock fishery PSC incidental catch rates summary, 1993 - 1998.

Species	Measure	541		542		543	
		A	B	A	B	A	B
Halibut (in kg per mt of pollcok)	Low	0.0	0.0	0.0	0.0	0.0	
	High	0.23666	0.01193	0.12285	0.00082	0.0	
	Median	0.00010	0.0	0.0	0.0		
	Mean	0.05601	0.00298	0.02815	0.00027		
Chinook (animals per mt of pollock)	Low	0.00741	0.0	0.0	0.0	0.0	
	High	0.06359	0.10999	0.01924	0.04956	0.00103	
	Median	0.02932	0.00770	0.00126	0.0		
	Mean	0.03251	0.03135	0.00509	0.01652		
Other salmon (animals per mt of pollock)	Low	0.0	0.0	0.0	0.0	0.0	
	High	0.11774	0.02999	0.08185	0.10946	0.16965	
	Median	0.2331	0.01462	0.00222	0.0		
	Mean	0.036356	0.01481	0.02008	0.03649		
Bairdi (animals per mt of pollock)	Low	0.0	0.0	0.0	0.0	0.0	
	High	0.2463	0.00127	0.0	0.0	0.00026	
	Median	0.00005	0.0	0.0	0.0		
	Mean	0.00416	0.00032	0.0	0.0		

Notes: Only two years with Area 543 bycatch (1997 and 1998). No bycatch reported form the "B" season. No median or mean calculated.

Figure 3.7-1 Trends in AI pollock fishery PSC catch rates, 1991-2002.

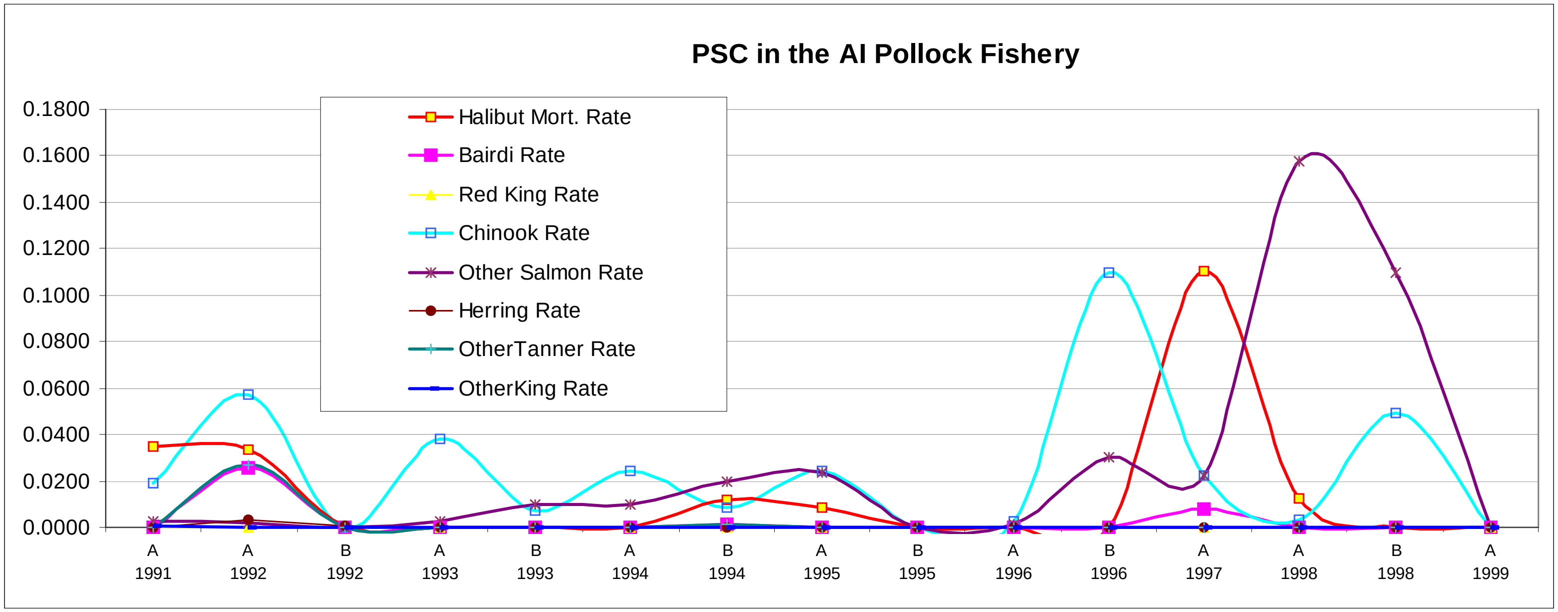
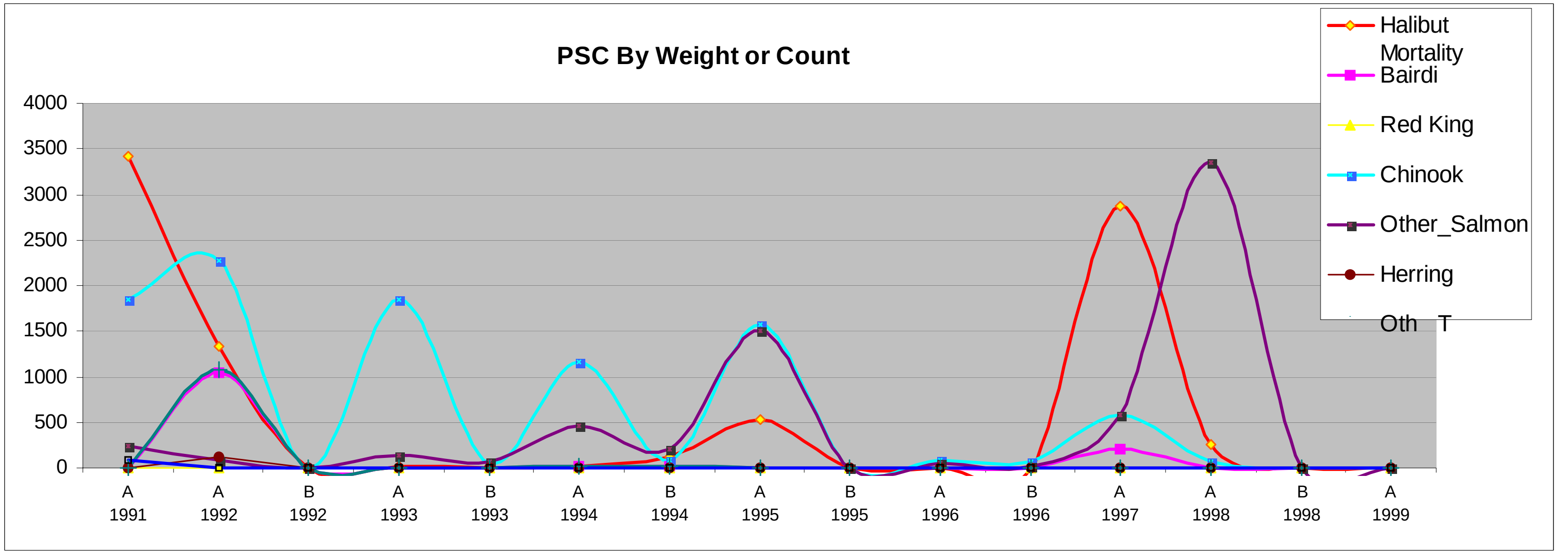


Figure 3.7-2 Trends in AI pollock fishery PSC catch, by weight or number, 1991-2002



The average Chinook salmon incidental catch rate (in animals per metric ton of pollock harvest) over the six year period was about 0.024. This means that pollock fishing operations would have captured about 2 Chinook salmon for each 100 metric tons of pollock harvest. An “A” season harvest of 15,000 metric tons would have been associated with the capture of 360 Chinook salmon. Table 3.7-1 shows that there was considerable variation in the annual Aleutians Chinook salmon incidental catch rate. The low was about .004 in 1998, while the high rate was about 0.025 in 1995. The figure also shows that there was considerable variation across NMFS areas and seasons. The highest level was about 0.11 in the Area 541 1996 “B” season. Note, however, that the Area 541 1998 “A” season harvest was quite small, raising questions about the potential reliability of this estimate.

The average “other salmon species” (which is almost entirely chum salmon) incidental catch rate (in animals per metric ton of pollock harvest) over the six year period was about .017. This means that pollock fishing operations would have captured about 2 other salmon for each 100 metric tons of pollock harvest. An “A” season harvest of 15,000 metric tons would have been associated with the capture of about 255 other salmon.

The average bairdi incidental catch rate (in animals per metric tons of pollock harvest) over the six year period was about .003. This means that pollock fishing operations would have captured about one animal for every 333 metric tons of pollock. An “A” season harvest of 15,000 metric tons would have been associated with the capture of about 45 animals.

Figure 3.7-1 shows the trends in pollock PSC rates over the period from 1991 to 1999. The figure shows relatively low, and in fact downward trending rates for the four key species over the period from 1991 to the 1996 “A” season, but then increased levels of some species in some years in the 1996 “B” season, and in 1997-1999. The halibut rate spiked in the 1997 “A” season. The Chinook rate spiked in the 1996 “A” season, and then again, to a lesser extent, in the 1998 “B” season. The “other salmon” rate spiked in the 1998 “A” season, and was still high in the 1998 “B” season.

State Water and Parallel Fisheries

The State of Alaska Department of Fish and Game (ADF&G) manages golden king crab, red king crab, tanner crab, and sablefish fisheries in the Aleutian Islands. The state also manages groundfish fisheries for which federal TACs are established within state waters in the Aleutian Islands, including Pacific cod, pollock (prior to 1999), Atka mackerel, rockfish, sablefish, and other species. Unless otherwise specified by the Alaska Board of Fisheries (BOF), open and closed seasons for directed fishing within state waters are concurrent with federal seasons. These fisheries have been referred to as parallel groundfish fisheries or parallel seasons in state waters. Harvests of groundfish in these fisheries accrue towards their respective federal TACs.

ADF&G management operates from a “closed until open” perspective. State waters are closed to fishing until state regulations or emergency orders open specific fisheries described by target species, start/end dates, location, and gear type, with guidance from the BOF.

ADF&G Emergency Order 4-GF-01-04 opened commercial parallel groundfish fishing seasons inside state waters on January 1, 2004. Parallel fisheries are subject to all restrictions and management measures described in the federal regulations, and oftentimes are subject to additional restrictive measures imposed by the BOF. In the Aleutian Islands, Steller sea lion management measures have dominated fishery management during the past decade. Most of the Aleutian Islands contain Steller sea lion critical habitat, and have therefore had associated fisheries restrictions of various types according to the nature of sea lion usage (haulouts versus rookeries). Because state waters are those waters from the coast out to 3 nautical miles, most state waters are considered sea lion habitat because sea lions traverse these waters moving to and from their haulouts and rookeries as they forage for food.

About 78% of state waters in the Aleutian Islands are considered to be within Steller sea lion critical habitat and have some form of fishery management restrictions (by season, gear type and target fishery) currently in place (see in-text table below). Currently the BOF is mirroring federal SSL regulations on parallel fisheries inside state waters. 5 AAC 28.650 of the Emergency Order states that "Waters of Bering Sea-Aleutian Islands Area that are described in the federal regulations implementing the Steller sea lion protection measures as closed to fishing or closed to gear types are so closed to all vessels, regardless of whether the vessel has a federal fishing permit." This emergency order and associated management measures are re-issued each year, and therefore the ADF&G and BOF have the ability to change it annually.

	Category	Sq Meters	% Total	Description
1	Total State Waters	17,378,298,381	100.00	Total area (square meters) inside state waters - 0 - 3 nm from shore
2	No Transit	1,662,460,564	9.57	Total area inside No Transit zones around SSL rookeries - 0 - 3 nm
3	No Groundfish	2,813,894,082	16.19	Total area inside No Groundfish (pollock, Atka mackerel, or cod)
4	No Trawl	3,656,071,614	21.04	Total area inside year-round No Cod and Atka Mackerel Trawl zones
5	No Atka M	5,465,395,685	31.45	Additional areas that are closed to Atka mackerel trawling year-round
6	Some restriction	13,597,821,945	78.25	Sum of 2 - 5 as a percentage of 1.

Percentage of state waters in the Aleutian Islands under current Steller Sea Lion management restrictions.

Figure 3.2-1 depicts SSL critical habitat in the Aleutian Islands as a thin blue line buffering most of the coast in the AI out to 20 nm. A visual inspection of this map shows that the only state waters in NMFS areas 541, 542, and 543 that are not inside critical habitat are waters south of Atka Island from Vasilief Bay to Sergief Bay, and waters immediately north of Atka Island. Figure 3.2-1 depicts historical catch of pollock in the AI, and does not show any significant historical catch of pollock in these areas. Upon further communication with ADF&G regional staff and review of observer and fish ticket catch data, this area seems subject to only minimal fishing effort for any species. Some golden king crabs are caught further offshore in this area, outside of state waters (ADF&G 2000).

In addition to federal regulations, the BOF conducts groundfish fisheries according to 5 AAC 028.89 *Guiding Principles for Groundfish Fishery Regulations*, which specify that the BOF will, to the extent practicable, consider the following when adopting regulations concerning groundfish fisheries:

1. conservation of the groundfish resource to ensure sustained yield, which requires that the allowable catch in any fishery be based upon the biological abundance of the stock;

2. minimization of bycatch of other associated fish and shellfish and prevention of the localized depletion of stocks;
3. protection of the habitat and other associated fish and shellfish species from nonsustainable fishing practices;
4. maintenance of slower harvest rates by methods and means and time and area restrictions to ensure the adequate reporting and analysis necessary for management of the fishery;
5. extension of the length of fishing seasons by methods and means and time and area restrictions to provide for the maximum benefit to the state and to regions and local areas of the state;
6. harvest of the resource in a manner that emphasizes the quality and value of the fishery product;
7. use of the best available information presented to the board; and
8. cooperation with the North Pacific Fishery Management Council (NPFMC) and other federal agencies associated with management of groundfish fisheries (ADF&G 2000).

Because of these guiding principles, fishery management restrictions that are additional to federal regulations are often put in place for fisheries inside state waters. For the parallel groundfish fisheries in the Aleutian Islands, the BOF has established vessel size and gear restriction zones around Adak and Sitkin Sound for the Pacific cod and rockfish fisheries. 5 AAC 28.690 and 5 AAC 28.629 specify that vessels fishing for groundfish inside state waters in these areas can only use pot, longline, jig, or hand troll (exact gear restriction depends on target species), and that vessels longer than 60 feet may not fish for groundfish inside a specific area. Additionally, the season is only open from May 1 until September 15.

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4.0 ENVIRONMENTAL EFFECTS

4.1 Significance Analysis and Criteria

An EA must consider whether an environmental impact is significant. Significance is determined by considering the contexts (geographic, temporal, societal) in which the action will occur, and the intensity of the action. The evaluation of intensity should include consideration of the magnitude of the impact, the degree of certainty in the evaluation, the cumulative impact when the action is related to other actions, the degree of controversy, and violations of other laws.

This section describes the criteria by which the impacts of the proposed action are analyzed for each of the following resource categories:

- Pollock stock
- Other target species and fisheries
- Incidental catch of other and non-specified species
- Incidental catch of forage fish species
- Incidental catch of prohibited species
- Steller sea lions
- Other marine mammals
- Seabirds
- Habitat
- Ecosystem
- State managed and parallel fisheries
- Social and economic effects

The above categories are used in the annual specifications EA documents and are relevant potential receptors in the proposed action. Each of these categories also is associated with significance criteria that have previously been developed and used to evaluate alternative quotas in the annual specifications document. Use of these provides consistency with the significance criteria used in these related documents.

Four significance assignments are made in this EA. These are:

Significantly adverse (S-): Significant adverse effect in relation to the reference point and based on ample information and data and the professional judgement of the analysts who addressed the topic.

Insignificant impact (I): Insignificant effect in relation to the reference point; this determination is based on information and data, along with the professional judgement of the analysts, that suggest that the effects will not cause a significant change to the reference point condition.

Significant beneficial (S+): Significant beneficial effect in relation to the reference point and based on ample information and data and the professional judgement of the analysts who addressed the topic.

Unknown (U): Unknown effect in relation to the reference point; this determination is characterized by the absence of information and data sufficient to adequately assess the significance of the impacts, either because the impact is impossible to predict, or because insufficient information is available to determine a reference point for the resource, species, or issue.

The "reference point condition", where used, may be considered the state of the environmental component being analyzed where it is believed to be in healthy condition, in equilibrium with its physical or biological environment, or is in a condition judged to be not threatened adversely at the present time. For example, a "reference point condition" for a fish species would be the state of that species such that it is in healthy condition, able to sustain itself, successfully reproducing, and not threatened with an adverse population-level decline.

This chapter is organized into seven sections. In addition to this section, which describes the significance criteria, there is one section for each of the decisions the Council identified in its February 2004 motion. As described in Chapter 2, these are:

- AI pollock allocation level
- Funding the AI pollock allocation
- Monitoring and enforcement measures
- Delay of small vessel use
- Economic development reporting
- Chinook salmon bycatch management

Each of these sections is divided into two parts. The first describes the alternatives available to the Council and the issues associated with their implementation. The second evaluates the environmental significance of these alternatives should they be incorporated into the FMP.

The following sub-sections of 4.1 describe the significance criteria used in evaluation of the proposed alternatives. Significance criteria are provided for each of the resource categories listed above.

Effects on Pollock Stocks

Alternatives are evaluated with respect to four potential impacts on pollock stocks in the Aleutian Islands:

1. How much effect does the alternative have on fishing mortality?

2. How much effect does the alternative have on spatial or temporal distribution of the species?
3. How much effect does the alternative have on the availability of prey for the target species?
4. How much effect does the alternative have on the target species' habitat?

The ratings utilize a qualitative assessment of the relative impact of each alternative on the mortality to pollock or the degree to which the action might affect the spatial and temporal distribution of pollock. The ratings also employ a qualitative assessment of how the alternative may affect prey items that are important to pollock, and how the alternative may affect pollock habitat The significance criteria used to evaluate the impacts of the alternatives on pollock are provided in Table 4.1-1.

Table 4.1-1 Criteria used to estimate the significance of effects on the pollock stocks in the Aleutian Islands

Direct Effects	Significant Adverse	Unknown	Insignificant Impact	
Fishing mortality	Reasonably expected to jeopardize the capacity of the stock to yield fishable biomass on a continuing basis.	Unknown fishing mortality rate.	Reasonably expected to not jeopardize the capacity of the stock to yield fishable biomass on a continuing basis.	Action allows the stock to return to its unfished biomass.
Spatial or temporal distribution	Reasonably expected to adversely affect the distribution of species harvested either spatially or temporally such that it jeopardizes the ability of the stock to sustain itself.	No information on how the action might affect the distribution of species harvested either spatially or temporally such that it enhances or jeopardizes the ability of the stock to sustain itself.	Unlikely to adversely impact the distribution of species harvested either spatially or temporally such that it has no effect on the ability of the stock to sustain itself.	Reasonably expected to positively affect the species harvested through spatial or temporal increases in abundance such that it enhances the ability of the stock to sustain itself.
Change in prey availability	Evidence that the action may lead to a change prey availability such that it jeopardizes the ability of the stock to sustain itself.	No information that the action may lead to a change in prey availability such that it enhances *or* jeopardizes the ability of the stock to sustain itself.	Evidence that the action will not lead to a change in prey availability such that it jeopardizes the ability of the stock to sustain itself.	Evidence that the action may result in a change in prey availability such that it enhances the ability of the stock to sustain itself.
Habitat: Change in suitability of spawning, nursery, or settlement habitat, etc. due to fishing	Evidence that the action may lead to a decrease in spawning or rearing success such that it jeopardizes the ability of the stock to sustain itself.	No information that the action may lead to a detectable change in spawning or rearing success such that it enhances *or* jeopardizes the ability of the stock to sustain itself.	Evidence that the action may lead to a detectable change in spawning or rearing success such that it has no effect on the ability of the stock to sustain itself.	Evidence that the action may lead to an increase in spawning or rearing success such that it enhances the ability of the stock to sustain itself.

Effects on Other Target Species and Fisheries

The FMP describes the target fisheries as, "those species which are commercially important and for which a sufficient data base exists that allows each to be managed on its own biological merits. Catch of each species must be recorded and reported. This category includes pollock, Pacific cod, yellowfin sole, Greenland turbot, arrowtooth flounder, rock sole, "other flatfish," sablefish, Pacific ocean perch, "other rockfish," Atka mackerel, and squid." (BSAI FMP, page 286). Impacts on pollock fisheries in the Aleutians are discussed under the previous resource category.

Alternatives are evaluated with respect to five potential impacts on other directed fisheries or the species harvested in other directed fisheries:

1. How much effect does the alternative have on fishing mortality?
2. How much effect does the alternative have on spatial or temporal concentration of the species?
3. How much effect does the alternative have on the availability of prey for the target species?
4. How much effect does the alternative have on the target species' habitat?
5. How much effect does the alternative have on gear use by other target fishers or the fishing grounds important to other target fisheries?

The ratings utilize a qualitative assessment of the relative impact of each alternative on the mortality to fish species harvested in non-target fisheries or the degree to which the action might affect the spatial and temporal distribution of species harvested in other directed fisheries. The ratings also employ a qualitative assessment of how the alternative may affect prey items that are important to fish harvested in other target fisheries, and how the alternative may affect the habitat used by non-target fish species. The issue of gear conflicts or fishing grounds preemption is addressed in these ratings also. The significance criteria used to evaluate the proposed action on other directed fisheries or fish stocks are provided in Table 4.1-2.

Table 4.1-2 Criteria used to estimate the significance of effects on other directed fisheries or the fish stocks targeted in other directed groundfish fisheries in the Aleutian Islands

Intensity of the Effects				
Direct Effects	**Significant Adverse**	**Unknown**	**Insignificant Impact**	**Significant Beneficial**
Fishing mortality	Reasonably expected to jeopardize the capacity of the stock to yield fishable biomass on a continuing basis.	Unknown fishing mortality rate.	Reasonably expected to not jeopardize the capacity of the stock to yield fishable biomass on a continuing basis.	Action allows the stock to return to its unfished biomass.
Spatial or temporal distribution	Reasonably expected to adversely affect the distribution of species harvested in other target fisheries either spatially or temporally.	No information on how the action might affect the distribution of species harvested in other target fisheries either spatially or temporally.	Unlikely to adversely impact the distribution of species harvested in other target fisheries either spatially or temporally.	Reasonably expected to positively affect the species harvested in other target fisheries through spatial or temporal increases in abundance.
Change in prey availability	Evidence that the action may lead to a change prey availability such that it jeopardizes the ability of the stock to sustain itself.	No information that the action may lead to a change in prey availability such that it enhances *or* jeopardizes the ability of the stock to sustain itself.	Evidence that the action will not lead to a change in prey availability such that it jeopardizes the ability of the stock to sustain itself.	Evidence that the action may result in a change in prey availability such that it enhances the ability of the stock to sustain itself.
Habitat: Change in suitability of spawning, nursery, or settlement habitat, etc. due to fishing	Evidence that the action may lead to a decrease in spawning or rearing success such that it jeopardizes the ability of the stock to sustain itself.	No information that the action may lead to a detectable change in spawning or rearing success such that it enhances *or* jeopardizes the ability of the stock to sustain itself.	Evidence that the action may lead to a detectable change in spawning or rearing success such that it has no effect on the ability of the stock to sustain itself.	Evidence that the action may lead to an increase in spawning or rearing success such that it enhances the ability of the stock to sustain itself.
Gear conflicts or fishing grounds preemption	Evidence that non-target fisheries will experience gear loss and/or will be displaced from important fishing grounds.	Unable to determine if the action will cause gear loss or grounds preemption.	Evidence that non-target fisheries will not experience gear loss and/or displacement from important fishing grounds.	Evidence that the action will result in reductions in gear loss in non-target fisheries and/or improved access to fishing grounds important to non-target fishers.

Effects on Incidental Catch of Other Species and Non-specified Species

The "other species" category in the BSAI are marine organisms that are important ecologically and also have some economic value. The Council sets an aggregate total TAC for the other species category to limit catch to within levels that are considered sustainable for these species. Some of the other species organisms are harvested incidentally in other fisheries, including sculpins, skates, sharks, and octopus. Information on the distribution, stock structure, and life history characteristics of these species is limited. Available information on sculpins, skates, sharks, and octopus is provided in the SAFE for 2004 (NPFMC 2003).

Table 4.1-3 provides estimates of incidental catches of other and non-specified species in sampled hauls by NMFS from 1991 to 1998. These are not estimates of total harvests of these species in directed pollock fisheries during these years. A very large number of species are included in the totals. Squid and grenadiers were the species that appeared in significant levels most consistently during these years.

Table 4.1-3 Most frequently appearing other and non-specified species in AI pollock incidental catches, 1991-1998 (from observer reports)

	50 metric tons or more in sampled hauls								
	90	**91**	**92**	**93**	**94**	**95**	**96**	**97**	**98**
Grenadier	X		X	X	X	X		X	X
Unidentified invertebrates	X								
Irish lord	X								
Lumpsucker	X	X	X	X	X	X		X	
Ragfish	X	X			X				
Sculpin	X	X							
Skate	X	X							
Sponge	X								
Squid	X	X	X	X	X	X	X	X	X
	100 metric tons or more in sampled hauls								
	90	**91**	**92**	**93**	**94**	**95**	**96**	**97**	**98**
Grenadier	X		X	X	X	X		X	
Irish lord	X								
Lumpsucker				X					
Sculpin	X	X							
Skate	X	X							
Sponge	X								
Squid	X	X	X	X	X	X	X	X	X

Non-specified species are other marine organisms harvested incidentally in other groundfish fisheries but are not of major economic value and are not specifically apportioned TAC in the specifications process. Information on incidental harvest of non-specified species is very limited. Presumably the incidental harvest of these organisms would track closely the harvest levels of certain target species, particularly when the target species is harvested by gear that also catches non-specified species. Non-specified species include such organisms as eelpouts, grenadiers, sea urchins, starfish, sponges, lumpsuckers, etc. Insufficient information is available with which to evaluate specific impacts of groundfish fisheries on these organisms.

The non-specified species category contains a huge diversity of species, including invertebrates, that are not defined in the FMP as target, other, forage, or prohibited species, except for animals protected under the MMPA or the ESA. Jellyfish and grenadiers, a group of deep-sea species related to hakes and cods, appear to have dominated non-specified catches in recent years. (Grenadier biology and management are discussed in Section 3.5.5.1 of the Draft PSEIS (NMFS 2003b)). Other non-specified species caught in recent years include prowfish, smooth lumpsucker, eels, sea cucumbers, Pacific lamprey, greenling, and Pacific hagfish.

There is currently no active management and limited monitoring for the species in this category, and the retention of any non-specified species is permitted. No reporting is required for non-specified species, and there are no catch limitations or stock assessments. Most of these animals are not currently considered commercially important and are not targeted or retained in groundfish fisheries.

The information available for non-specified species is much more limited than that available for target fish species. Estimates of biomass, seasonal distribution of biomass, and natural mortality are unavailable for most non-specified species. Management concerns, data limitations, research in progress, and planned research to address these concerns are discussed in Section 5.1.2.6 of the Draft PSEIS (NMFS 2003b).

Because information is limited, predictions of impacts from different levels of harvest are described qualitatively. Direct effects include the removal of other or non-specified species from the environment as incidental catch in the groundfish fisheries. The reference point against which significance was assessed was the current population trajectory or harvest rate of the non-specified species. For analytical purposes, this is assumed to be a 2003 trajectory or rate. The current trajectory or rate significance criterion had been used in the Steller Sea Lion Protection Measures SEIS (Table 4.0-1 of NMFS 2001b). The criterion for evaluating significance was whether a substantial difference in bycatch amount would occur (increase by 50% = adverse or decrease by 50% = beneficial). Indirect effects include habitat disturbance by fishing gear and disruption of food web interactions by disproportionate removal of one or more trophic levels. No attempt was made to evaluate the significance of indirect effects. See Table 4.1-4 for significance criteria for incidental catch of other or non-specified species.

Table 4.1-4 Criteria used to estimate the significance of effects on incidental catch of other species and non-specified species in the Aleutian Islands

Effect	Significant Adverse	Insignificant	Significant Beneficial	Unknown
Incidental catch of other species and non-specified species	Reasonably expected to increase harvest levels by >50%.	Reasonably expected to not increase or decrease harvest levels by >50%.	Reasonably expected to decrease harvest levels by >50%.	Insufficient information available to predict harvest change.

Effects on Incidental Catch of Forage Fish Species

Forage fish are fish eaten by larger predatory fish, seabirds, or marine mammals, usually swimming in large schools. In this analysis the species referred to as forage fish species are limited to those species included in FMP Amendments 36 in the BSAI and 39 in the GOA. Listings of GOA forage fish species may be found in Section 3.1 of the FMP while listings of BSAI forage fish species may be found in regulations in Table 2 to 50 CFR 679. The forage fish species categories include (but are not limited to) eulachon, capelin, smelts, lanternfishes, Pacific sand lance, Pacific sandfish, gunnels, pricklebacks, krill, and Pacific herring. A great many other species occupy similar trophic levels in the food chain to forage fish as species preyed upon by higher trophic levels at some period during their life history, such as juvenile pollock and Pacific cod.

Management concerns, data limitations, research in progress, and planned research to address these concerns are discussed in Section 5.1.2.5 of the Draft PSEIS (NMFS 2003b) and the Ecosystems Considerations for 2004 (NMFS 2003a, Appendix C). Bottom trawl surveys of groundfish conducted by NMFS are not designed to assess the biomass of forage fish species. Estimates of biomass and seasonal distribution of biomass are poor for forage fish species, therefore the effects of different levels of target species harvest on forage fish species are not quantitatively described.

Direct effects include the removal of forage fish species from the environment as incidental catch in the groundfish fisheries. Indirect effects include competition between groundfish (particularly juveniles) and forage fish for available prey. In the Steller Sea Lion Protection Measures SEIS (NMFS 2001b) the reference point against which forage fish effects are assessed is the current population trajectory or harvest rate of the subject target fish species (Table 4.1-1 in NMFS 2001b). For analysis purposes, this is assumed to be rates in 2003. The criterion for evaluating significance was a substantial change in incidental catch amount (increase >50% = adverse and decrease >50% = beneficial).

Indirect effects include habitat disturbance by fishing gear and disruption of food web interactions by disproportionate removal of one or more trophic levels. Insufficient information is available to estimate the indirect effects of changes in the incidental catch of forage species. Even though the amount of biomass and seasonal distribution is unknown for the individual forage fish groups, the small amount of average incidental catch in the BSAI of 33 mt and in the GOA of 148[23] mt (2000 to 2002) is not likely to affect stocks (abundance) of forage fish species by more than 50%. In both the BSAI and the GOA more than 90% of the incidental catch by weight of all forage fish species are smelt which are taken in pollock fisheries.

Table 4.1-5 summarizes the significance criteria applicable to forage fish.

Table 4.1-5 Criteria used to estimate the significance of effects on incidental catch of forage fish species in the Aleutian Islands

Effect	Significant Adverse	Insignificant	Significant Beneficial	Unknown
Incidental catch of other species and non-specified species	Reasonably expected to increase harvest levels by >50%.	Reasonably expected to not increase or decrease harvest levels.	Reasonably expected to decrease harvest levels by >50%.	Insufficient information available to predict change in harvest levels.

Effects on Incidental Catch of Prohibited Species

Retention of prohibited species is forbidden in the BSAI and GOA groundfish fisheries. These species were typically utilized in domestic fisheries prior to the passage of the Magnuson-Stevens Act in 1976. Retention was prohibited in the foreign, joint venture, and domestic fisheries to eliminate any incentive that groundfish fishermen might otherwise have to target these species. The prohibited species in the include: Pacific salmon (chinook, coho, sockeye, chum, and pink and ESA listed salmon), steelhead trout, Pacific halibut, Pacific herring, and Alaska king, Tanner, and snow crab.

This analysis focuses on the effects of the alternatives on three aspects of prohibited species management measures: 1) effects on the stocks of prohibited species; 2) effects on harvest levels in the directed fisheries for salmon, halibut, herring, and crab managed by the state; and 3) effects on recent levels of incidental catch of prohibited species in the groundfish fisheries.

Potential direct and indirect effects to these species include: the impact of incidental catch of prohibited species in the groundfish fisheries on stocks of prohibited species, the impact of incidental catch of prohibited species in the groundfish fisheries on the harvest levels of those species in their respective directed fisheries, and the effect on levels of incidental catch of prohibited species in the groundfish fisheries. Significance criteria for analyzing these effects are presented in Tables 4.1-6, 4.1-7, and 4.1-8.

Effects on the stocks of prohibited species are considered significantly adverse if they are likely to

[23] The GOA harvest varied considerably around the mean, ranging from zero mt in 2000 to 351 mt in 2001.

jeopardize the capacity of the stock to maintain benchmark population levels. Benchmarks for each prohibited species are defined below. The effects are considered significantly beneficial if harvest levels in the directed fisheries for the prohibited species increase without jeopardizing the stock. Effects on the harvest levels in fisheries targeting prohibited species are considered significant if they increase or decrease harvest levels by 20%. Effects on the incidental catch of prohibited species in directed groundfish fisheries are considered significant if they affect levels of incidental catch by 50% or more.

The benchmark used to determine the significance of effects under each alternative on salmon stocks was whether or not salmon minimum escapement needs would reasonably be expected to be met. If the alternative was reasonably not expected to jeopardize the capacity of the salmon stocks to produce long term sustainable yields it was deemed insignificant; if the alternative was reasonably expected to jeopardize the capacity of the salmon stocks to produce long term sustainable yields it was deemed significantly adverse; and where insufficient information exists to make such conclusions, the alternative's effects were rated unknown.

The benchmark used to determine the significance of effects under each alternative on herring stocks was whether minimum spawning biomass threshold levels could be reasonably expected to be met. If the alternative was reasonably not expected to jeopardize the capacity of the herring stocks to reach minimum spawning biomass threshold levels, it was deemed insignificant; if the alternative was reasonably expected to jeopardize the capacity of the herring stocks to reach minimum spawning biomass threshold levels it was rated significantly adverse; and where insufficient information exists to make such conclusions the alternative's effects were rated unknown.

The benchmark used to determine the significance of effects under each alternative on the halibut stock was whether or not incidental catch of halibut in the groundfish fisheries would reasonably be expected to lower the total Constant Exploitation Yield (CEY) of the halibut stock below the long term estimated yield of 26,980 mt for the U.S. and Canada. If the alternative were reasonably not expected to decrease the total CEY of the halibut stock below the long term estimated yield of 26,980 mt, it was rated insignificant; if the alternative were reasonably expected to lower the total CEY of the halibut stock below the long term estimated yield of 26,980 mt it was rated significantly adverse. Where insufficient information exists to make such conclusions, the alternative's effects were rated unknown.

The benchmark used to determine the significance of effects under each alternative on crab stocks was whether MSST (minimum stock size threshold) levels would reasonably be expected to be maintained. If the alternative was reasonably not expected to jeopardize the capacity of the crab stocks to maintain MSST levels it was rated insignificant, if the alternative was reasonably expected to jeopardize the capacity of the crab stocks to reach or maintain MSST levels it was rated significantly negative, and where insufficient information exists to make such conclusions the alternative's effects were rated unknown.

Table 4.1-6 Criteria used to estimate the significance of effects on stocks of prohibited species in the BSAI and GOA

Effect	Significant Adverse	Insignificant	Significant Beneficial	Unknown
Incidental catch of prohibited species	Reasonably expected to jeopardize the capacity of the stock to maintain benchmark population levels	Reasonably not expected to jeopardize the capacity of the stock to maintain benchmark population levels	Reasonably expected to increase harvest levels in directed fisheries targeting prohibited species without jeopardizing capacity of stock to maintain benchmark population levels.	Insufficient information available

Benchmarks: Salmon - minimum escapement goals, Pacific halibut - estimated long term CEY level, Pacific herring - minimum spawning biomass threshold, crab - minimum stock size threshold.

Table 4.1-7 Criteria used to estimate the significance of effects on of harvest levels in state managed directed fisheries targeting stocks of prohibited species in the BSAI and GOA

Effect	Significant Adverse	Insignificant	Significant Beneficial	Unknown
Harvest levels in directed fisheries targeting catch of prohibited species	Substantial decrease in harvest levels in directed fisheries targeting prohibited species (>20%)	No substantial increase or decrease (<20%) in harvest levels in directed fisheries targeting prohibited species	Substantial increase in harvest levels in directed fisheries targeting prohibited species (>20%)	Insufficient information available

Table 4.1-8 Criteria used to estimate the significance of effects on bycatch levels of prohibited species in directed groundfish fisheries in the BSAI and GOA

Effect	Significantly Adverse	Insignificant	Significant Beneficial	Unknown
Harvest levels of prohibited species in directed fisheries targeting groundfish species	Substantial increase in harvest levels of prohibited species in directed fisheries targeting groundfish species (>50%)	No substantial increase or decrease (<50%) in harvest levels of prohibited species in directed fisheries targeting groundfish species	Substantial decrease in harvest levels of prohibited species in directed fisheries targeting groundfish species (>50%)	Insufficient information available

Effects on Steller Sea Lions

Because the Steller sea lion is endangered and groundfish fisheries in the Aleutian Islands are currently subject to a set of protection measures established to avoid jeopardy and adverse modification of the critical habitat of this species, the Steller sea lion will be addressed separately from other marine mammals (below).

Currently, the Steller sea lion population in Alaska is divided into two distinct population segments (DPS), the eastern and the western. The western DPS of Steller sea lion inhabits Alaska's marine waters from approximately the Prince William Sound region westward to the end of the Aleutian Islands. Thus the "stock" or DPS referenced in this document is the wSSL but will be referred to as SSL. Direct and indirect interactions between Steller sea lions and groundfish harvest may occur due to overlap in the size and species of groundfish harvested in the fisheries that are also important SSL prey, and due to temporal and spatial overlap in SSL foraging and commercial fishing activities.

Impacts of the proposed AI pollock fishery are analyzed by addressing four core questions modified from Lowry (1982):

1. Does the proposed action result in increases in direct interactions with SSLs (incidental take and entanglement in marine debris)?
2. Does the proposed action remove prey species at levels that could compromise foraging success of SSLs (harvest of prey species)?
3. Does the proposed action result in temporal or spatial concentration of fishing effort in areas used for foraging by SSLs (spatial and temporal concentration of removals with some likelihood of localized depletion)?
4. Does the proposed action modify SSL foraging behavior to the extent that population level impacts could occur (disturbance)?

The reference point for determining significant impact to Steller sea lions is predicting whether the proposed action will impact the current population trajectory of the SSL. Criteria for determining significance are provided below (Table 4.1-9).

Table 4.1-9 Criteria for determining significance of effects to Steller sea lions.

Effects	Significance Criteria			
	Significant Adverse	Insignificant	Significant Beneficial	Unknown
Change in current SSL protection measures	Harvest outside global control rule. Seasonal apportionment other than 40/60 A/B seasons. Fishery inside critical habitat closed areas.	Harvest within global control rule. Seasonal apportionment 40/60 A/B seasons. Fishery outside critical habitat closed areas.	Not Applicable	Insufficient information to determine if action results in fishery prosecuted within or outside of current SSL protection measures
Incidental take/ entanglement in marine debris	Take rate increases downward change in population trajectory by >10%	Level of take below that which would have an effect on population trajectories by > 10%	Not Applicable	Insufficient information available on take rates
Spatial/ temporal concentration of fishery	More temporal and spatial concentration in key areas	Spatial concentration of fishery as modified by SSL Protection Measures	Much less temporal and spatial concentration of fishery in all key areas	Insufficient information as to what constitutes a key area
Harvest of important prey species	Harvest level exceeds harvest control rule likely to cause JAM* determination.	Harvest level at or below harvest control rule	Not applicable	Insufficient information to determine level of harvest in relation to available prey biomass
Disturbance	More disturbance (closed areas reopened)	Similar level of disturbance as that which was occurring in 2001	Much less disturbance by groundfish fishery.	Insufficient information as to what constitutes disturbance

*jeopardy of extinction or adverse modification or destruction of critical habitat

Effects on Other Marine Mammals

The other marine mammal group includes northern fur seals, ESA-listed cetaceans (North Pacific right, blue, fin, sei, humpback, sperm, and bowhead whales); other cetaceans (gray, minke, beluga, and killer whales); Pacific white-sided dolphin; harbor and Dall's porpoise; Baird's, Cuvier's, and Stejneger's beaked whale; harbor seals; other pinnipeds (spotted, bearded, ringed, and ribbon seals; Pacific walrus; and northern elephant seal); and sea otters. Several species of marine mammals that reportedly occur in the North Pacific (Springer et al. 1999) are poorly known, and thus are not specifically addressed in this document. These are the Bryde's whale; short-finned pilot whale; false killer whale; and Risso's, bottlenose, striped, common, and northern right whale dolphins. The California sea lion is not likely present in the Aleutian Islands. The polar bear also is not likely present, even when the seasonal ice cover extends to the Aleutian Islands. These latter two species also are not addressed in this document.

Direct and indirect interactions between marine mammals and groundfish harvest activity may occur due to overlap of groundfish fishery activities and marine mammal habitat. Fishing activities may either directly take through injury, death, or disturbance marine mammal species, or indirectly affect these animals by removing prey items important for growth and nutrition or cause sufficient disturbance such that marine mammals may avoid or abandon important habitat. Fishing also may result in loss or discard of fishing nets, line, etc. that may ultimately entangle marine mammals causing injury or death.

Impacts of the proposed action are analyzed by addressing three questions:

1. Does the proposed action result in increases in direct or indirect interactions with marine mammals that may result in incidental take or entanglement in marine debris?
2. Does the proposed action concentrate or otherwise result in fishing activity that may remove marine mammal prey items that could compromise foraging success of marine mammals and affect their nutrition?
3. Does the proposed action create sufficient disturbance to marine mammals such that they may avoid or abandon habitat important to breeding, resting, lactating, pupping, foraging, or other vital activities?

The reference point for determining significant impact to marine mammals is predicting whether the proposed action will impact the current population trajectory of any marine mammal species. Significance ratings for each question are provided below (Table 4.1-10).

Table 4.1-10 Criteria for determining significance of effects to other marine mammals

Effects	Significance Criteria			
	Significant Adverse	**Insignificant**	**Significant Beneficial**	**Unknown**
Incidental take/ entanglement in marine debris	Action may result in concentration of fishing activity that results in more take or entanglement.	Action is unlikely to result in any increase or decrease in take or entanglement.	Action may result in decreases in marine mammal take or reduced levels of entanglement.	Insufficient information is available to determine take or entanglement rates.
Spatial/ temporal concentration of fishery	Action may result in concentration of fishing activity resulting in a rate or magnitude of marine mammal prey removal that could affect nutrition, lactation, or other physiological impacts that could reduce marine mammal growth, reproduction, and population viability.	Action will not likely increase concentration of fishing activity that may result in prey removals that could compromise marine mammal growth, reproduction, and population viability.	Action may result in decreased fishing activity which in turn could reduce removals of marine mammal prey items such that their growth and reproduction is enhanced which in turn may enhance population viability.	Insufficient information is available to judge impacts of the action on marine mammal prey items.
Disturbance	Action may result in increased disturbance such that marine mammals may avoid or abandon habitat important to breeding, resting, lactating, pupping, foraging, or other vital activities.	Action will not likely result in disturbance to marine mammals such that they may avoid or abandon habitat important to breeding, resting, lactating, pupping, foraging, or other vital activities.	Action may result in decreased levels of disturbance to marine mammals such that access to habitats important for breeding, resting, lactating, pupping, foraging, or other vital activities is increased.	Insufficient information is available to judge effect of the proposed action on marine mammal breeding, resting, lactating, pupping, foraging, or other vital activities.

Effects on Seabirds

Given the sparse information, it is not likely that groundfish fishery effects on most individual bird species are discernable. For reasons explained in the Steller Sea Lion Protection Measures SEIS (NMFS 2001b), the following species or species groups are considered: northern fulmar, short-tailed albatross, spectacled and Steller's eiders, albatrosses and shearwaters, piscivorous seabird species, and all other seabird species not already listed. The fishery effects that may impact seabirds are direct effects of incidental take (in gear and vessel strikes), and indirect effects on prey (forage fish) abundance and availability, benthic habitat, processing waste and offal. ESA listed seabirds are under the jurisdiction of the USFWS, which has completed an FMP level (USFWS 2003a) and project level BiOp (USFWS 2003b) for the groundfish fisheries and the setting of annual harvest specifications. Both BiOps concluded that the groundfish fisheries and the annual setting of harvest specifications were unlikely to cause the jeopardy of extinction or adverse modification or destruction of critical habitat for ESA listed birds.

The effects of incidental take of seabirds (from fishing gear and vessel strikes) are described in Section 3.7.1 of the Draft Programmatic SEIS (NMFS 2003b). Birds are taken incidentally in longline (hook and line), trawl, and pot gear. Estimation of seabird incidental take from longline and pot vessels is very straightforward. On trawlers, however, the estimation procedure is confounded by sample size issues (Appendix C of the PSEIS). This unfortunately creates the need to provide two estimates of total seabird takes for trawl fisheries, depending on the sample size for hauls where seabirds were not recorded. Further, while observers are able to see all gear-related mortalities from longline and pot vessels, on trawl vessels there is anecdotal evidence that seabird mortalities occur from collisions with the trawl sonar cable and main net cables. The degree of that mortality is currently unknown, as observers are fully tasked with sampling the catch. The trawl fleet contributes from 10.6% to 44.9% of the overall mortality, depending on which estimation methodology is used, with the actual amount likely being somewhere between these two bounds.

As noted in Section 3.7.1 of the Draft PSEIS (NMFS 2003b), several factors are likely to affect the risk of seabird incidental catch. It is reasonable to assume that risk goes up or down, partly as a consequence of fishing effort (measured as total haul time in the trawl fleet) each year (NMFS 2003b). In the longline fleet, new regulations became effective in February 2004 (69 FR 1930; 1-13-04). However, a sizeable portion of the longline fleet began, in January 2002, to use the seabird avoidance measures recommended by Washington Sea Grant (Melvin, et al., 2001) and approved by the North Pacific Fishery Management Council at their December 2001 meeting. While the incidental take of seabirds has exhibited some large inter-annual variations, it is worth noting that the overall take of seabirds was reduced by about 60% from 2001 to 2002, largely due to bycatch reduction measures used by longline fisheries (outlined on pages 3.7-7 through 3.7-10 of the draft programmatic SEIS (NMFS 2003b)) . Continued collection of seabird incidental take data by groundfish observers will provide the data necessary to evaluate whether the rates continue to decrease.

In the trawl fleet, improved instructions to observers will help refine the estimates, which will in turn allow a better assessment of whether the numbers taken pose a conservation concern. At the same time, the trawl industry, USFWS, the NMFS, Washington Sea Grant, and the University of Washington are collaborating on a project to reduce or eliminate mortality associated with sonar transducer and net cables.

A description of the effects of prey abundance and availability on seabirds is in Section 3.7.1 of the Draft PSEIS (NMFS 2003b). Detailed conclusions or predictions cannot be made regarding the effects of forage fish bycatch on seabird populations or colonies. However, the present understanding is that fisheries management measures affecting abundance and availability of forage fish or other prey species could affect seabird populations (NMFS 2003b; NMFS 2001b), although commercial fisheries do not compete directly with seabirds. There is no directed commercial fishery for those species which compose the forage fish management group and seabirds typically target juvenile stages rather than adults for those target species where there is an overlap between seabirds and commercial fisheries.

The fishery effects on benthic habitat are described in Section 3.6.4 of the Draft PSEIS (NMFS 2003b). The indirect fishery effects on benthic habitat as utilized by seabirds are described in the seabird summaries provided in each alternative (Sections 4.5.7, 4.6.7, etc. in the PSEIS) (NMFS 2003b). The seabird species most likely to be impacted by any indirect gear effects on the benthos would be diving sea ducks such as eiders and scoters as well as cormorants and guillemots (NMFS 2001b). Additional impacts from bottom trawling may occur if sand lance habitat is adversely impacted. This would affect a wider array of piscivorous seabirds that utilize sand lance, particularly during the breeding season, when this forage fish is also used for feeding chicks. Bottom trawl gear has the greatest potential to indirectly affect seabirds via their habitat. The harvest of pollock in the AI will be restricted to pelagic trawl gear which will likely have less effect on benthic prey items that would bottom trawl gear.

The volume of offal and processing wastes probably changes approximately in proportion to the total catch in the fishery. Whereas some bird populations may benefit from the food supply provided by offal and processing waste, the material also acts as an attractant that may lead to increased incidental take of some seabird species (NMFS 2001b). For example, there seems to be little interaction between trawl sonar cables and seabirds in the shoreside delivery fleet, which has minimal discards and offal, while the interactions are higher near catcher/processor vessels (McElderry, et al., in prep). These conclusions are drawn on very limited samples and should be used with caution. It is also worth noting the apparent reduction in seabird incidental take for the longline fleet described earlier. Should the use of seabird avoidance gear prove effective over time, the negative aspects of seabird attraction to vessels will be reduced. TAC levels could reduce the amount of processing waste and offal that is available to scavenging seabirds, particularly in some areas near major breeding colonies. This impact would need to be considered in the balance of the beneficial and detrimental impacts of any disposal actions.

Table 4.1-11 outlines the qualitative significance criteria or thresholds that are used for determining if an effect has the potential to create a significant impact on seabirds.

Table 4.1-11 Criteria used to determine significance of effects on seabirds.

Effects	Rating		
	Significant	Insignificant	Unknown
Incidental take	Take number and/or rate increases or decreases substantially	Take number and/or rate is the same.	Take number and/or rate is not known.
Prey (forage fish) availability	Prey availability is substantially reduced or increased	Prey availability is the same.	Changes to prey availability are not known.
Benthic habitat	Impact to benthic habitat is substantially increased or decreased	Impact to benthic habitat is the same.	Impact to benthic habitat is not known.
Processing waste and offal	Availability of processing wastes is substantially decreased or increased	Availability of processing wastes is the same.	Changes in availability of processing wastes is not known.

Effects on Habitat

The Draft PSEIS uses the following criteria to determine significance for habitat:

1. Level of mortality and damage to living habitat;
2. Benthic community diversity;
3. Geographic diversity of impacts.

The reference point, or baseline, against which the criteria are applied is the current size and quality of marine benthic habitat and other essential fish habitat. Criteria used to evaluate effects of the proposed action on habitat are provided in Table 4.1-12.

Table 4.1-12 Criteria used to determine significance of effects on habitat

Effect	Significant	Insignificant	Beneficial	Unknown
Mortality and damage to living habitat species	Substantial increase in mortality and damage; long-term irreversible impacts to long-lived, slow growing species	Likely to not increase mortality or damage to long-lived, slow growing species	Decrease in mortality or damage to long-lived, slow growing species	Insufficient information available
Benthic community structure	Substantial decrease in community structure from baseline	Likely to not decrease community structure	Increase in community structure from baseline	Insufficient information available on baseline habitat
Distribution of fishing effort	Substantial increase in fishing activity in habitats lightly or not fished	Likely to be similar to baseline conditions of lightly- or not-fished state	Decrease in fishing activity in areas that have been lightly or not fished	Not applicable

Effects on the Ecosystem

The proposed action could affect the marine ecosystem through removals of pollock biomass or other actions that could affect either removals, discards, or discharge of processing materials such that this marine system is altered. Three primary means of measurement of ecosystem change are evaluated here: predator-prey relationships, energy flow and balance, and ecosystem diversity. The criteria used to evaluate the significance of the effects on the ecosystem from the proposed action are provided in Table 4.1-13.

Table 4.1-13 Significance thresholds for fishery induced effects on ecosystem attributes.

Issue	Effect	Significance Threshold	Indicators
Predator-prey relationships	Pelagic forage availability	Fishery induced changes outside the natural level of abundance or variability for a prey species relative to predator demands	Population trends in pelagic forage biomass (quantitative - pollock, Atka mackerel, catch/bycatch trends of forage species, squid and herring)
	Spatial and temporal concentration of fishery impact on forage	Fishery concentration levels high enough to impair the long term viability of ecologically important, nonresource species such as marine mammals and birds	Degree of spatial/temporal concentration of fishery on pollock, Atka mackerel, herring, squid and forage species (qualitative)
	Removal of top predators	Catch levels high enough to cause the biomass of one or more top level predator species to fall below minimum biologically acceptable limits	Trophic level of the catch Sensitive top predator bycatch levels (quantitative: sharks, birds; qualitative: pinnipeds) Population status of top predator species (whales, pinnipeds, seabirds) relative to minimum biologically acceptable limits
	Introduction of nonnative species	Fishery vessel ballast water and hull fouling organism exchange levels high enough to cause viable introduction of one or more nonnative species, invasive species	Total catch levels
Energy flow and balance	Energy re-direction	Long-term changes in system biomass, respiration, production or energy cycling that are outside the range of natural variability due to fishery discarding and offal production practices	Trends in discard and offal production levels (quantitative for discards) Scavenger population trends relative to discard and offal production levels (qualitative) Bottom gear effort (qualitative measure of unobserved gear mortality particularly on bottom organisms)
	Energy removal	Long-term changes in system-level biomass, respiration, production or energy cycling that are outside the range of natural variability due to fishery removals of energy	Trends in total retained catch levels (quantitative)

Issue	Effect	Significance Threshold	Indicators
Ecosystem Diversity	Species diversity	Catch removals high enough to cause the biomass of one or more species (target, nontarget) to fall below or to be kept from recovering from levels below minimum biologically acceptable limits	Population levels of target, nontarget species relative to MSST or ESA listing thresholds, linked to fishing removals (qualitative) Bycatch amounts of sensitive (low potential population turnover rates) species that lack population estimates (quantitative: sharks, birds, HAPC biota) Number of ESA listed marine species Area closures
	Functional (trophic, structural habitat) diversity	Catch removals high enough to cause a change in functional diversity outside the range of natural variability observed for the system	Guild diversity or size diversity changes linked to fishing removals (qualitative) Bottom gear effort (measure of benthic guild disturbance) HAPC biota bycatch
	Genetic diversity	Catch removals high enough to cause a loss or change in one or more genetic components of a stock that would cause the stock biomass to fall below minimum biologically acceptable limits	Degree of fishing on spawning aggregations or larger fish (qualitative) Older age group abundances of target groundfish stocks

Effects on State of Alaska -Managed State Waters and Parallel Fisheries for Groundfish Species

The State of Alaska manages state water seasons for several species of groundfish in internal waters: sablefish in Statistical Areas 649 (Prince William Sound) and 659 (Southeast Inside District), pollock in Area 649 (Prince William Sound), and Pacific cod in Areas 610 (South Peninsula District), 620, 630 (Chignik, Kodiak, and Cook Inlet Districts), and 649 (Prince William Sound). The state also manages groundfish fisheries for which federal TACs are established within state waters. Unless otherwise specified by the state, open and closed seasons for directed fishing within state waters are concurrent with federal seasons. These fisheries have been referred to as parallel fisheries or parallel seasons in state waters. Harvests of groundfish in these fisheries accrue towards their respective federal TACs.

This analysis focuses on the effects of Alternatives 1 through 5 on harvest levels in these state managed fisheries. The criteria used in estimating the effects are outlined below in Table 4.1-14. If an alternative was deemed by NMFS as likely to result in a decrease in harvest levels in these fisheries of more than 50%, it was rated significantly adverse. If the alternative was deemed to likely result in an increase in harvest levels of more than 50%, it was rated significantly beneficial.

If the alternative was deemed likely to neither decrease nor increase harvest levels by more 50%, it was rated insignificant. Where insufficient information was available to make such determinations, the effect was rated as unknown. The level of a 50% change in harvest levels is more a qualitative than quantitative assessment. The authors felt that a change of 50% or more in either direction was clearly a significant change and that a change of less than 50% in either direction was clearly insignificant as stocks of groundfish frequently change over the short term within this range. The authors acknowledge that individual fishing operations with greater reliance upon participation in these state fisheries may experience adverse or beneficial effects at changes in harvest levels below the 50% level. The year 2003 was used as a benchmark for comparison.

The significance criteria used for the analysis in this section to determine changes to harvest levels in state-managed and parallel fisheries can be reviewed in Table 4.1-14. An action is considered to have significant effects if it is likely to change harvest levels in these fisheries by at least 50%.

Table 4.1-14 Criteria used to estimate the significance of effects on harvest levels in state managed groundfish fisheries in the BSAI and GOA.

Effect	Significant Adverse	Insignificant	Significant Beneficial	Unknown
Harvest levels of groundfish in state waters seasons and parallel seasons	Substantial decrease in harvest levels (>50%)	No substantial decrease or increase in harvest levels (<>50%)	Substantial increase in harvest levels (>50%)	Insufficient information available

Social and Economic Effects

The significance criteria used to evaluate effects of the proposed action include a quantitative and qualitative assessment of gross revenues, operating costs, net returns, safety and health, related fisheries, consumer effects, management and enforcement, excess capacity, bycatch and discards, subsistence use, impacts on benefits from marine ecosystems, and community impacts. These significance criteria are provided in Table 4.1-15.

Table 4.1-15 Economic and socio-economic significance criteria

Issue	Indicators	Significance threshold
Gross revenues	Changes in estimated gross revenues to relevant fishing and fish processing operations.	With exceptions noted below, The term “significant” for an expected change in a quantitative indicator means a 20 percent or greater change (either plus or minus) relative to the comparative baseline. If the expected change is less than 20 percent, the change is not considered to be significant. Roughly, the same threshold is used to assess changes in qualitative indicators (e.g. fishing vessel safety). However, whereas changes in quantitative indicators are based on model projections, predicted changes in qualitative indicators are based on the judgement of the economic analysts. (PSEIS, 4.1-10)
Operating costs	Cost information is generally unavailable for North Pacific fishing and/or processing operations. Only a qualitative discussion of operating costs will generally be possible.	
Net returns	Measured net returns (gross revenues net of variable and/or fixed costs as appropriate). Operating cost information is generally unavailable for North Pacific fisheries or fish processors. Only a qualitative analysis of net returns will generally be possible, based on inferences from knowledge of changes to gross revenues and of the characteristics of fishery management regime.	
Safety and health	Changes in risk of death, injury, or morbidity for the relevant population. In general, models making it possible to project changes in the risk of death, injury, or morbidity associated with changes in fishery management regulations are not available. It may only be possible to make informed conjectures about the direction of likely impacts. Only qualitative analyses will be possible.	
Related fisheries	Changes in fishing activity in one groundfish fishery can have impacts on other groundfish fisheries, (and on non-groundfish fisheries, such as those for crab, salmon, herring, and halibut). Behavioral models that would make quantitative projections of impacts possible are not, in general, available. A qualitative analysis will often be necessary.	
Consumer effects	Alternatives that change the quantity or quality of fish harvested, or that change the cost of harvesting fish, may affect product form, availability, and the prices faced by consumers and, thus, the size of the consumers’ surplus they receive from the fisheries. In the absence of information on consumers’ demand curves and demand elasticities, this analysis must necessarily be qualitative.	
Management and enforcement	The Council, NMFS, NOAA Enforcement, and the U.S. Coast Guard incur costs for the management of North Pacific fisheries, and for the enforcement of fisheries regulations. The U.S. Coast Guard also incurs costs to provide emergency services to the fishing industry. (Private sector costs associated with safety are considered under the “safety” impact category.) The private sector may also incur costs associated with observer, catch accounting and reporting, or VMS requirements. Analysis of this impact will be quantitative and qualitative.	
Excess capacity	Actions may impact fishery overcapacity. Impacts in the directed regulated fishery should be considered, as well as impacts in related fisheries (for example, will restrictions or rationalization in one fishery lead to increased capacity in a second fishery). In the absence of behavioral models, this discussion will generally be qualitative.	

Issue	Indicators	Significance threshold
Bycatch and discards	The impacts of the alternatives on the bycatch and discard of the target species, of other groundfish and non-groundfish species that support fishing activities by other sectors, and of PSC, may have economic impacts.	The significance criteria for PSC species, and for bycatch and discards of other species, which are targeted by other fishing sectors, are adopted here.
Subsistence use	The mechanisms relating changes in the harvest of groundfish prey to changes in populations of animals used for subsistence purposes, and the mechanisms relating changes in populations of animals to changes in subsistence use, are poorly understood. In addition, as noted earlier in this section, prohibited species bycatch is limited by bycatch caps and area closures. This issue will require a qualitative analysis.	The 20% utilization criterion above is adopted here.
Impacts on benefits from marine ecosystems	Groundfish fishing rules may directly impact marine ecosystem benefits through effects on groundfish populations, or indirectly through impacts on predators, prey, or habitat. Other than those benefits related to commercial or subsistence groundfish fisheries (addressed above, these may include non-market (existence value and option value, etc.), and other uses of the ecosystem such as recreational fishing or tourism.	Any action that places a species listed as endangered under the ESA in jeopardy or creates adverse modification to the species' habitat. will be significant, by definition. The 20% utilization criteria will be used for actions affecting recreational fishing or tourism.
Community impacts	Income, employment, and other impacts to onshore communities associated with actions. Simple quantitative models may be employed in some cases, although qualitative analysis will often be necessary.	The 20% utilization criterion above is adopted here

4.2 Allocation size

4.2.1 Introduction

The CAA and Senator Stevens' floor language (See Appendices A1 and A2) contained provisions providing the Council with guidelines for the level at which to set the AI directed pollock fishery (DPF). During the course of debate at the Council meeting, industry representatives called for provisions to fix the level of the AI DPF so as to reduce the potential for disagreements and controversy during the annual TAC settting process. Thus, while the Council has the option of leaving the determination of the annual AI pollock DPF to the annual specifications process, it is also appropriate to evaluate alternatives that would incorporate guidelines or requirements into the BSAI FMP and/or regulation.

The Alternatives

Section 4.2 evaluates the following six alternatives:[24]

[24]These alternatives retain the language in which they were introduced before the Council meeting. During the course of the June Council meeting it became apparent that the term directed pollock fishery (DPF) was more appropriate than the directed fishery allowance (DFA) since it comported with language used in the American Fishery Act dealing with pollock allocations to CDQ groups. The DFA language has been retained in the alternatives, but the DPA language has been introduced elsewhere in the document.

1.1 No action: Determine the appropriate Aleutian Islands pollock TAC each year during the annual specifications process.

1.2 For guidance in determining the allocation amount to the AI pollock fishery, the Council shall consider pollock allocations given to the various groups that participate in the CDQ program, in order to recommend a "reasonable amount" of AI pollock to award to the Aleut Corporation, and in no case should this amount exceed 40,000 mt.

1.3 The Council shall allocate a combined AI incidental catch allowance (ICA) and directed fishing allowance (DFA) equal to the lesser of the TAC generated from the ABC for that year or 40,000 mt. The DFA shall be subject to the 40% "A" season and 60% "B" season apportionment required by the Steller sea lion protection measures.

1.4 Beginning in 2005, and until changed, the AI pollock "A" season DFA shall be the lesser of 15,000 mt or 40% of the AI pollock annual TAC, after subtraction of the ICA. No part of the annual DFA shall be allocated to the "B" season.

1.3^C The Council shall allocate a combined Aleutian Islands ICA and DFA equal to the lesser of the ABC or 40,000 mt. This allocation shall be subject to the 40% A season, 60% B season allocation required by the SSL protection measures.

1.4^C Beginning in 2005, and until changed, the annual Aleutian Islands pollock TAC shall be the lesser of 15,000 mt or 40% of the AI pollock ABC. One hundred percent of the Directed Fishing Allowance (DFA) shall be available for harvest in the pollock "A" season."

A detailed discussion of Alternatives 1.1, 1.2, 1.3, and 1.4 may be found in sub-sections 4.2.1 and 4.2.2. A detailed discussion of Alternatives 1.3^C and 1.4^C may be found in sub-section 4.2.3. Section 4.2.3 provides a detailed comparison of Alternatives 1.3 and 1.4 and 1.3^C and 1.4^C. In February 2004 the Council requested an analysis of Alternatives 1.1 and 1.2. In April 2004 the Council requested analysis of two additional alternatives. The intent of the motion was to provide additional alternatives that would establish the specific size of the allocation to this fishery so that industry would know the approximate magnitude of the TAC prior to industry negotiations. In the review of this motion, the Council's intent was interpreted by the analysts preparing this EA/RIR and phrased as Alternatives 1.3 and 1.4 which are analyzed in the preceding section. Upon a careful comparison of the language of 1.3 and 1.4, and the language in the in the Council motion, differences were evident. Thus, an analysis of the wording in the Council motion is provided in Section 4.2.3. The Council's original April language has been identified as Alternatives 1.3^C and 1.4^C ("C" designating "Council").

Statutory Text and Floor Language

Section 803 of the 2004 CAA does not provide guidance about the size of the directed fishing allocation the Council is to recommend for the Aleut Corporation. This recommendation and decision is left up to the Council and NMFS, respectively. The statute indicates that the allocation is to be made for "the purposes of economic development in Adak, Alaska, pursuant to the requirements of the Magnuson-Stevens Fishery Conservation and Management Act..."[25] This indicates that the allocation should meet the objectives of that act, especially with respect to the conservation of the resource, and should be proportionate to the economic development needs of Adak.

The record with respect to Congressional intent is limited. Senator Stevens (R-AK) did make several comments in floor remarks that reveal his intentions. These included a statement that,

> "The North Pacific Council should consider pollock allocations given to the various groups that participate in the Community Development Quota program to recommend a reasonable amount of the Aleutian Islands pollock to the Aleut Corporation for purposes of economic development in Adak and in no case should this amount exceed 40,000 metric tons. Nothing in this section requires the North Pacific Council to open the Aleutian Islands pollock fishery. The Council should not take any action in regards to this fishery which would require a new consultation under the current biological opinion or Endangered Species Act covering Steller sea lions."[26]

Senator Stevens' language suggests that: (a) a possible directed fishing allocation could be zero, (b) no allocation should be greater than 40,000 mt, (c) reasonable allocations should be similar to those given to western Alaska CDQ groups, and (d) implementation of the AI pollock fishery should not trigger formal consultation on the Steller sea lion protection measures. Senator Stevens did not provide a biological rationale for the 40,000 mt limit.

The legislative record is helpful in interpreting the intent of Congress in cases where the statutory language is ambiguous. It does not have the prescriptive force of statutory language, however. The more complete the legislative record, including committee reports, and records of debates in committee and on the floor, the more useful the record is.

The Annual Specifications Process

Section 803 of the CAA speaks about the allocation of a directed fishery for pollock to the Aleut Corporation. This allocation of the directed fishery appears to preclude the allocation of Aleutian Islands pollock to CDQ groups, or to the AFA cooperatives under the provisions of the MSA and the AFA. While Section 803 refers to vessels listed in the AFA statute as making up one of the two

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[25] Section 803 may be found in Appendix A.1.

[26] Senator Stevens' floor remarks may be found in Appendix A.2.

classes of vessels with which the Aleut Corporation may contract, this does not imply that any allocation would be made to these vessels in their capacity as AFA vessels.

It is important to emphasize the difference between TAC, ICA, and DPF. Since 1999, the Council has established a TAC for pollock in the Aleutian Islands, but this TAC was only large enough for an ICA for vessels targeting other species but taking pollock incidentally in these activities. The TAC has not been large enough, however, to provide for a DPF for a directed fishery. From 1999 to 2002 this was because of SSL protection restrictions on pollock harvest in the AI. In 2003 and 2004, the Council could have, but declined to, set a TAC large enough to provide for a directed fishery. In the future, the Council may or may not adopt TACs large enough to provide for a DPF, although the Congressional action states that "...the North Pacific Fishery Management Council shall recommend and the Secretary shall approve an allocation under subsection (a) to the Aleut Corporation..."(Section 803(d)). Each year, once the Council has made a TAC recommendation, NMFS inseason managers would identify the pollock bycatch needs of other fisheries, and would set an ICA for AI pollock. If the difference between the TAC and ICA was large enough to establish a DPF for a directed commercial fishery, the vessels with which the Aleut Corporation contracts would be able to fish for the DPF.

The DPF would be subject to the "A" and "B" season 40-60 split associated with the Steller sea lion protection measures. Thus only 40% of the annual DPF would be available between the opening of the fishery on January 20, and the end of the "A" season on June 10. In practice, the fishery could be quite a bit shorter than that, probably ending in March or April. The remaining 60% of the DPF could be fished in the "B" season, which commences June 10 and extends to November 1. The 40%/60% "A/B" season TAC split would apply to Alternatives 1.1, 1.2, and 1.3. Alternative 1.4, however, added by the Council in their April 2004 meeting, specifies that only an"A"season fishery could occur because it specifies that any TAC set for the Aleut Corporation fishery shall be provided in the"A"season.

Considering CDQ Allocations

Table 4.2.1-1 summarizes information on pollock allocations to CDQ groups from 2001 to 2004. The table includes information on total CDQ community population, the number of CDQ communities, the number of CDQ groups, and information on per capita allocations, average community allocations, and average group allocations. Pollock allocations did not vary much over this period. The typical total allocation to the CDQ groups combined was between 140,000 and 150,000 metric tons. The per capita allocations were between 5.2 and 5.5 metric tons, the community allocations were between 2,100 and 2,300 metric tons, and the average group allocations were between 23,000 and 25,000 metric tons.

Table 4.2.1-2 provides more highly disaggregated information on pollock allocations to CDQ groups from 2001 to 2004. The averages over all CDQ groups, reported in Table 4.2.1-1, hide important differences between the CDQ groups. In any one year, per capita allocations between CDQ groups differ by a factor of three or four. For example, in 2004, the Norton Sound Economic Development Corporation (NSEDC) received an allocation of 3.9 mt per capita, while the Aleutian Pribilof Islands Community Development Association (APICDA) communities received allocations of 18.3 mt per capita. Similarly, community allocations vary by a large amount in any given year. In 2004, the Coastal Villages Region Fund (CVRF) received an allocation that averaged 1,790 mt per community, while the Central Bering Sea Fisherman's Association (CBSFA) received an allocation that averaged 7,460 mt per community. These per capita and per community differences reflect differences in CDQ group development strategies and application packages, and differences created by state allocation decisions.

Table 4.2.1-1 CDQ Pollock Allocations, 2001-2004

	2004		2003		2002		2001	
	metric tons	percentage of CDQ	metric tons	percentage of CDQ	metric tons	percentage of CDQ	metric tons	percentage of CDQ
APICDA	20,888	14%	20,885	14%	20,790	14%	16,600	14%
BBEDC	31,332	21%	31,327	21%	31,185	21%	29,400	21%
CBSFA	7,460	5%	7,459	5%	5,936	4%	5,600	4%
CVRF	35,808	24%	35,802	24%	35,640	24%	33,600	24%
NSEDC	32,824	22%	32,819	22%	34,155	23%	32,200	23%
YDFDA	20,888	14%	20,885	14%	20,790	14%	19,600	14%
Total CDQ reserve	149,200	100%	149,176	100%	148,495	100%	140,000	100%
Pollock TAC	1,492,000		1,491,760		1,485,000		1,400,000	
Population, all villages	27,073		27,073		27,073		27,073	
Allocation per capita	5.5		5.5		5.5		5.2	
CDQ communities	65		65		65		65	
Allocation per community	2,295		2,295		2,285		2,154	
CDQ groups	6		6		6		6	
Allocation per group	24,867		24,863		24,749		23,333	

Table 4.2.1-2 CDQ Pollock Allocations, 2001-2004, Per Capita and Per Community

Group	Year	Population	Communities	Allocation (metric tons)	Allocation (per capita)	Allocation (per community)
APICDA	2004	1,143	6	20,888	18.3	3,481
	2003			20,885	18.3	3,481
	2002			20.790	18.2	3,465
	2001			19,600	17.1	3,267
BBEDC	2004	5,932	17	31,332	5.3	1,843
	2003			31,327	5.3	1,843
	2002			31,185	5.3	1,834
	2001			29,400	5.0	1,729
CBSFA	2004	532	1	7,460	14.0	7,460
	2003			7,459	14.0	7,459
	2002			5,936	11.2	5,936
	2001			5,600	10.5	5,600
CVRF	2004	7,855	20	35,808	4.6	1,790
	2003			35,802	4.6	1,790
	2002			35,640	4.5	1,782
	2001			33,600	4.3	1,680
NSEDC	2004	8,488	15	32,824	3.9	2,188
	2003			32,819	3.9	2,188
	2002			34,155	4.0	2,277
	2001			32,200	3.8	2,147
YDFDA	2004	3,123	6	20,888	6.7	3,481
	2003			20,885	6.7	3,481
	2002			20,790	6.7	3,465
	2001			19,600	6.3	3,267

If the intent of Senator Stevens' floor language is incorporated into the BSAI FMP, the Council would be required to consider the allocations given to the CDQ groups in determining the appropriate directed fishing allocation for the Aleut Corporation. The section does not create a mathematical formula or fixed proportion to which the Council should adhere. However, if Alternative 1.2 is selected, then during the annual specifications process it would be necessary for the Council to articulate a reasonable relationship between CDQ allocations and the Aleut Corporation allocation.

The 40,000 Metric Ton Cap in Alternatives 1.2 and 1.3

Senator Stevens' floor language says that the size of the directed pollock fishing allocation to be made available to the Aleut Corp not be greater than 40,000 mt. This is a limit on DPF, not a limit on the TAC, to be set for Aleutian Islands pollock. That TAC could exceed 40,000 mt by the size of the ICA or more if the ABC is large. AI ICAs since the directed fishery closure in 1999 have been 1,000 mt, but actual catches have exceeded that. In-season managers indicate that an appropriate ICA may be 2,000 mt. Thus, Senator Stevens' language may be consistent with a maximum DPF and ICA of 42,000 mt.

Alternative 1.3 allows the Council to set the quota at either a 40,000 mt maximum, or at some amount less than 40,000 mt if the ABC for that year is such that the Council would set a TAC lower than 40,000 mt. Alternative 1.4 provides a similar method for determining the quota, but it would not exceed 15,000 mt and no "B" season directed fishery would be allowed.

A 40,000 mt cap incorporated into the FMP or regulations would constrain Council specifications recommendations in the short run, but would not necessarily be a constraint in the medium to long term. In the short term, the provision would constrain the Council from adopting a DPF greater than 40,000 mt in a year, even if the BSAI Plan Team had recommended an ABC sufficiently greater than 40,000 mt at its November meeting and the Council, in turn, adopted a TAC equal or nearly equal to ABC. In the longer term, 18 months or more, the Council would be able to amend the FMP to modify or eliminate a cap of this nature.

The analyses in this document do not evaluate any specific TAC level (that would be handled in the harvest specifications analysis), but there is analysis of the impact of incorporating CDQ-level apportionment guidelines or the 40,000 mt limit. This section also includes analysis of an option to fix the DPF at an amount less than 15,000 or 40% of the TAC, whichever is less (Alternative 1.4); this alternative does fix the DPF at a level that is quite a bit lower than the 40,000 mt maximum discussed above. Significance is evaluated using the criteria from the harvest specifications EA, modified appropriately to reflect this proposed action.

The Council's April 2004 Motion

Each year, the BSAI plan team recommends a new set of species ABCs at its November meeting. Following this meeting, and prior to the start of the December Council meeting, industry groups meet to negotiate a set of preferred species TACs. The results of these negotiations are considered by the AP and by the Council, as they deliberate their own TAC recommendations.

As the Bering Sea pollock biomass and pollock harvest have risen, the TACs for other species fisheries have been reduced to keep the sum of TACs under the BSAI OY cap. Negotiated industry consensus has become harder to reach in recent years as the sum of recommended TACs is right at the OY cap. Disagreements have not prevented the Council from reaching decisions on its TAC recommendations, and have not delayed the start of fishing seasons. Failure to reach agreement can require additional AP and Council time during the December meeting and can reduce the time available for deliberation on other issues.

At the April 2004 Council meeting industry representatives expressed concern that the decisions about the level of AI pollock DPF that the industry, AP, and Council would be required to make each year under Alternatives 1.1 and 1.2 would further complicate the TAC setting process in November and December. The additional decisions would further complicate negotiations, making it harder to reach an industry consensus prior to the December meeting. This increased potential for controversy over the specifications process could increase the time required for setting the specifications at the Council meeting.

To address this concern, the Council requested that two new alternatives be considered. Each of these would insert a formula in the BSAI FMP that would determine the AI pollock TAC, once the AI pollock ABC were known. These alternatives are evaluated in Section 4.2.3 as Alternatives 1.3^{C} and 1.4^{C}. Many believe that a formula or some other way of determining the amount of the AI pollock allocation, earlier than the time when industry negotiations occur, would provide more certainty about the amount that would likely be allocated to the Aleut Corporation fishery, and thus would reduce the number of issues to be negotiated in those industry negotiations in the fall.

However, as noted in Section 4.2.3, the introduction of a deterministic formula between TAC and ABC raises concerns that the proposal may go beyond the measures approved as a part of the SSL mitigation measures adopted in 2001. If so, they might involve the Council in a formal ESA consultation. The Council has explicitly said that it does not want to take measures that would do this. For this reason, analysts introduced two new alternatives, that were variants of 1.3^{C} and 1.4^{C} that did not have the same deterministic relation between TAC and ABC. These new alternatives were Alternatives 1.3 and 1.4.

Alternative 1.3 appears to be very similar to Alternative 1.2. However, while Alternative 1.2 establishes a cap on the allocation that may be made to the AI pollock DPF, Alternative 1.3 sets an actual DPF, once the TAC is recommended (which would, in turn, be based partly on the ABC for that year). Thus for a TAC of 45,000 mt, Alternative 1.2 sets a cap on the AI DPF of 40,000 mt, and allows the Council to choose a DPF equal to or less than that. Under the same conditions, Alternative 1.3 would set the DPF less than the 40,000 mt by the size of the ICA (so, for example, if the ICA were 2,000 mt, the DPF would be 38,000 mt).

Alternative 1.3 was introduced in conjunction with funding alternative 2.5, which would require the roll back of 60% of the DPF (in this example, 0.6*38,000 = 22,800 mt). Thus, continuing the numerical example, if these two alternatives were adopted together, Alternative 1.3 would result in an “A” season DPF of 15,200 mt. The Council may or may not adopt Alternative 2.5 in conjunction with Alternative 1.3. The Council may adopt Alternative 2.5 in conjunction with Alternatives 1.1 and 1.2. Alternative 2.5 would not be necessary if Alternative 1.4 were adopted. While Alternative 1.3 is explicitly subject to the 40%/60% “A/B” split, Alternatives 1.1 and 1.2 would be subject to the split as well. Alternative 1.4 implicitly incorporates the split.

Table 4.2.1-3 shows the AI pollock DPFs that would be associated with each of these alternatives for a range of ABCs. These ABCs provide a “grid” covering a range from 10,000 to 60,000 mt, at 10,000 mt intervals. Although ABCs in the past (the 1980s and early 1990s) were often 100,000 mt, and sometimes higher (see Table 3.2-5), an ABC of 60,000 mt was chosen as an upper limit for several reasons: (1) Although the ABCs from 1978 to 1991 always exceeded 100,000 mt, harvests during this period almost always fell substantially short of the ABCs. As Table 3.2-5 indicates, harvests during this period only rose above 60,000 mt three times, and only approached 100,000 mt once. From 1992 to the last year of the domestic fishery in 1998, the ABC only exceeded 60,000 mt once, and harvests only exceeded 60,000 mt once. (2) Our understanding of the stocks has changed since the 1980s. (3) The range of harvests proposed for the AI pollock fishery under active discussion in 2004 is generally capped at 40,000 mt. Much of the discussion anticipates harvests that are much lower than this. The 60,000 upper range is 1.5 times the upper level currently under discussion. (4) Under three of the AI DPF size alternatives under consideration, harvests would be capped at 40,000 mt or less. (5) The 2003 AI pollock SAFE report suggests that directed pollock fishing should be eliminated in an area near the eastern boundary of management area 541, and that future AI pollock ABCs reflect biomass estimates in the inshore areas of the Aleutians west of 174°W. This would be result in lower ABC estimates than if the biomass estimates included the entire Aleutian Islands area as it currently exists. Note that, again, allocation decisions cannot be tied to ABC, only TAC, to comply with SSL protection measures. ABC numbers are shown here for illustrative purposes only.

Alternative 1.4 does not provide for a “B” season. Aleut Corporation representatives have indicated that they do not expect to be able to utilize “B” season quota in the first year, and perhaps the first several years of the program. Under Alternative 1.4, an FMP amendment would be required before a “B” season pollock allocation could be created.

Table 4.2.1-3 Maximum AI pollock Annual DPFs under Alternatives 1.3 and 1.4, given different assumptions about AI pollock ABC

Alternative 1.3					
ABC	**TAC**	**ICA**	**DPF**	**"A" season**	**"B" season ****
10,000	10,000	2,000	8,000	3,200	4,800
20,000	20,000	2,000	18,000	7,200	10,800
30,000	30,000	2,000	28,000	11,200	16,800
39,400	39,400	2,000	37,400	14,960	22,440
50,000	40,000	2,000	38,000	15,200	22,800
60,000	40,000	2,000	38,000	15,200	22,800
Alternative 1.4					
ABC	**TAC**	**ICA**	**DPF**	**"A" season**	**"B" season**
10,000	10,000	2,000	8,000	3,200	0
20,000	20,000	2,000	18,000	7,200	0
30,000	30,000	2,000	28,000	11,200	0
39,400	39,400	2,000	37,400	14,960	0
50,000	50,000	2,000	48,000	15,000	0
60,000	60,000	2,000	58,000	15,000	0

Notes: An ABC of 39,400 mt has been used in place of 40,000 mt, because the values are very similar, and 39,400 mt was the 2004 ABC. The ICA has been 1,000 mt in recent years. However, catches have exceeded this level. Inseason managers suggest that 2,000 mt may be a prudent ICA in future years. These are maximum TACs because the alternatives evaluated leave open the possibility that TACs could be set below the ABCs.

**The maker of the motion that introduced Alternative 1.3 anticipated that the entire "B" season allocation would be rolled back to the EBS pollock fishery each year in early June (in accordance with Alternative 2.5). If Alternative 2.5 is adopted with Alternative 1.3, "B" season allocations would be zero.

Maximum DPFs Under Alternatives 1.1, 1.2, 1.3, and 1.4

Table 4.2.1-4 below summarizes information about the maximum potential AI pollock DPFs under Alternatives 1.1, 1.2, 1.3, and 1.4, for a range of possible AI pollock ABCs (with ABC as a proxy for the Council's assigned TAC).

Funding Alternative 2.5 provides for a mandatory roll back of the entire "B" season allocation (60% of the DPF) at the start of the "B" season (June 10). The maximum DPFs in the table have been calculated both with and without the Alternative 2.5 roll back requirement. All estimates have been prepared after accounting for an ICA of 2,000 mt. Past ICAs have been less than this, but catches have often exceeded the ICAs. NMFS Alaska Region inseason managers have indicated that the higher ICA would be appropriate. The 2,000 mt ICA is used here purely for illustrative purposes.

The DPFs for alternatives 1.1 and 1.2 are maximums; actual DPFs could be smaller than these, because under these alternatives the Council has discretion to choose the DPF within a range bounded by the TAC and ICA requirements. DPFs for Alternatives 3 and 4 are projected DPFs; these alternatives incorporate formulas into the FMP that remove annual discretion from the Council.

Table 4.2.1-4 Maximum AI pollock DPFs under different assumptions about AI pollock ABC, allocation size alternative, and funding/rollover alternatives (2.2-2.5) (metric tons)

	#1.1		#1.2		#1.3		#1.4
ABC	Potential DPF under Alts. 2.2, 2.3, and 2.4	Potential DPF under Alt 2.5	Potential DPF under Alts. 2.2, 2.3, and 2.4	Potential DPF under Alt 2.5	Potential DPF under Alts. 2.2, 2.3, and 2.4	Potential DPF under Alt 2.5	Potential DPF under Alts. 2.2, 2.3, 2.4, and 2.5
10,000	8,000	3,200	8,000	3,200	8,000	3,200	3,200
20,000	18,000	7,200	18,000	7,200	18,000	7,200	7,200
30,000	28,000	11,200	28,000	11,200	28,000	11,200	11,200
39,400	37,400	14,960	37,400	14,960	37,400	14,960	14,960
50,000	48,000	19,200	40,000	16,000	38,000	15,200	15,000
60,000	58,000	23,200	40,000	16,000	38,000	15,200	15,000

Notes: All DPFs are calculated after accounting for a 2,000 mt AI pollock ICA. Alt. 2.5 has a required "B" season roll back. "Potential harvests" refers to the harvest that might be had if there are no "voluntary" roll backs (that is, no roll backs not mandated in the FMP or regulation).

4.2.2 Effects of Allocation Size Options

NEPA Significance Analysis

This is an analysis of Amendment 82 to the Fishery Management Plan for the BSAI groundfish fisheries. The FMP must be amended since the Council proposes to modify the management regime it established for the BSAI groundfish fisheries. The significance analysis provided in the following sections is related to the FMP amendment. That is, the analysis is directed at the *process* of implementing an AI pollock fishery whose DPF is apportioned by the Council exclusively to the Aleut Corporation. The analyses below generally do not evaluate the specific AI pollock TACs or ITACs that might be specified - only the process by which they are allocated to the Aleut

Corporation. However Alternatives 1.3 and 1.4 have specific associated TAC amounts, depending on assumptions about alternative levels of ABC.

The alternatives will be evaluated with respect to the impacts and the significance criteria identified in Section 4.1. As discussed at the start of this section, Alternatives “1.1,” “1.2,” “1.3,” and “1.4" are analyzed in Subsection 4.2.2, while Alternatives “1.3C,” and “1.4C” are evaluated in Subsection 4.2.3. The Council’s preferred alternative is evaluated in Subsection 4.2.4. This subsection is divided into 11 parts, each dealing with one of the 11 potential impact categories used in this EA. Within each of these parts, the start of the analysis of a Council alternative is indicated by an alternative number, such as “1.1" at the start of the leading paragraph.

Effects on Pollock Stocks

1.1 The impacts of reopening the pollock fishery would likely be similar to those impacts realized in this fishery in prior years. Those impacts were evaluated as part of the annual assessment process for determining the appropriate ABC levels (based traditionally on surveys occurring once every three years). In 2000, NMFS increased the survey effort to occur every other year (an Aleutian Islands Region survey will be conducted in 2004). Additionally, an age-structured model has been developed to refine estimates of appropriate ABC levels (Barbeaux et al. 2003). Annual estimates of ABC levels therefore would be expected to improve relative to earlier assessments because more data are being collected (more frequently),and the assessment modeling has undergone a number of refinements. As questions arise (such as stock-structure uncertainty), the Council will consider appropriate measures to mitigate these concerns.

Under the status quo, the TAC approved for an AI pollock fishery would be determined during the annual specifications process. Essentially, the Council could choose a TAC of zero or an amount up to the ABC set for the AI pollock stock for that year, which in past years has been as high as 100,000 mt. In recent years AI pollock ABC has declined. Given the BSAI Plan Team’s efforts to better define the AI pollock stock structure, there is potential for areas east of 174 degrees W to be recommended for fishing closure to protect weaker elements of the overall AI pollock stock, leaving perhaps lower ABC recommendations for fishable areas in the AI region west of 174 degrees W. The implications are that the AI region would be defined as being areas west of 174 degrees West , and excluding basin areas more offshore, for the purposes of pollock fishery management.

The annual pollock TAC could fluctuate from year to year. Obviously, the mortality to pollock would vary directly with specification of TAC levels. Because TAC will be less than or equal to ABC, the overall impact to the pollock stock would be less than or equal to the effect represented in the stock assessment document. The overall impact on stock sustainability would therefore range from the expectation that the capacity of the stock would result in yields on a continuing basis (at the upper extreme of catch level) to having the stock return to near unfished levels (at the zero or bycatch-only fishing levels).

Future harvests would be subject to recommendations by the Council and would be constrained by the ABC. The environmental significance of the harvests would be evaluated each year in an EA.

Section 803 does not require a DPF each year; if appropriate the Council could set TACs at levels that would provide for an ICA but not a DPF. Harvest would be conducted under the spatial and temporal requirements of the SSL protection measures. For these reasons, this alternative has been rated “insignificant” with respect to pollock fishing mortality, spatial or temporal distribution of harvests, change in prey availability and habitat impacts on stock.

1.2 A similar conclusion would apply to this alternative because the allocation of harvests should not affect the stock. In cases where a fishery allocation resulted in a shift to a younger or older component of the stock than is the norm, then there might be some impact. However, as this information becomes available for analysis within the stock assessment analysis, a modification to the ABC level would self-correct this effect and the conclusion (that catches less than ABC) are sustainable and reasonably expected to provide adequate spawning biomass levels on a continuing basis. This alternative has therefore been ranked “insignificant” with respect to the relevant criteria.

1.3 This alternative would set the sum of the ICA and DPF equal to the TAC generated from that year’s ABC or 40,000 mt, whichever is less. Thus, the impacts on the pollock stock would likely be similar to those discussed above under Alternative 1.1 relative to setting TAC at the level of that year’s ABC. The difference might be the constraint imposed by the 40,000 mt maximum, which, then, would result in effects similar to those discussed above under Alternative 1.2. Both Alternatives 1.1 and 1.2 were rated as “insignificant’ and this alternative is so rated as well since its effects would be at or less than those outlined for Alternatives 1.1 or 1.2.

1.4 This alternative would provide a lower constraint on the harvest amount in that it specifies that an”A”season DPF could not be set above 15,000 mt. And furthermore, based on recent years’ TACs in the AI area, the other provision of this alternative would limit the DPF to 40% of the TAC derived from the ABC for that given year, if not greater than 15,000 mt (and only an”A”season fishery would be allowed); thus, in this alternative there is the potential for even smaller levels of DPF. The impacts on pollock stocks would be less than described for the above alternatives, and thus is rated “insignificant”.

Effects on Other Target Species and Fisheries

1.1 The Aleutian Islands area previously has been open to a directed pollock fishery. The impacts of reopening the fishery on other target fisheries would likely be similar to those impacts realized in this fishery in prior years. Those impacts were reviewed periodically in those years, and annual levels of harvest were set based on consideration of effects on other fisheries, the environment, etc. Where issues of concern arose, the Council established appropriate measures to mitigate these concerns.

Under this alternative (if the Council takes no action) the TAC approved for an AI directed pollock fishery would be determined during the annual specifications process. Essentially, the Council could choose a TAC of zero or an amount up to the ABC set for the AI pollock stock for that year, which in past years has been up to as high as 100,000 mt. (See caveat on AI pollock stock structure in previous section.) The annual TAC could fluctuate from year to year. Since small amounts of non-target species are harvested incidentally with pollock in a directed pollock fishery, some level of mortality to non-target species will occur. The mortality to species harvested in other target fisheries would essentially be very small to negligible if the TAC for pollock were set very low or at zero. Mortality could be higher if larger TACs were approved, but the impacts likely would be in proportion to the amount of TAC allocated. The more TAC that is allocated, the more fishing activity would occur in the region, and in turn, the more potential incidental harvest of species harvested in other target fisheries.

It should be noted that the future AI pollock fishery may be prosecuted with smaller vessels than in previous years, and in different geographic areas (because of SSL closures). The trawl nets used, the horsepower of participating vessels, and fishing strategies used may all be quite different than prior to 1998, resulting in bycatch rates and patterns quite different from historic. This may affect our ability to extrapolate future bycatch rates in the AI pollock fishery on the basis of the fishery in the 1990s. Future rates may be systematically higher or lower than historical rates. The following, however, uses available information to make judgements about potential impacts.

In an AI pollock fishery, the bycatch of species targeted in other fisheries could reduce the quantity of fish available for harvest in these other fisheries, causing some economic effects. Quotas for other target fisheries might be affected if this incidental harvest becomes large. Mortality to non-target species could affect potential yield from these stocks or affect the spatial or temporal distribution of these species. Harvest of pollock also may reduce the yield from the AI pollock population, possibly reducing production of juvenile pollock that are important prey for fish species harvested in other directed fisheries.

Historically, the fisheries prosecuted in the AI include Atka mackerel, Pacific cod, sablefish, flatfish, and rockfish. During the period 1995-1998, prior to the closure of the AI to the directed pollock fishery, incidental harvest of non-target species ranged from:

0-147 mt of Atka mackerel (60 mt average)
1-216 mt of Pacific cod (69 mt average)
7-89 mt of rockfish (52 mt average)
3-188 mt of flatfish (54 mt average).

Almost no sablefish were incidentally harvested in this period. The other species harvest ranged from 14-86 mt. These levels of incidental catch were in pollock fisheries whose harvests ranged from 21,386 mt to 64,405 mt (35,052 mt average) in the same period.

The directed fisheries for these species during 1995-1998 ranged from:

63,399 to 118,693 mt of Atka mackerel (86,184 mt average)
11,791 to 34,982 mt of Pacific cod (24,035 mt average)
8,913 to 16,687 mt of rockfish (12,510 mt average)
40 to 1,628 mt of flatfish (Greenland turbot)(730 mt average)
809 to 3,409 mt of sablefish (1,961 mt average).

As a percentage of the average directed fishery harvests, the average incidental harvest of these species in the AI pollock fishery in 1995-1998 was:

0.07 percent of the directed Atka mackerel fishery
0.29 percent of the directed Pacific cod fishery
0.42 percent of the directed rockfish fishery
7.40 percent of the directed flatfish fishery.

Incidental harvest rate of sablefish was essentially zero in that period.

During the domestic AI pollock fishery from 1991 to 1998, pollock fishermen took rockfish as a bycatch. Rockfish bycatch during the period totaled 324 mt. Almost all of this, 300 mt, was Pacific ocean perch (POP). Over half of the remainder, about 16 mt during the eight years, was shortraker. Rockfish bycatch rates averaged 0.00085 mt per mt of pollock over the period; the rate in the lowest year was 0.000125, while the rate in the highest year was 0.003421. Table 4.2.2-1 below, shows the estimated rockfish bycatch associated with these rates for potential pollock directed fishing allowances from 10,000 to 40,000 mt.

Table 4.2.2-1 Estimated rockfish bycatch under different assumptions about DPF levels (metric tons)

DPF	Rockfish bycatch with bycatch rate of 0.000125	Rockfish bycatch with bycatch rate of 0.00085	Rockfish bycatch with bycatch rate of 0.000342
10,000	1	9	34
20,000	3	17	68
30,000	4	26	101
40,000	5	34	137

Almost all of this estimated rockfish bycatch is expected to be Pacific ocean perch. The dominance of Pacific ocean perch is consistent with experience in the recent EBS pollock fishery, and in the GOA pollock fishery. In the Aleutians the Pacific ocean perch fishery is typically conducted by five to seven trawlers that begin fishing in the Eastern Aleutian district in July, and gradually work their way to the Central and Western districts. In 2004, the AI Pacific ocean perch TAC was set equal to the ABC of 11,172 mt. Separate TACs were provided in each management district. In 2003, fishing operations harvested the entire AI TAC, exceeding it in the Eastern and Western districts, and falling short in the Central district. Pacific ocean perch bycatch in the pollock fishery would count against the AI Pacific ocean perch quotas and reduce the volume of Pacific ocean perch available to this trawl fishery. In a low bycatch rate year, the rockfish bycatch may be under 10 mt. In a high year, with a 40,000 mt DPF, the rockfish bycatch may reach 137 mt.

In the BSAI, pollock fishermen have a 2% MRA for shortraker/rougheye, and a 5% MRA for the remaining rockfish species (including Pacific ocean perch). AI bycatch rates from the 1990s do not approach these levels. EBS harvest data for 2003 does not indicate that pollock fishermen are trying to top off their MRA with Pacific ocean perch. There is no evidence of pollock fishermen topping off on Pacific ocean perch in the past. Should that occur, NMFS would have the option of lowering the MRA rate.

This discussion is based on bycatch rates in the 1990s. A new fishery may be significantly different, and associated with different patterns of rates. A new fishery will be taking place away from historical fishing areas. Moreover, a significant part of the harvest in a new fishery may be taken with small (under 60 ft LOA) trawlers, which may operate in ways that are different from the historical fishery

These levels are very small except for the incidental harvest of flatfish (the data reported here are Greenland turbot, the principal flatfish harvested in this area).

The apportionment of TAC to an AI pollock fishery through the normal specifications process may result in varying levels of pollock harvest and the incidental harvest of non-target fish species. As discussed above, these levels of mortality are very low when compared with the direct harvest of these species in the fisheries directed at these species. These levels of mortality, whether associated with low or high pollock TACs, would likely imperceptibly impact the overall yield of these non-target species. It is also very unlikely that such pollock harvests would affect the temporal or spatial distribution of these non-target species (see discussion below on the potential overlap of an AI pollock fishery with other fisheries prosecuted in the AI area).

An AI pollock fishery would be prosecuted with pelagic trawls, and would not likely affect habitat for such non-target species as Pacific cod, Atka mackerel, sablefish, flatfish, or rockfish since these species are more demersal or benthic oriented, are often associated with benthic structure and relief, and pollock fishing would be targeting schools of pollock that would likely be more bathypelagic or midwater oriented.

Under this alternative, levels of pollock harvest would vary depending on the TAC set for the fishery which could be zero to as high as the calculated ABC for pollock for that year. The process for setting the TAC would include weighing the impacts of a pollock fishery on the yield of pollock in the AI, as well as the potential incidental harvest of other species and the effects of that harvest on yield of those species, among other factors. Higher removals of pollock could reduce biomass of pollock, thereby reducing the production of juvenile pollock that are preyed upon by other pollock, Pacific cod, and other species of fish. Juvenile pollock are important components of the diet of other fishes, with pollock being the number one consumer of juvenile pollock followed by Pacific cod and arrowtooth flounder as numbers two and three, respectively (Lang et al. 2003). But the levels of reduced yield are very small and are judged to be insignificant given the very large biomass of pollock in the AI region. Thus this alternative is not likely to impact prey items for fish species harvested in other target fisheries in the AI. Again, this alternative addresses the process by which TAC is apportioned, in this case using the normal specifications process. The above considerations are routinely evaluated in the specifications process, and that analysis is provided in an annual Environmental Assessment document; previously such levels of pollock harvest were found to not adversely impact other target species or fisheries.

Other potential impacts of an AI pollock fishery on other target fisheries could include gear conflicts or grounds preemption in cases where the pollock fishery would occur in the same areas and during the same time periods as another directed groundfish fishery in the region. Some AI pollock fishers may themselves participate in other target fisheries, precluding gear conflicts in that situation. The AI pollock fishery would be prosecuted solely with pelagic trawl gear (except for incidental harvest of pollock in fisheries that use other gear types). Historically, harvests in the AI pollock fishery have occurred in several areas of concentration including areas north of Atka Island, northwest of Adak Island, and east of Attu Island and north of Shemya Island (Figure 4.2.2-1).

The Pacific cod fishery has historically (1995-1998) occurred in about the same areas as the pollock fishery, especially around Adak and Atka islands (Figure 4.2.2-2). Since 1999, when the AI region was closed to a directed pollock fishery, the Pacific cod fishery has been prosecuted under SSL protection measures that allow Pacific cod fishing to occur closer to shore than a directed pollock fishery would be allowed. A future pollock fishery, then, likely would not conflict with a Pacific cod fishery in these closer-to-shore areas. Some potential interactions could occur outside the 20 n mi closed areas.

The Atka mackerel fishery harvests have been fairly spread across the AI region, with some catches concentrated south of Amukta Pass, near Petrel Bank, and scattered in the Rat Islands area (Figure 4.2.2-3). This fishery is currently under a platoon management restriction to spread out the harvest effort. When comparing the AI pollock fishery prior to 1999 (Figure 4.2.2-1) with the historic Atka mackerel fishery suggests there would be very little overlap of fishing activity.

The sablefish fishery is entirely under an IFQ management system and is prosecuted with fixed longline gear. The locations of the sablefish harvests from 1995-2003 suggest most of the fishing effort in the AI region occurs within 100 n mi of Adak and Atka (Figure 4.2.2-4). This fishery is not under special restrictions for SSL protection, and occurs in waters within 20 n mi of shore in the AI area. While the levels of fishing inside versus outside 20 n mi will vary temporally and spatially, it seems likely that there would not be large conflicts with a directed pollock fishery in the AI. Some gear overlap could occur in areas outside 20 n mi.

The AI rockfish fishery historically has occurred throughout the AI region with some concentration of harvests between Kiska and Agattu islands, around Amchitka Island and Petrel Bank, north of Atka Island, and in Amukta Pass (Figure 4.2.2-5). Some of these harvests have occurred within 20 n mi, reducing potential overlap with an AI pollock fishery. The flatfish fishery has historically occurred primarily within 100 n mi of Adak and Atka islands (Figure 4.2.2-6). Again, much of that harvest has been within 20 n mi of shore and would not likely overlap to any great extent with an AI pollock fishery.

These target fisheries have historically occurred during years when an AI pollock fishery also occurred in the AI. During those years, the process of TAC apportionment was not an issue of concern. Thus, whether TAC is apportioned under the normal specifications process, or some other process, it does not seem likely that this procedural issue is an issue of potential concern to other directed target fisheries. But were potential conflicts to be identified, the Plan Teams could make recommendations to the Council for an allocation scheme that mitigated these concerns.

Future pollock harvests would be subject to recommendations by the Council and would be constrained by the ABC. The environmental significance of the harvests would be evaluated each year in an EA. Section 803 does not require a positive DPF each year; if appropriate the Council could set TACs at levels that would provide for an ICA but not a DPF. Historical evidence indicates that pelagic pollock fisheries will only catch small amounts of these other target species incidentally. There appears to be limited potential for overlap between pollock and fixed gear fishing areas. For these reasons, Alternative 1.1 has been rated "insignificant" with respect to other target species, spatial or temporal distribution of harvests, change in prey availability, impacts on habitat for other target fish stocks, and gear conflict.

1.2 The preceding conclusion would apply to this alternative also. If the Council should choose either a TAC amount similar to the TAC that current CDQ pollock fishery groups receive, or perhaps the 40,000 mt cap option, impacts on other target fisheries would likely be similar to those listed above. The level of impact would likely be proportional to the TAC amount set. This alternative merely prescribes a TAC based on a "CDQ level" and/or with a limit of 40,000 mt. Conceivably the Council would be constraining the future AI pollock fishery if the AI pollock stock ABC increases. Under this scenario, the effect would be a limit on directed pollock fishing activity in the Aleutian Islands, resulting in less opportunity for interactions with other target fisheries. In this case, potential impacts on other target fisheries that might occur under a much larger TAC would be reduced, and this alternative might be considered to have a potentially positive effect. However, "positive" or "negative" effect in this situation is a relative term, since, as discussed above, there is little suggestion that an AI pollock fishery would adversely affect any other target fisheries in this region under the TAC apportionment scenarios discussed above. This alternative has therefore been ranked "insignificant" with respect to the relevant criteria.

1.3 This alternative would constrain the sum of the ICA and DPF to the TAC generated from that year's ABC or 40,000 mt, whichever is less. Thus, the impacts on other target fish species and fisheries would likely be similar to those discussed above under Alternative 1.1 relative to setting TAC at the level of that year's ABC. The difference might be the constraint imposed by the 40,000 mt maximum, which, then, would result in effects similar to those discussed above under Alternative 1.2. Both Alternatives 1.1 and 1.2 were rated as "insignificant' and this alternative is so rated as well since its effects would be similar to or less than those outlined for Alternatives 1.1 or 1.2.

1.4 This alternative would provide a lower constraint on the harvest amount in that it specifies that a pollock "A"season DPF could not be set above 15,000 mt. And furthermore, based on recent years' TACs in the AI area, the other provision of this alternative would limit the DPF to 40% of TAC derived from the ABC for that given year, if not greater than 15,000 mt (and only an"A"season fishery would be allowed); thus, in this alternative there is the potential for even smaller levels of DPF. The impacts on other target fisheries or species would be less than described for the above alternatives, and thus is rated "insignificant" with respect to the relevant criteria.

Effects on Incidental Catch of Other and Non-specified Species

Other species include sculpins, skates, sharks, and octopus. This category also includes squid, which in the BSAI are separately assessed annually by the Plan Team. Information on these species is generally limited when compared with other species upon which directed fisheries are prosecuted. However, these species have some current or potential economic value, are an integral part of the marine ecosystem, and thus are monitored by NMFS. Catch levels are small when compared with target species, but levels of catch are increasing (NPFMC 2003b).

Non-specified species are marine organisms which have little or no economic value and are generally discarded and certainly not targeted; non-specified species catch levels presumably track the catches of the target species in various fisheries. Since target fishers realize adverse effects from harvest of species not targeted, efforts are generally made to minimize catch of these species to reduce the time it takes to sort or otherwise deal with unwanted catch. Thus, levels of catch of other or non-specified species are generally low.

The remainder of the section cites data from the AI pollock fishery during the 1990s. It should be noted that the future AI pollock fishery will be prosecuted with smaller vessels than in previous years, and perhaps more intensively in some geographic areas (because of SSL closures). The trawl nets used, the horsepower of participating vessels, and fishing strategies used may all be quite different than prior to 1998, resulting in bycatch rates and patterns quite different from historic. Thus extrapolation or inferring the future bycatch rates in the AI pollock fishery is problematic. The following, however, uses available information to make judgements about potential impacts.

1.1 This alternative would allow TAC for an AI pollock fishery to range from zero to as high as the ABC for the current year. Presumably, because this fishery would be prosecuted with pelagic trawl gear, the incidental harvest of other species, which are largely benthic oriented, or non-specified species, would be unknown, but probably small. Historical data suggest a pelagic trawl pollock fishery harvests few non-specified or other species. The incidental harvest of these species likely would increase in some proportion to increasing levels of TAC. Overall BSAI removals are expected to change modestly because of the OY cap. This impact has been rated “insignificant.”

Figure 4.2.2-1 Locations of observed pollock harvests, 1995-2003

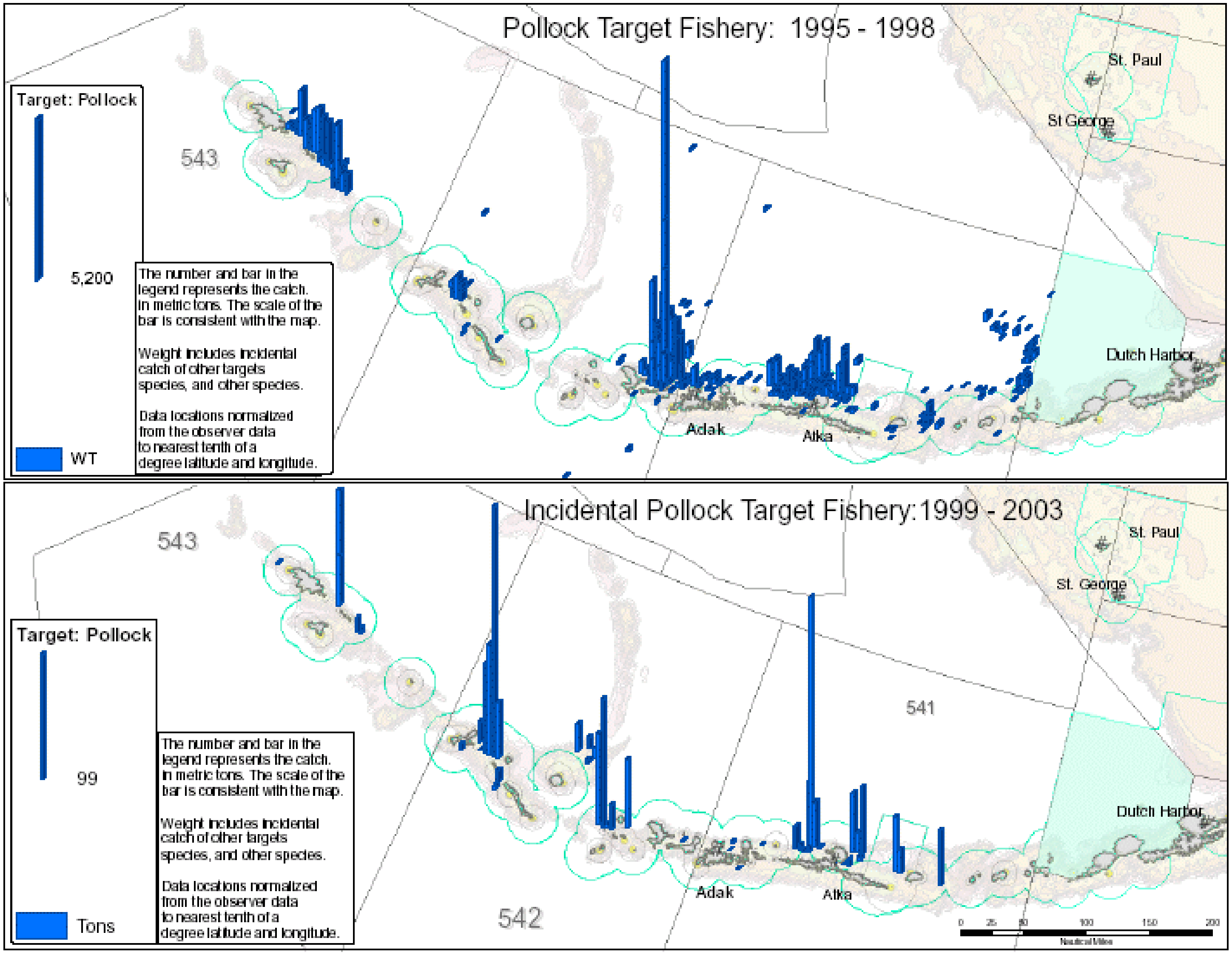


Figure 4.2.2-2 Locations of observed Pacific cod target catches, 1995-2003

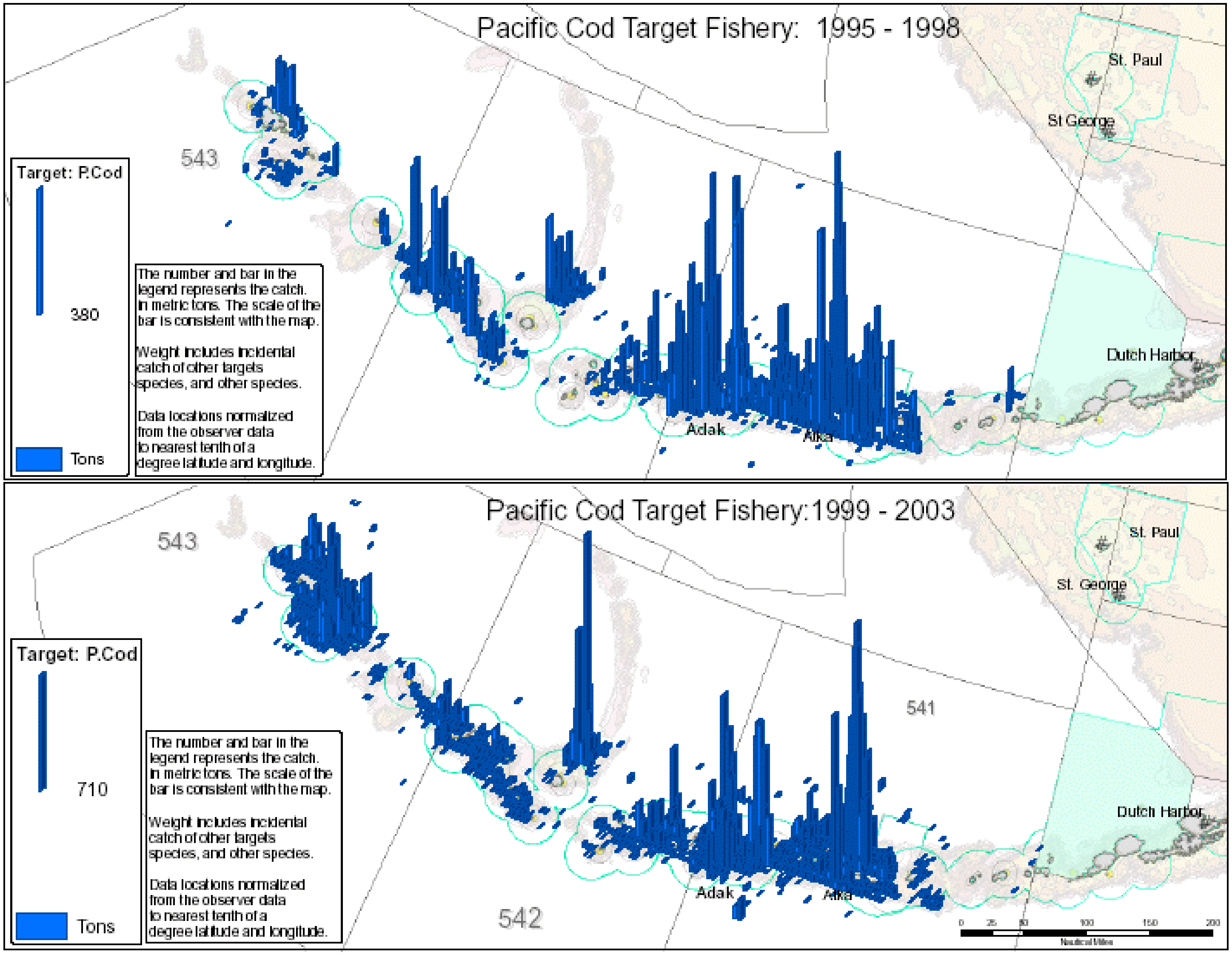


Figure 4.2.2-3 Locations of observed Atka mackerel target catches, 1995-2003

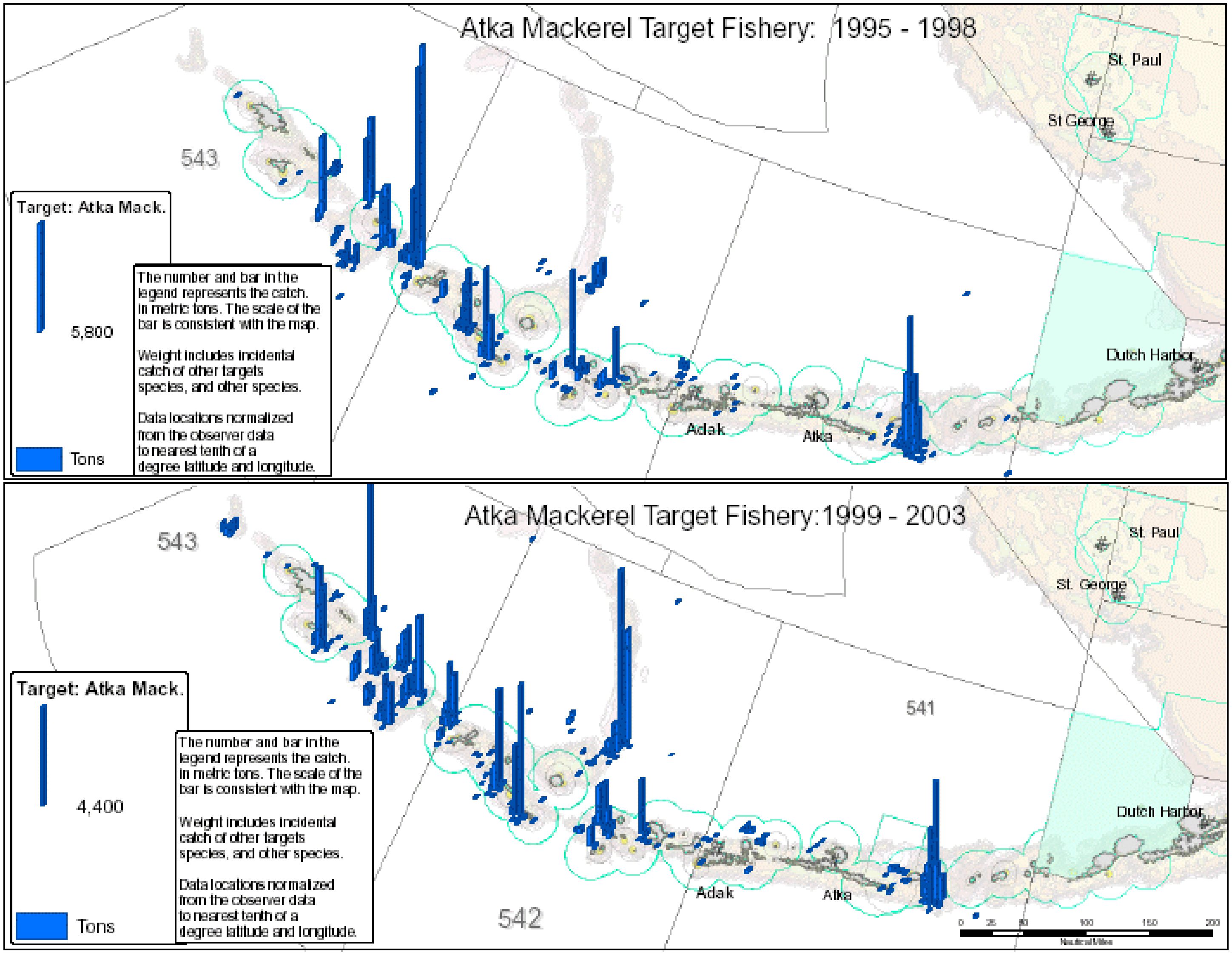


Figure 4.2.2-4 Locations of observed sablefish target harvests, 1995-2003

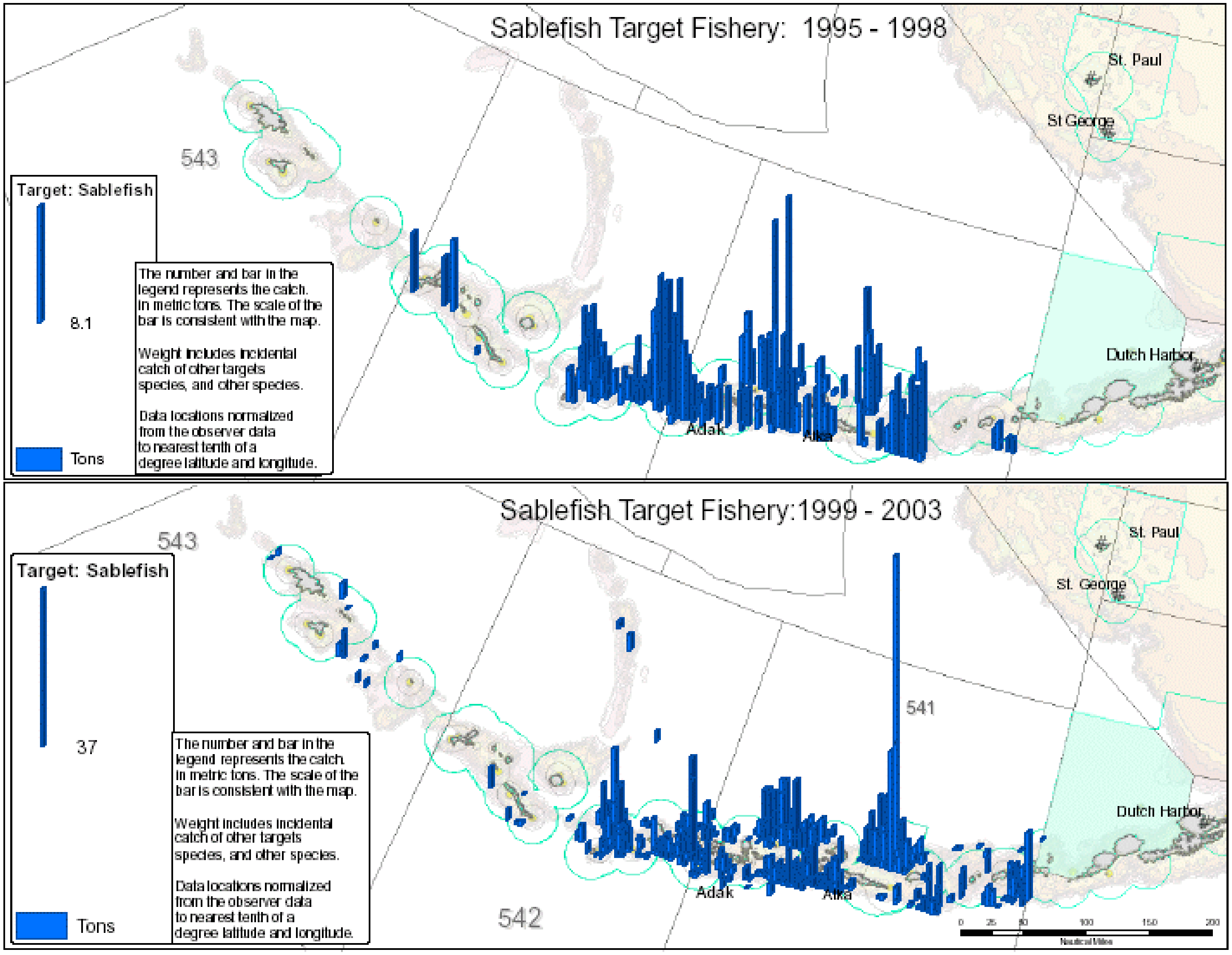


Figure 4.2.2-5 Locations of observed rockfish target harvests, 1995-2003

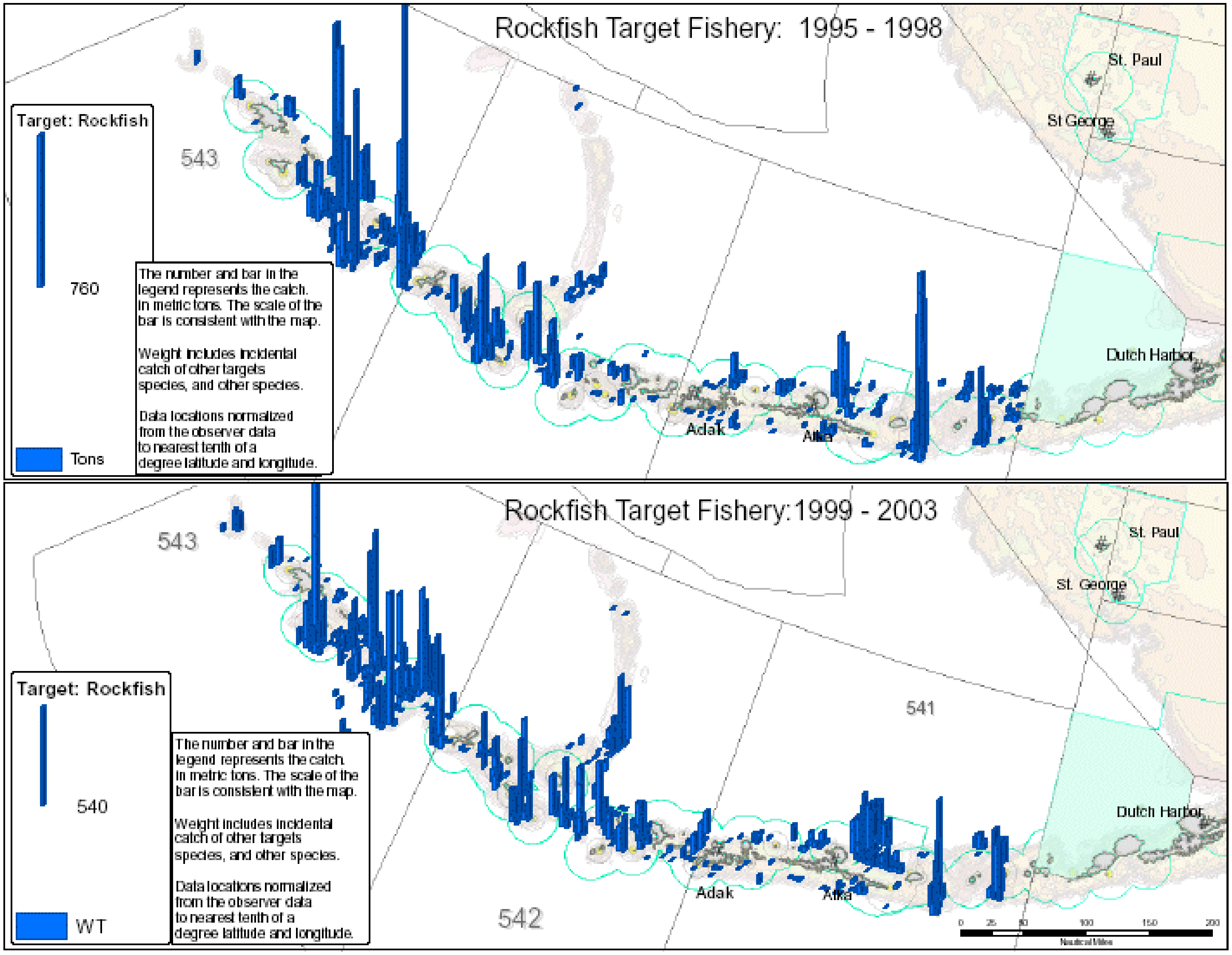
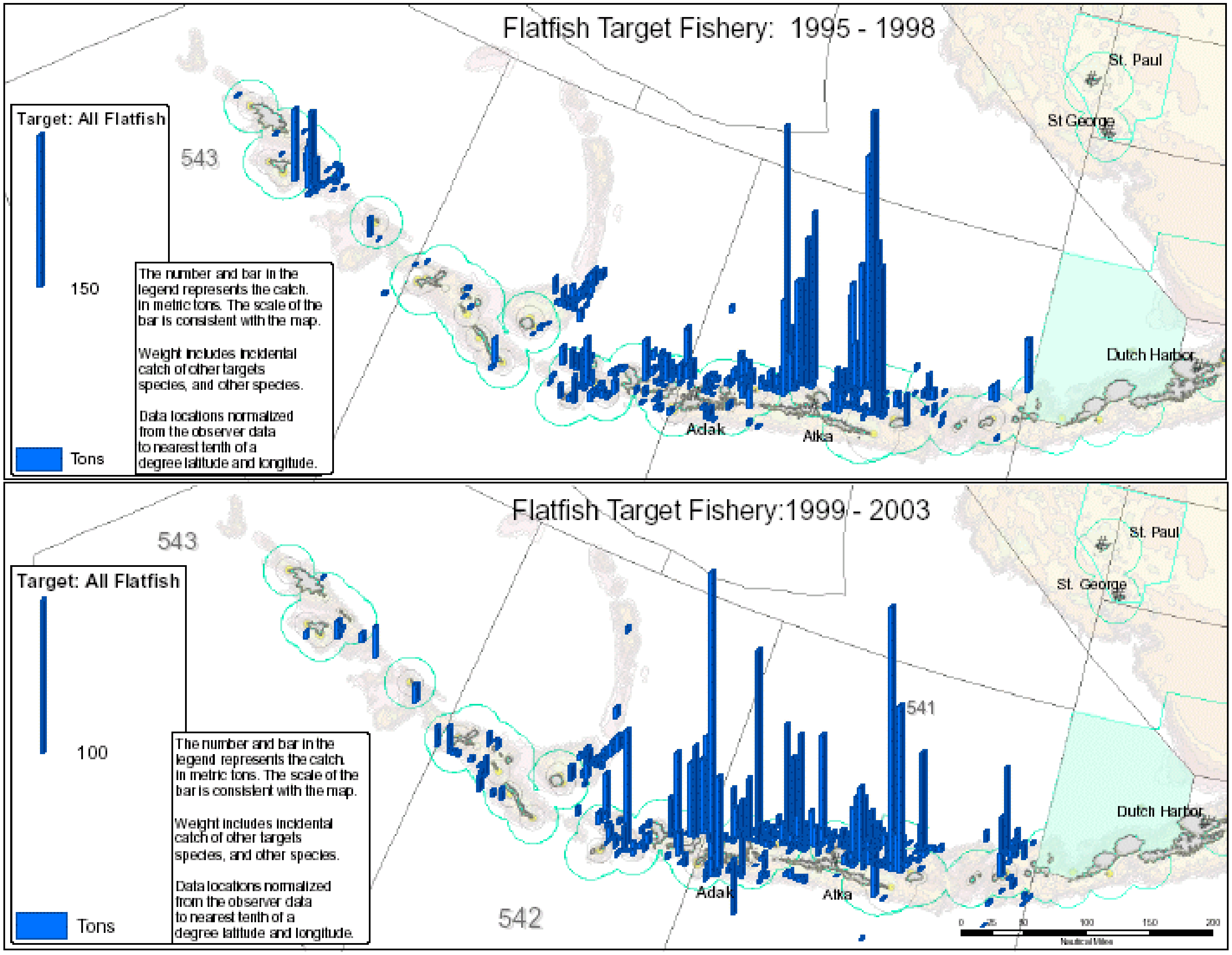


Figure 4.2.2-6 Locations of observed flatfish target harvests, 1995-2003



1.2 The preceding conclusion would apply to this alternative also. Alternative 1.2 requires the Council to set the AI pollock TAC at a level reflecting CDQ pollock allocations, with a 40,000 mt limit on the total TAC. This alternative limits potential catches relative to Alternative 1.1 This alternative's impacts on other or non-specified species would be largely unknown, but likely very small. The incidental harvest of these species likely would be in some proportion to the level of TAC set for the target fishery. This impact has been rated "insignificant."

1.3 This alternative would constrain the sum of the ICA and DPF to the TAC generated from that year's ABC or 40,000 mt, whichever is less. Thus, the impacts on other or non-specified species would likely be similar to those discussed above under Alternative 1.1 relative to setting TAC at the level of that year's ABC. The difference might be the constraint imposed by the 40,000 mt maximum, which, then, would result in effects similar to those discussed above under Alternative 1.2. Both Alternatives 1.1 and 1.2 were rated as "insignificant' with respect to the relevant criteria, and this alternative is so rated as well since its effects would be similar to or less than those outlined for Alternatives 1.1 or 1.2.

1.4 This alternative would provide a lower constraint on the harvest amount in that it specifies that a pollock"A"season DPF could not be set above 15,000 mt. And furthermore, based on recent years' TACs in the AI area, the other provision of this alternative would limit the DPF to 40% of TAC derived from the ABC for that given year if not greater than 15,000 mt (and only an"A"season fishery would be allowed); thus, in this alternative there is the potential for even smaller levels of DPF. The impacts on other or non-specified species would be less than described for the above alternatives, and thus is rated "insignificant" with respect to the relevant criteria.

Effects on Incidental Catch of Forage Fish Species

Forage species are taken incidentally in many groundfish fisheries, and prior to 1998 these species were primarily capelin and eulachon. After 1998, no commercial fishery on forage species has been allowed (BSAI FMP Amendment 36). At the present time, the incidental catch of forage species likely would be very small to negligible. Current regulations permit maximum retainable forage species catch of 2 percent of total catch. (Table 11, §679)

It should be noted that the future AI pollock fishery will be prosecuted with smaller vessels than in previous years, and perhaps more intensively in some geographic areas (because of SSL closures). The trawl nets used, the horsepower of participating vessels, and fishing strategies used may all be quite different than prior to 1998, resulting in bycatch rates and patterns quite different from historic. This may affect our ability to extrapolate future incidental catch rates in the AI pollock fishery on the basis of the fishery in the 1990s. Future rates may be systematically higher or lower than historical rates. The following, however, uses available information to make judgements about potential impacts.

1.1 This alternative would allow an AI pollock harvest in a range from zero to ABC. Presumably the incidental catch of forage species would be similar to the patterns of catch in the historic pollock fishery, where levels were very low but in many cases unknown. The incidental catch of forage fish under this alternative likely would be in some proportion to the level of catch of the target species. But the levels of incidental catch are unknown. Overall BSAI removals are expected to change modestly because of the OY cap. The overall effects of this alternative likely would be negligible. This alternative has therefore been ranked "insignificant" with respect to the relevant criteria.

1.2 The effects of this alternative on incidental catch of forage species would be similar to those described above in 1.1. If the Council places a cap of 40,000 mt in the AI pollock fishery, some level of bycatch of forage fish could occur but at unknown levels. The effects of this alternative likely would be negligible. This alternative has therefore been ranked "insignificant" with respect to the relevant criteria.

1.3 This alternative would constrain the sum of the ICA and DPF to the TAC generated from that year's ABC or 40,000 mt, whichever is less. Thus, the impacts on forage species would likely be similar to those discussed above under Alternative 1.1 relative to setting TAC at the level of that year's ABC. The difference might be the constraint imposed by the 40,000 mt maximum, which, then, would result in effects similar to those discussed above under Alternative 1.2. Both Alternatives 1.1 and 1.2 were rated as "insignificant' with respect to the relevant criteria, and this alternative is so rated as well since its effects would be similar to or less than those outlined for Alternatives 1.1 or 1.2.

1.4 This alternative would provide a lower constraint on the harvest amount in that it specifies that a pollock"A"season DPF could not be set above 15,000 mt. And furthermore, based on recent years' TACs in the AI area, the other provision of this alternative would limit the DPF to 40% of TAC derived from the ABC for that given year if not greater than 15,000 mt (and only an"A"season fishery would be allowed); thus, in this alternative there is the potential for even smaller levels of DPF. The impacts on forage species would be less than described for the above alternatives, and thus is rated "insignificant" with respect to the relevant criteria.

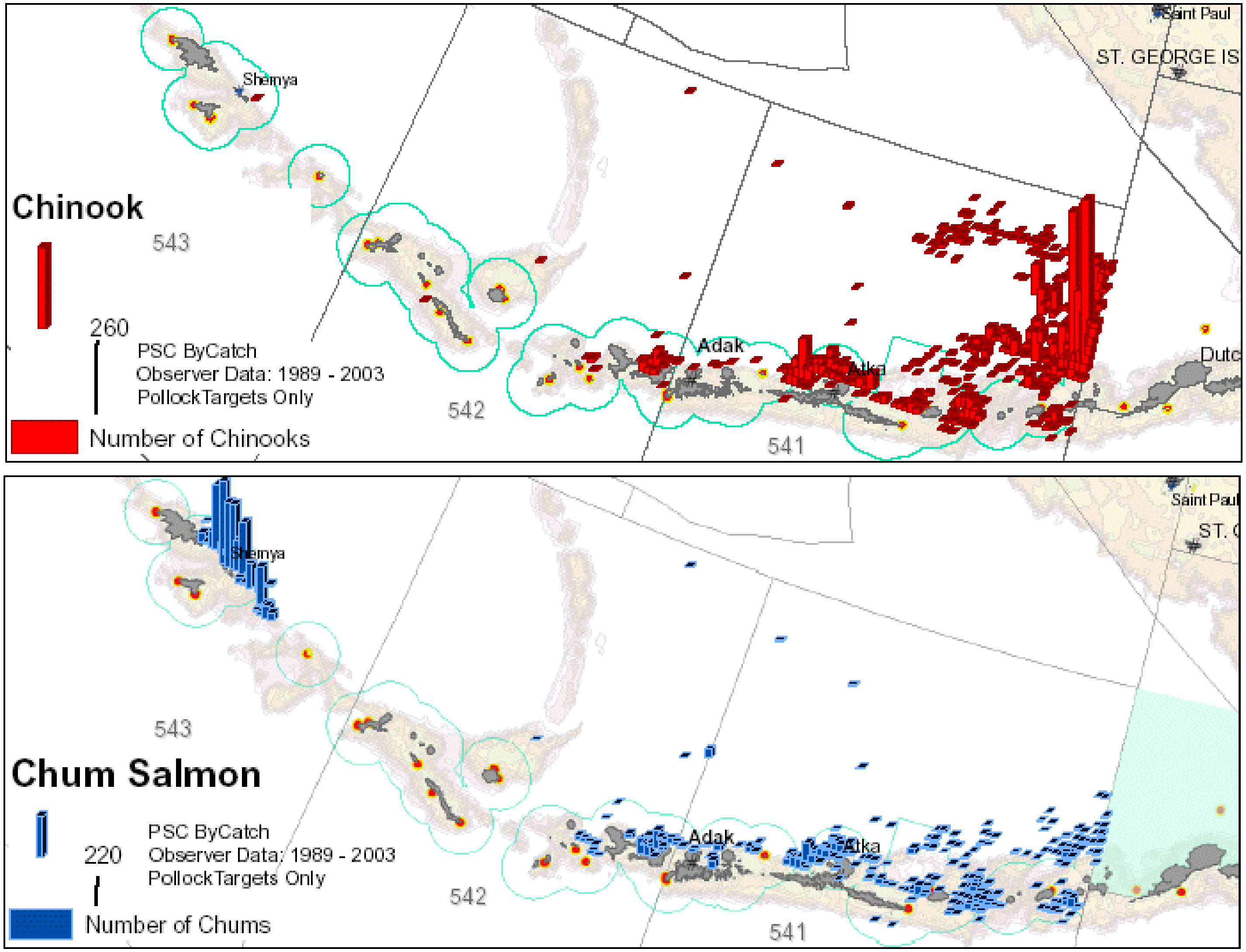
Effects on Incidental Catch of Prohibited Species

The prohibited species, their management, and their recent catch histories in the BSAI are described in Section 3.7 of the EA. During the April 2004 Council meeting, the Council added an alternative for analysis that addresses whether Chinook salmon PSC bycatch in an AI pollock fishery would, or would not, be counted against the overall BSAI Chinook salmon bycatch cap and how this may/may not affect closures of Bering Sea Chinook salmon savings areas and thus impact other fisheries. Three alternatives are analyzed: for Chinook bycatch to count against the BSAI cap, for Chinook bycatch to not count against the BSAI cap, or to create a new 360 fish bycatch cap for the AI only. This analysis is provided in Section 4.7 of this Chapter.

It should be noted that the future AI pollock fishery will be prosecuted with smaller vessels than in previous years, and perhaps more intensively in some geographic areas (because of SSL closures). The trawl nets used, the horsepower of participating vessels, and fishing strategies used may all be quite different than prior to 1998, resulting in bycatch rates and patterns quite different from historic. This may affect our ability to extrapolate future incidental catch rates in the AI pollock fishery on the basis of the fishery in the 1990s. Future rates may be systematically higher or lower than historical rates. The following, however, uses available information to make judgements about potential impacts.

1.1 Figure 4.2.2-7a shows locations of salmon bycatch in pollock fisheries in the Aleutian Islands. A relatively large part of historical AI bycatch of Chinook salmon occurred outside of critical habitat on the eastern border of Area 541, and north of Atka Island. A large part of AI Chinook bycatch appears to have occurred outside of Steller sea lion critical habitat, so additional pollock trawling there could lead to additional Chinook salmon bycatch in the Aleutian Islands. A relatively large part of historical AI bycatch of other (primarily chum) salmon occurred between the Rat Islands and the Near Islands in waters outside of SSL critical habitat, and also in the waters just north of Atka, some of which are outside critical habitat. Additional pollock trawling in these waters could also lead to additional salmon bycatch.

Figure 4.2.2-7a Locations of salmon bycatch



Under Alternative 1.1, pollock TACs for the AI region would be set annually and could range from 0 up to the ABC level for a particular year. Looking back to pollock ABC in the AI when there was a directed fishery, the ABC was steadily decreasing from 101,460 mt in 1991 to 23,800 mt in 1998, where it held steady for several years, in response to decreases in biomass estimated from NMFS surveys in the early 1990s. However, the Aleutian region pollock biomass estimates from the groundfish survey began to increase again in 1997, and for 2002 showed a substantial increase in biomass from the 2000 survey, back to near 1991 levels of biomass. In 2003 and 2004, NMFS stock assessment biologists have reevaluated the stock structure of pollock in the AI region given uncertainty over stock composition. Future AI pollock ABCs may be changed in amount, and geographic boundary, in future stock assessments. A change in pollock stock structure, with possible changes in where pollock may be fished, and at what levels, may result in a change in the overall PSC bycatch scenario, placing some uncertainty in predicting future effects of these alternatives on PSC bycatch.

The Aleutian Islands pollock ABC for 2004 was set equal to 39,400 mt, which would be consistent with a maximum DPF of 37,400 (assuming a 2,000 mt ICA). At historical bycatch rates this implies a Chinook salmon bycatch of 898 fish (using a 1991-1998 average rate of .024), and an other salmon bycatch of 636 fish (using a rate of .017). This is about 2.0% and 0.003% (respectively) of Chinook and other salmon bycatches in the BSAI in 2003. These amounts are not large enough to jeopardize the capacity of the stocks to maintain benchmark population levels, produce 20% decreases in harvest levels in directed fisheries, or increase BSAI harvests of prohibited species by more than 50%. This would be rated an insignificant impact. Obviously TACs set lower than this amount similarly would be rated “insignificant”. However, other pollock allocation levels higher than this level could conceivably have a significant impact. However, this action does not create a pollock allocation in the AI, and so alone has an “insignificant” impact. Alternative 1.1 provides only setting the pollock TAC in the AI at or lower than ABC.

1.2 If the Council were to place a cap on the Aleut Corporation allocation of 40,000 mt, it is likely that any effects would be insignificant to stocks of prohibited species, to directed fisheries for these species, and to levels of incidental catch of these species in the groundfish fisheries. The same issues mentioned in Alternative 1.1 would apply in this situation, but any effects would be limited because of the cap of 40,000 mt.

1.3 This alternative would constrain the sum of the ICA and DPF to the TAC generated from that year’s ABC or 40,000 mt, whichever is less. Thus, the levels of incidental catch of PSC species would likely be similar to those discussed above under Alternative 1.1 relative to setting TAC at the level of that year’s ABC. The difference might be the constraint imposed by the 40,000 mt maximum, which, then, would result in levels of PSC bycatch similar to those discussed above under Alternative 1.2. Both Alternatives 1.1 and 1.2 were rated as “insignificant’ with respect to the relevant criteria. This alternative is given the same rating because its effects would be similar to or less than those outlined for Alternatives 1.1 or 1.2.

1.4 This alternative would provide a lower constraint on the harvest amount in that it specifies that a pollock”A”season DPF could not be set above 15,000 mt. And furthermore, based on recent years’ TACs in the AI area, the other provision of this alternative would limit the DPF to 40% of TAC derived from the ABC for that given year if not greater than 15,000 mt (and only an"A"season fishery would be allowed); thus, in this alternative there is the potential for even smaller levels of DPF. The levels of incidental catch of PSC species would be less than described for the above alternatives, and thus Alternative 1.4 is rated "insignificant" with respect to the relevant criteria.

Effects on Steller Sea Lions

1.1 The Aleutian Islands would be open to a directed pollock fishery with the TAC set during the normal specifications process under this alternative. The current regulations (and ESA consultations) provide for an Aleutian Islands Subarea pollock fishery that is outside of Steller sea lion designated critical habitat, with TAC apportioned 40%/60% to the"A"and"B"seasons respectively, and based upon an ABC value which conforms to the harvest control rule and is based on the annual pollock stock assessment which appropriately evaluates the stock being harvested. Possible adverse effects of an offshore (i.e., outside of critical habitat) fishery for pollock were fully considered in the 2001 Biological Opinion and those adverse effects were accounted for under the incidental take statement provided by that consultation. This alternative has therefore been ranked "insignificant."

The proposed pollock fishery would be prosecuted in compliance with existing SSL protection measures. Several potential direct and indirect effects on Steller sea lions are considered in this analysis. Annual levels of fishery-related incidental mortality to Steller sea lions are estimated by comparing the ratio of observed incidental take of animals to observed groundfish catch (stratified by area and gear type). Incidental bycatch frequencies also reflect locations where fishing effort is highest. In the Aleutian Islands and GOA, incidental takes are often within Steller sea lion critical habitat. In the Bering Sea, takes are farther off shore and along the continental shelf. Otherwise there seems to be no apparent "hot spot" of incidental catch disproportionate with fishing effort. Given that critical habitat is closed to directed fishing for pollock in the Aleutian Islands, an AI pollock fishery apportionment would not likely result in an increase in the incidental take of Steller sea lions. Use of areas beyond critical habitat by sea lions is very limited in the Aleutian Islands subarea (2001 BiOp). Also, it is unlikely that the allocational regime chosen for the offshore fishery would result in additional adverse impacts. Therefore, incidental take would be insignificant under this alternative.

The spatial and temporal effects on Steller sea lion prey by the Aleutian Islands pollock fishery previously has been analyzed and the fishery modified to comply with the Endangered Species Act (ESA)(2001 BiOp). The fishery as prosecuted under this alternative would be conducted according to these protection measures and no impacts are expected beyond those already analyzed. The specifics of the fishery seasonal apportionments and fishery location were described above. No aspect of this alternative would include types of actions that would be likely to impact the prey availability for Steller sea lions. The decision on the appropriate TAC amount will be considered in supplemental NEPA documents (typically the TAC specifications EA promulgated annually; thus, the effect of that determination will be considered in those subsequent documents.

Steller sea lion protection measures require the control of overall harvest of pollock, Pacific cod, and Atka mackerel, which are considered key Steller sea lion prey species (50 CFR 679.20(d)(4)). If the spawning biomass of a prey species is predicted to fall below 20 percent of its unfished spawning biomass, directed fishing for that species would be prohibited. The analysis of the harvest control rule is in the Steller sea lion protection measures SEIS (NMFS 2001). This alternative would not allow directed fishing for pollock if the spawning biomass fell below 20 % of the unfished spawning biomass, and therefore would have insignificant impacts on the global availability of pollock in the Aleutian Islands area. Further, the resumption of a fishery in the Aleutian Islands area would be provided such that the 2 million metric ton cap for the BSAI would not be exceeded, as required by the 2000 Biological Opinion.

Vessel traffic, nets moving through the water column, or underwater sound production may all represent perturbations, that could affect Steller sea lion behavior. An increase in fishing activity in the AI region could result in increased discard or accidental loss of fishing materials such as nets, package bands, lines, etc. that could increase the incidence of entanglement with Steller sea lions. Foraging could potentially be affected not only by interactions between vessel and species, but also by changes in fish schooling behavior, distributions, or densities in response to harvesting activities. In other words, disturbance to the prey base may be as relevant a consideration as disturbance to the predator itself. For the purposes of this analysis, we recognize that some level of prey disturbance may occur as a fisheries effect. The impact on marine mammals using those schools for prey is a function of both the amount of fishing activity and its concentration in space and time. The criterion set for insignificant impacts is a similar level of disturbance as that which was occurring in 2001. Although the total pollock catch in the Aleutian Islands was only 824 mt (Table 3.2-1) in 2001 so that a fishery up to the ABC would be a substantial increase in the amount of catch compared to 2001, the test for significance is whether there would be more disturbance to the Steller sea lion population. Given that all of sea lion critical habitat is closed in the Aleutian Islands, and the effects of a fishery up to the ABC was considered in the 2001 BiOp and the Steller sea lion protection measures SEIS (NMFS 2001), no substantial disturbance effects are likely given the vast area beyond 20 n mi from land and the very limited use of this area by sea lions in the Aleutian Islands due to the bathymetry (i.e., deep water off the continental shelf). Thus, the effect under this alternative is insignificant according to the criteria set for significance.

1.2 Under this alternative, the Council could choose either a TAC amount similar to current CDQ pollock fishery groups receive, or perhaps the 40,000 mt cap option; impacts on Steller sea lions would likely be similar to those listed above. The level of impact would likely be proportional to the TAC amount set. This alternative requires the Council to consider the size of pollock allocations to the CDQ groups when setting the AI pollock DPF, and to limit any DPF to 40,000 mt. Conceivably the Council would be constraining the future AI pollock fishery if the AI pollock stock ABC increases. Under this scenario, the effect would be a limit on fishing activity in the Aleutian Islands resulting in less opportunity for SSL interactions with vessels and gear, gear loss, fuel spills, and other impacts than under Alternative 1.1. In this case, potential impacts on Steller sea lions that might occur under a much larger TAC would be precluded and this alternative might be considered to have a potentially positive effect compared to that alternative. This alternative has therefore been ranked “insignificant.”

1.3 This alternative would constrain the sum of the ICA and DPF to the TAC generated from that year’s ABC or 40,000 mt, whichever is less. Thus, the concerns over this alternative regarding Steller sea lions would likely be similar to those discussed above under Alternative 1.1 relative to setting TAC at the level of that year's ABC. The difference might be the constraint imposed by the 40,000 mt maximum, which, then, would result in concerns over Steller sea lions that would be similar to those discussed above under Alternative 1.2. This alternative does not change the current Steller sea lion protection measures which have been determined to provide sufficient protection for this species. Both Alternatives 1.1 and 1.2 were rated as "insignificant' with respect to the relevant criteria, and this alternative is so rated as well since its effects would be similar to or less than those outlined for Alternatives 1.1 or 1.2.

1.4 This alternative would provide a lower constraint on the harvest amount in that it specifies that a pollock"A"season DPF could not be set above 15,000 mt. And furthermore, based on recent years' TACs in the AI area, the other provision of this alternative would limit the DPF to 40% of the TAC derived from the ABC for that given year if not greater than 15,000 mt (and only an"A"season fishery would be allowed); thus, in this alternative there is the potential for even smaller levels of DPF. This alternative does not change the current Steller sea lion protection measures which have been determined to provide sufficient protection for this species. Also, under this alternative, similar to Alternatives 1.2 and 1.3, the effect likely would be a further limit on fishing activity in the Aleutian Islands resulting in even less opportunity for SSL interactions (compared to Alternative 1.1) with vessels and gear, gear loss, fuel spills, and other impacts. Also under this alternative, potential impacts on Steller sea lions that might occur under a much larger TAC would be precluded. Therefore, any potential impacts on Steller sea lions under this alternative would likely be less than described for the above alternatives, and thus Alternative 1.4 is rated "insignificant" with respect to the relevant criteria.

Effects on Other Marine Mammals

1.1 The Aleutian Islands area previously has been open to a directed pollock fishery. Prior to 1999, this fishery's TAC was as high as 100,000 mt. In recent years the TAC has been much lower, and the BSAI Plan Team's reevaluation of the AI pollock structure may lead to recommended closure to fishing east of 174 degrees W and perhaps lowered ABCs for the remainder of the AI region. The impacts of a reopened fishery on marine mammals would likely be similar to those impacts realized in this fishery in prior years. However, a reopened fishery will occur in areas outside of Steller sea lion protection areas; these protection areas will remain closed to pollock trawling. This may displace the Aleut Corporation pollock fishing activities into areas perhaps not fished as intensely as before.

Under this alternative, that is if the Council takes no action, then the TAC approved for an AI directed pollock fishery would be determined during the annual specifications process. Essentially, the Council could choose a TAC of zero or an amount up to the ABC set for the AI pollock stock for that year, which in past years has been up to as high as 100,000 mt (see caveat on ABC and fishing areas above). The annual TAC could fluctuate from year to year. The impacts on marine mammals would essentially be very small to negligible if TAC were set very low or at zero. Impacts could be higher if larger TACs were approved, but the impacts likely would be in proportion to the amount of TAC allocated. The more TAC that is allocated, the more fishing activity would occur in the region, and in turn, the more potential encounters between fishing activities and marine mammals could occur.

Impacts on marine mammals could include direct take in fishing nets or from vessel strikes, encounters with contaminants (oil or fuel discharges), or entanglement in discarded or lost fishing nets, package bands, and lines. Impacts also may be indirect through prey depletion or disturbance in marine mammal habitat areas used for reproduction, feeding, or migration, or direct through debris entanglement or capture in trawl nets. Historically, these concerns have not been considered to be of such magnitude that marine mammal populations were in danger of major decline. Thus, returning a fishery to this region that historically has had little impact on marine mammals would likely not have an adverse impact on these species.

There could be some effect of an AI pollock fishery if spatial concentration of fishing activity occurs. This could result from either larger AFA vessels fishing a relatively small TAC concentrating their efforts in an area or areas that yield good CPUEs, encouraging the vessels to remain in such areas to attain their TAC quotas as quickly and efficiently as possible. Also, if and when small vessels enter this fishery, and given the continued closures of areas near shore within 20 n mi of SSL protection areas, conceivably small vessels also could concentrate in areas open to fishing that are closest to ports or areas of refuge in stormy weather. In either case, some local depletion of marine mammal prey items could occur, but the volumes of potential harvest are small compared with available biomass. Impacts on marine mammals would be in proportion to the amount of TAC apportioned to this fishery.

If the spawning biomass of pollock, Pacific cod, or Atka mackerel are predicted to fall below 20 percent of its unfished spawning biomass, directed fishing for that species would be prohibited. This alternative would not allow directed fishing for pollock if the spawning biomass fell below 20 % of the unfished spawning biomass, and therefore would have insignificant impacts on the global availability of pollock in the Aleutian Islands area.

Vessel traffic, nets moving through the water column, or underwater sound production may all represent perturbations that could affect marine mammal behavior. An increase in fishing activity in the AI region could result in increased discard or accidental loss of fishing materials such as nets, package bands, lines, etc. that could increase the incidence of entanglement with marine mammals. Foraging could potentially be affected not only by interactions between vessel and species, but also by changes in fish schooling behavior, distributions, or densities in response to harvesting activities. In other words, disturbance to the prey base may be as relevant a consideration as disturbance to the predator itself. For the purposes of this analysis, we recognize that some level of prey disturbance may occur as a fisheries effect. The impact on marine mammals using those schools for prey is a function of both the amount of fishing activity and its concentration in space and time. The test for significance is whether there would be more disturbance to the marine mammal population or more entanglement in debris that would lead to increased take. For many marine mammal species, substantial disturbance effects are not likely given the vast area beyond 20 n mi from land. Entanglement rates are difficult to predict, but in recent years the fishing fleets have reduced discards of such material to very low levels. All in all, impacts of this alternative are not likely to be insignificant.

The northern fur seal population has declined over the past decade, and recent counts in the Bering Sea region suggest the decline is continuing. Fur seals breed and pup on the Pribilof Islands and on a few other islands in the Bering Sea region, and lactating females forage at sea to maintain a nutritional status sufficient to successfully nurse pups during the summer months. These foraging areas are primarily in the Bering Sea, and thus an AI pollock fishery would not likely overlap this foraging habitat. However, most of the Bering Sea fur seal population migrates through Aleutian Island passes en route to/from summer habitat and winter habitat. The fur seal is pelagic during the winter months in the north Pacific, although some remain in the Bering Sea region in winter. Migrations through the AI region could be affected by an AI pollock fishery through disturbance or direct take. Fur seals are susceptible to entanglement with derelict fishing gear because of their seasonal pelagic activity, and often entangle with lost nets and line around rookery areas. Even today, efforts to remove derelict gear, nets, lines, and other debris from beaches on the Pribilof Islands have resulted in large amounts of such debris. Fur seals feed on pollock, although primarily juvenile fish, and a pollock fishery could remove prey items used by fur seals; however, given the difference in size between fishery-targeted pollock and pollock consumed by fur seals, this overlap may be of less concern. Also, the AI pollock fishery is very distant from the main Bering Sea fur seal foraging areas, and would unlikely affect foraging fur seals. There still could be some impact on fur seals as they move through Aleutian Island passes, but the AI pollock fishery has operated there in the past, and many other fisheries continue to operate there, and the small incremental addition in the proposed action does not rise to a level of concern and thus is considered to be insignificant.

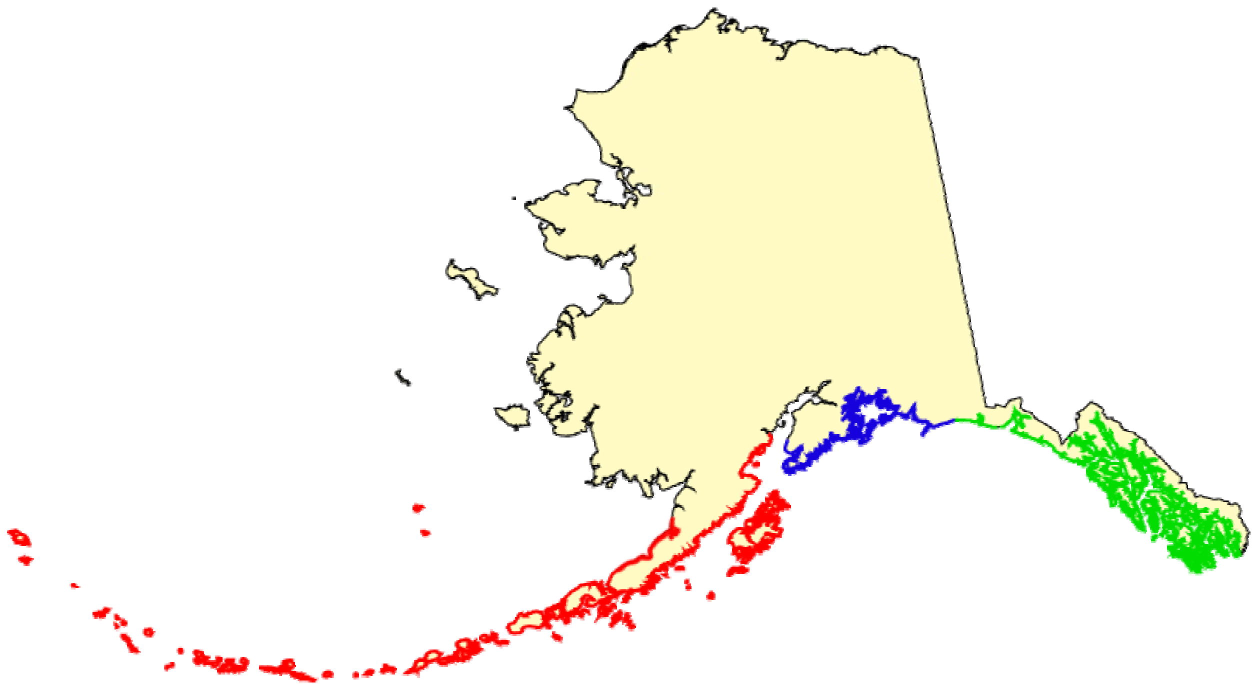
Similarly, some cetaceans migrate through the AI region, and special concern has been expressed over the extremely small population of northern right whale that seasonally occupies habitat in the Bering Sea. This highly endangered whale may be sensitive to encounters with fishing activity; as is currently understood, this whale is susceptible to vessel strikes because of its low profile when at the water surface making it difficult to see. Members of the right whale group (including the Atlantic stock) may entangle with lines from floating buoys, damaging baleen plates and impairing feeding. However, very little is known about the northern right whale's habitat, movement patterns, or other vital activities in the north Pacific region. Other cetaceans also may be susceptible to gear entanglement. Some mortality to humpback whales has been reported for trawl fisheries in the Bering Sea (Angliss and Lodge 2002), and mortality to fin whales also has been reported from BSAI groundfish trawl fisheries. Most baleen whales do not target food species that would be harvested in an AI pollock fishery (although some baleen plates in larger whales may sieve large quantities of larval or small juvenile pollock, among other fish species).

The Bering Sea stock of northern harbor seal experiences mortality from BSAI trawl fisheries of 2 or more individuals annually (Angliss and Lodge 2002). However, this level of mortality likely comes from a variety of groundfish fishery activities, and at these levels is not considered a threat to this population. Increased fishing in the AI by trawl vessels will likely be a small fraction of any future injury or mortality to harbor seals, primarily because these fisheries will be prosecuted distant from shore where harbor seals tend to concentrate throughout the year. Some heightened concern may remain, however, as the Alaskan populations of harbor seals (their stock structure is still not understood and is the subject of ongoing genetic and other research) have declined in some areas and managers are seeking to understand reasons so that mitigative actions might be taken in the future.

The southwest Alaska stock (Distinct Population Segment or DPS) of the northern sea otter is a candidate for listing as threatened under the Endangered Species Act (65 *FR* 67343; 11/9/00). This DPS of sea otter (see Figure 4.2.2-7b) is under a heightened level of concern because of the significant population decline in the Aleutian Islands in the past several years. It is unlikely that the AI pollock fishery would have any appreciable effect on sea otters because this species is very coastally oriented, does not migrate from area to area, and feeds on prey items not targeted by the fishery. Fuel spills and loss of nets and lines could result in direct contact and mortality to sea otters. However, the AI pollock fishery would be prosecuted well offshore and not in contact or proximity to sea otters, and thus would not likely have measurable effects on the sea otter population. Future impacts on this DPS may depend on action taken by Congress and the U.S. Fish & Wildlife Service on defining critical habitat. It is possible that some features of critical habitat may be susceptible to impact from groundfish fishing activities, although it again appears unlikely that an AI pollock fishery will overlap with sea otter critical habitat to any extent such that significant concern results.

Springer et al. (2003) discuss a possible mechanism that could explain the decline over recent decades in some north Pacific marine mammal species, including seals, sea lions, and sea otters. Their thesis is that industrial whaling in the mid 20th Century may have removed the primary prey (great whales, particularly fin, sei, and sperm) important to killer whales, thus causing killer whales to shift to feeding on smaller marine mammal prey in a sequential fashion causing a one-by-one collapse in population size of harbor seas, fur seals, sea lions, and most recently sea otters. The scientific community is not unified in acceptance of this hypothesis, but it is a potential factor that may have influenced marine mammal populations in the north Pacific, with the consequence of either absolving fishery activities as possible causes or reducing marine mammal populations sizes to such a low level that they are more susceptible to effect from smaller perturbations. Most scientists and managers likely agree that the reasons for how these various factors interweave and affect the population dynamics of the various species of marine mammals in this region is elusive.

Figure 4.2.2-7b The geographic range of the southwest DPS of northern sea otter.



[----------- range of southwest DPS --]

The overall combination of effects described above seem to indicate a small adverse impact of setting harvest specifications for pollock between zero and ABC on marine mammals. Some species are known to have potential interactions with groundfish fisheries (some whales, northern fur seals), and in some cases the effects of the proposed action in the context of this interaction are unknown. For some marine mammals, pollock are a component of their diet (harbor seals, Steller sea lions, northern fur seals), and some localized prey depletion might be a concern, depending on how the fishery is actually prosecuted. In the past, groundfish fishery effects on prey availability was one reason SSL protection measures were put in place, limiting prey removals within 3, 10, or 20 nm from SSL haulouts and/or rookeries. Thus, setting a TAC that could result in prey removals is of some concern. In some other cases insufficient information is available on the distribution, abundance, or habitat use patterns by many marine mammal species, making it impossible to predict impact, although from past history with the AI pollock fishery no significant concerns were raised. Some marine mammals that likely use the AI region for seasonal habitat, or migrate through the AI passes en route to or from seasonal habitat in the Bering Sea, are endangered, heightening the level of concern over any fishery prosecuted in their habitat. Some are in continued decline (e.g. northern fur seals) or have declined such that their population condition is uncertain (northern harbor seals, northern right whale). Given the potential for some overlap of this fishery with pelagic fur seals, movement corridors for northern right whales en route to/from summering areas in the Bering Sea, and movement corridors for some other cetaceans, the impacts of this alternative could be of concern, but the fact that this fishery has occurred in the region before without adversely impacting these marine mammals suggests that it will not have adverse impacts in the future. Many other marine activities occur in the area, and this small pollock fishery is likely to produce a small, incremental addition to fishing activity in the region. Overall, then, an insignificant rating is assigned to this issue.

1.2 If the Council should choose either a TAC amount similar to current CDQ pollock fishery groups receive, and is limited by the 40,000 mt cap, impacts would likely be similar to those listed above. The level of impact would likely be proportional to the TAC amount set. This alternative merely requires the Council to take pollock allocations to CDQ groups into account when setting the AI pollock DPF, and to limit the DPF to 40,000 mt. Conceivably the Council would be constraining the future AI pollock fishery if the AI pollock stock ABC increases. Under this scenario, the effect would be a limit on fishing activity in the Aleutian Islands resulting in less opportunity for marine mammal interactions with vessels and gear, gear loss, fuel spills, and other impacts. In this case, potential impacts on marine mammals that might occur under a much larger TAC would be precluded, and this alternative might be considered to have a similar, but potentially smaller effect compared to Alternative 1.1. This alternative has been rated “insignificant” because this alternative could lead to less fishing activity, less pollock removal, and less potential for take and entanglement than might be experienced under Alternative 1.1, and Alternative 1.1 was rated insignificant. This alternative has therefore been ranked “insignificant.” (see discussions above under Alternative 1.1).

1.3 The Council proposed this alternative so that a specific TAC level would be identified early in the schedule of the overall TAC-setting process each year. The alternative would restrict the AI pollock TAC to the TAC generated from the ABC or 40,000 mt, whichever is less. This alternative preserves the 40%/60% TAC split required by SSL protection measures in the AI region. Because this alternative merely sets a specific TAC amount that is either at ABC or less, the impacts are essentially the same as discussed above under Alternative 1.1 but constrained to a level commensurate with a maximum pollock TAC of 40,000 mt. Since the TAC would be constrained by either ABC or the absolute limit of 40,000 mt, the nature of impacts on marine mammals would likely be similar to those discussed in Alternative 1.2. The constraining nature of this alternative could result in a lowered TAC from what could be considered a maximum (at ABC), and thus would have impacts that could be considered to be "insignificant" for the reasons described under 1.2 above.

1.4 This alternative places a more restrictive limit on the TAC that could be apportioned to the AI pollock fishery. It also limits the fishery to the"A"season, January 20 to as late as June 10, annually. It does not allow a"B"season, although it preserves a 40%/60% split in AI pollock DPF to maintain adherence to the intent of the SSL protection measures (the"B"season apportionment of 60% of DPF is set at the beginning of the year but would not be harvested in the AI pollock fishery). Given that this alternative is more restrictive than Alternatives 1.1, 1.2, and 1.3, there is the element of a reduction in fishing effort embodied in this alternative that suggests a possibly reduced level of impact on marine mammals compared with the above three alternatives. Since Alternatives 1.1, 1.2, and 1.3 were rated insignificant, the impacts of Alternative 1.4 on marine mammals have also been rated "insignificant".

Effects on Seabirds

1.1 The Aleutian Islands would be open to a directed pollock fishery with the TAC set during the normal specifications process under this alternative. The proposed pollock fishery would be prosecuted in compliance with existing seabird protection measures. Several potential direct and indirect effects on seabirds are considered in this analysis. Annual levels of fishery-related incidental mortality to seabirds are estimated by comparing the ratio of observed incidental take of dead birds to observed groundfish catch (stratified by area and gear type). Incidental take frequencies also reflect locations where fishing effort is highest. In the Aleutian Islands and GOA, overlap between seabirds and trawl fishing effort is most likely to occur near shore or the relatively narrow band of the continental shelf. In the Bering Sea, trawling overlaps with birds along the continental shelf and mid shelf regions, thus extending farther from land masses than in the GOA (see GOA and BSAI SAFE documents).

The most frequent incidental take in trawl fisheries is of the northern fulmar (about 75% of trawl seabird bycatch), and over 500,000 northern fulmars nest on the Aleutian Islands. The next most common, shearwaters and Laysan albatross, do not nest in Alaska. Birds which utilize bottom fish and crustaceans, such as some alcids and cormorants (< 2% of total bycatch), may be taken in trawls or have their foraging affected. Between 5 - 7 % of birds taken in trawls are not identified, which may mean that alcids comprise a larger proportion of incidental take than previously recognized. The species most commonly subject to vessel strike mortality (especially in dark, stormy conditions or where lights are used) include five species of small auklets; auklets comprise about 32% of the colonial birds that nest on these islands.

In the Aleutian Islands (Unimak Pass to Attu), the Beringian Seabird Colony Catalog (USFWS 2004) lists approximately 10.5 million seabirds nesting at 274 colony sites. The colonies would usually be occupied by nesting birds from May through September, although some species, notably fulmars, may be raising chicks through October. Thus, primarily the "B" pollock season would substantially overlap temporally with colonially nesting birds, although the same species listed below are likely to be in the Aleutian area, further offshore, during their non-breeding season. These colonially nesting birds consist of 29 species, with the most abundant being fork-tailed storm-petrel (22% of total), leach's storm-petrel (24%), least auklet (22%) and tufted puffin (12%).

In terms of bird distribution at sea, the North Pacific Pelagic Seabird Database (NPPSD) (See SAFE 2002 report for figures) indicates that northern fulmars overlap with trawl fisheries in the Aleutians near the major passes and around the eastern Aleutian Islands. Shearwaters also occur primarily around Unimak Pass and the central to eastern Aleutians. Laysan albatrosses are most likely to overlap in the western Aleutians, whereas black-footed albatrosses are relatively rare in the Aleutians. In the Aleutians, short-tailed albatrosses have been observed most frequently near the central Aleutians and on the GOA side of the eastern Aleutians.

Because of the 20 n mi closure around SSL critical habitat, and the consequent closure of these areas to any pollock trawl fishery, many of the nearshore feeding birds, such as guillemots, cormorants, and sea ducks, should not experience a significant increase in incidental take from the proposed trawl fishery in the AI. Species that may experience a shift in location of incidental take in the Aleutians include albatrosses and shearwaters, although the global take should not increase significantly. An exception may be the Laysan albatross, which occurs primarily in the central and western Aleutians, and thus could experience an increase in total bycatch. The short-tailed albatross has only been observed to be taken in long-line fisheries, and the spectacled and Steller's eiders have not been recorded as incidental take in groundfish fisheries. The impact of third-wire interactions with albatrosses is not well defined, and is being addressed through on-going studies. This action does not create a pollock allocation in the Aleutian Islands, and so alone it would not likely have a significant impact.

The decision on the appropriate TAC amount will be considered in supplemental NEPA documents (typically the TAC specifications EA promulgated annually); thus, the effect of that determination will be considered in those subsequent documents.

Piscivorous seabirds utilize a wide variety of forage fish, as well as the juvenile stages of some commercial species such as pollock and Pacific cod. Forage fish are not commercially fished, and although their bycatch in trawl fisheries is not well defined, they do not appear to be a large proportion of fish bycatch (SAFE Ecosystem Considerations chapter, Forage fish, 2004).

Vessel traffic, nets moving through the water column, or underwater sound production may all represent perturbations that could affect seabird behavior. Foraging could potentially be affected not only by interactions between vessel and species, but also by changes in fish schooling behavior, distributions, or densities in response to harvesting activities. In other words, disturbance to the prey base may be as relevant a consideration as disturbance to the predator itself. For the purposes of this analysis, we recognize that some level of prey disturbance may occur as a fisheries effect. The impact on seabirds using those schools for prey is a function of both the amount of fishing activity and its concentration in space and time.

Rats are known to inhabit many of Alaska's coastal islands, and the USFWS has documented that rats have severely impacted native plants and certain species of seabirds on many of the Aleutian Islands. Rats change native vegetation, depredate bird eggs and chicks, and thus change the native plant and animal diversity. Several species of seabirds have been nearly eradicated from some Aleutian Islands, particularly species that nest in burrows such as storm petrels and puffins. Rat infestation is considered by the USFWS as their number one prevention priority in the Alaska Coastal Maritime Wildlife Refuge (Vernon Byrd, USFWS, personal communication, May 10, 2004), which includes nearly all of the Aleutian Islands region.

Adak and Unalaska Islands currently are rat infested, as are several other large and many small islands in the Aleutian chain. Entry of rats to these locations has been through past military occupancy, shipwrecks, or cargo or other materials transfers from vessels to the shore. The USFWS is actively working to eradicate rats on infested islands, educate local residents and the fishing community on rat prevention, and establish systems for response to potential rat infestation events. The threat of additional island infestation is taken seriously by the USFWS, the U.S. Coast Guard, and cooperating municipalities. The USFWS is currently attempting to extirpate rats from some infested islands using a variety of techniques.

The AI pollock fishery will involve small vessels as well as large. When vessels are docked in ports such as Adak or Unalaska, rats may run aboard or be transferred onboard through cargo. Given the often severe weather conditions in the region, vessels may suffer accidental groundings or become disabled or wrecked; such incidents could allow rats to populate an island or islet. Inclement weather especially may be an issue for smaller vessels that must fish beyond 20 nm offshore, exposing them to greater opportunity for accidents. Thus, it is possible that the increased use of small vessels in the AI pollock fishery could increase the opportunities for shipwrecks or groundings. If rats are aboard in such a case, vessels could introduce rats to areas in the Aleutian Islands that currently do not harbor rat populations, resulting in additional ecological damage to the region that would likely have very serious consequences to native habitat, particularly for certain nesting seabird species.

The criterion set for insignificant impacts is a similar level of disturbance as that which was occurring in 2001. The criterion set for insignificant impacts is a similar level of disturbance as that which was occurring in 2001. Although the total pollock catch in the Aleutian Islands was only 824 mt (Table 3.2-1) in 2001 so that a fishery up to the ABC would be a substantial increase in the amount of catch compared to 2001, the test for significance is whether there would be more disturbance to the sea bird population. Because sea lion critical habitat is closed in the Aleutian Islands, no substantial disturbance effects are likely within the 20 n mi zone around those islands. This closure would continue to provide 'protection' of food resources for guillemots, cormorants, and eiders near the protected rookeries and haulouts. Many species of birds forage extensively beyond this zone, however, and may also be attracted to fishing activity. Thus, some impact to foraging behavior is likely to occur in the Aleutians. Also some effects may occur with respect to birds nesting during the "B" pollock season; the "B" season overlaps with seabird occupation of nesting areas from May through September. This would also be the period when obtaining sufficient prey is critical to building reserves for egg laying, and for supplying food to newly hatched chicks. At this time there is insufficient information to determine if the proposed increase in fishing effort in the Aleutians would impact foraging of birds nesting in the Aleutians. Seabird productivity and population trends in the Aleutian islands should be monitored with respect to changes in the fishery, using the USFWS monitoring report (Dragoo et al. 2003) as a baseline.

More difficult to judge, however, is the concern over persistent bad weather in the AI region and the increased small vessel activity that would come with the AI pollock fishery, and what might be the potential for accidental grounding of vessels or vessel wreckage on an island that currently is not rat infested. As stated above, this could be significantly adverse to some species of nesting birds. NIOSH (2002) reports that the rate of fishing vessel loss in Alaska has not been declining (1991-1999), but those statistics include sinkings and other losses, and don't necessarily relate to vessel loss that would result in wreckage ashore. NIOSH statistics (unpublished, personal communication, February 27, 2004) indicate that up to 16% of vessel losses have occurred in the Aleutian Islands/Pribilof Islands region, but a very small proportion of Alaskan vessel losses have involved the pollock industry (3.2%). Further, there already is other vessel traffic in the region from military, cargo shipment, other target fishing activities, tendering, and some recreational vessel activity. The incremental addition of a small number of vessels fishing the AI pollock resource would likely have a very small probability of increasing the odds for a vessel loss that might contribute rats to an uninfested island that harbors a significant population of burrow-nesting seabirds. If necessary, the Aleut Corporation could develop a program of shipboard rat prevention to minimize this problem, particularly given Adak's current level of infestation. Given available information, it is unlikely that the proposed action would lead to an incident that accidentally brought rats to an uninfested island, and thus this alternative is judged to be insignificant.

Overall then, this alternative is not expected to increase or decrease the incidental take of seabirds significantly, to substantially change prey availability, to substantially increase or decrease impacts to benthic habitat, or to substantially increase or decrease processing waste and offal. This alternative is not expected to have a significant impact on burrowing bird colonies through the introduction of rats to rat-free islands.

1.2 This alternative requires the Council to consider the size of pollock allocations made to the CDQ groups when it determines the AI pollock DPF, and to limit that DPF to 40,000 mt, even if the ABC is larger. The impacts of this alternative on seabirds would likely be similar, or possibly less than, those listed above. The level of impact would likely be proportional to the TAC amount set. This alternative merely prescribes a TAC at a specific amount, either a "CDQ level" or 40,000 mt. Conceivably the Council would be constraining the future AI pollock fishery if the AI pollock stock ABC increases. Under this scenario, the effect would be a limit on fishing activity in the Aleutian Islands resulting in less opportunity for seabird interactions with vessels and gear, gear loss, fuel spills, and other impacts. In this case, potential impacts on seabirds that might occur under a much larger TAC would be precluded and this alternative might be considered to have a similar but potentially smaller effect compared to Alternative 1 (that is, it would reduce the potential for incidental take). Overall, however, as discussed above, specific TACs are not the issue here, just the process for setting TACs. And while the issue of potential rat entry to an uninfested Aleutian island is of concern, as discussed above the likelihood of an event that would lead to this is very small; and this alternative actually reduces the level of fishing that might occur in the region compared to Alternative 1.1, further lowering the probability of potential effect. Thus the effects of this alternative are judged to be insignificant.

1.3 The Council proposed this alternative so that a specific TAC level would be identified early in the schedule of the overall TAC-setting process each year. The alternative would restrict the AI pollock ICA and DPF to the TAC generated from the ABC, or 40,000 mt, whichever is less. This alternative preserves the 40%/60% TAC split required by SSL protection measures in the AI region. Because this alternative merely sets a specific TAC amount that is either at ABC or less, the impacts are essentially the same as discussed above under Alternative 1.1 but constrained to a level commensurate with a maximum pollock TAC of 40,000 mt. Since the TAC would be constrained by either ABC or the absolute limit of 40,000 mt, the nature of impacts on seabirds would likely be similar to those discussed in Alternative 1.2. The constraining nature of this alternative could result in a lowered TAC from what could be considered a maximum (at ABC), with a commensurately lowered level of fishery interactions with seabirds (fewer cable or superstructure strikes or fouling in nets). And while the issue of potential rat entry to an uninfested Aleutian island is of concern, as discussed above the likelihood of an event that would lead to this is very small; and this alternative reduces the level of fishing that might occur in the region, further lowering the probability of potential effect, and thus the effects of this alternative are judged to be insignificant.

1.4 This alternative places a more restrictive limit on TAC that could be apportioned to the AI pollock fishery. It also limits the fishery to the"A"season, January 20 to as late as June 10, annually. It does not allow a"B"season, although it preserves a 40%/60% split in AI pollock DPF to maintain adherence to the intent of the SSL protection measures (the"B"season apportionment of 60% of DPF is set at the beginning of the year but would not be harvested in the AI pollock fishery). Given that this alternative is more restrictive than Alternatives 1.1, 1.2, and 1.3, there is the element of a reduction in fishing effort embodied in this alternative that suggests a potentially reduced level of impact on seabirds compared with the above three alternatives. The constrained level of DPF that could be harvested in the AI pollock fishery under this alternative would result in lower levels of fishing vessel activities in the AI region, with the resultant likely lower levels of seabird take through trawl cable or superstructure strikes. Since these levels are currently not of major concern, this alternative would not appreciably change this situation. And while the issue of potential rat entry to an uninfested Aleutian island is of concern, as discussed above the likelihood of an event that would lead to this is very small; and this alternative actually reduces the level of fishing that might occur in the region, further lowering the probability of potential effect. Thus the effects of this alternative are judged to be insignificant.

Effects on Habitat

The Magnuson-Stevens Act amendments addressing habitat protection emphasized a need to insure healthy fisheries and to strengthen the ability of NMFS and the Council to protect and conserve essential fish habitat. EFH is defined as “those waters and substrate necessary to fish for spawning, breeding, feeding, and growth to maturity.” As part of the process of evaluating EFH considerations, Habitat Areas of Particular Concern, which are habitats that may be particularly sensitive to the effects of fishing activities, also are being evaluated by the Council. In the AI region, sensitive areas of concern include known concentrations of sponge and coral (see Figs. 4.2.2-8 and 4.2.2-9).

This section uses the following criteria to analyze the alternatives for habitat impacts:

- mortality and damage to living habitat
- benthic community structure
- distribution of fishing effort

Any new directed AI pollock fishery will be prosecuted using pelagic trawls (some AI pollock will still continue to be harvested incidentally to Pacific cod, rockfish or flatfish fisheries and may, thus, be harvested by gear other than pelagic trawls). Therefore, impacts on benthic habitat from the proposed action would be less than if bottom trawl gear were used, although large pelagic trawl nets full of target species catch may touch the sea floor in some situations. The primary habitat concerns in the AI region would be the potential adverse effects of an AI pollock fishery on the coral and sponge assemblages that are evident throughout the region; the locations of these habitat types are known based on bycatch of these organisms in previous trawl hauls over the past several decades. Figures 4.2.2-8 and 4.2.2-9 show these distributions.

Figure 4.2.2-8 Location of Coral bycatch in AI groundfish fisheries

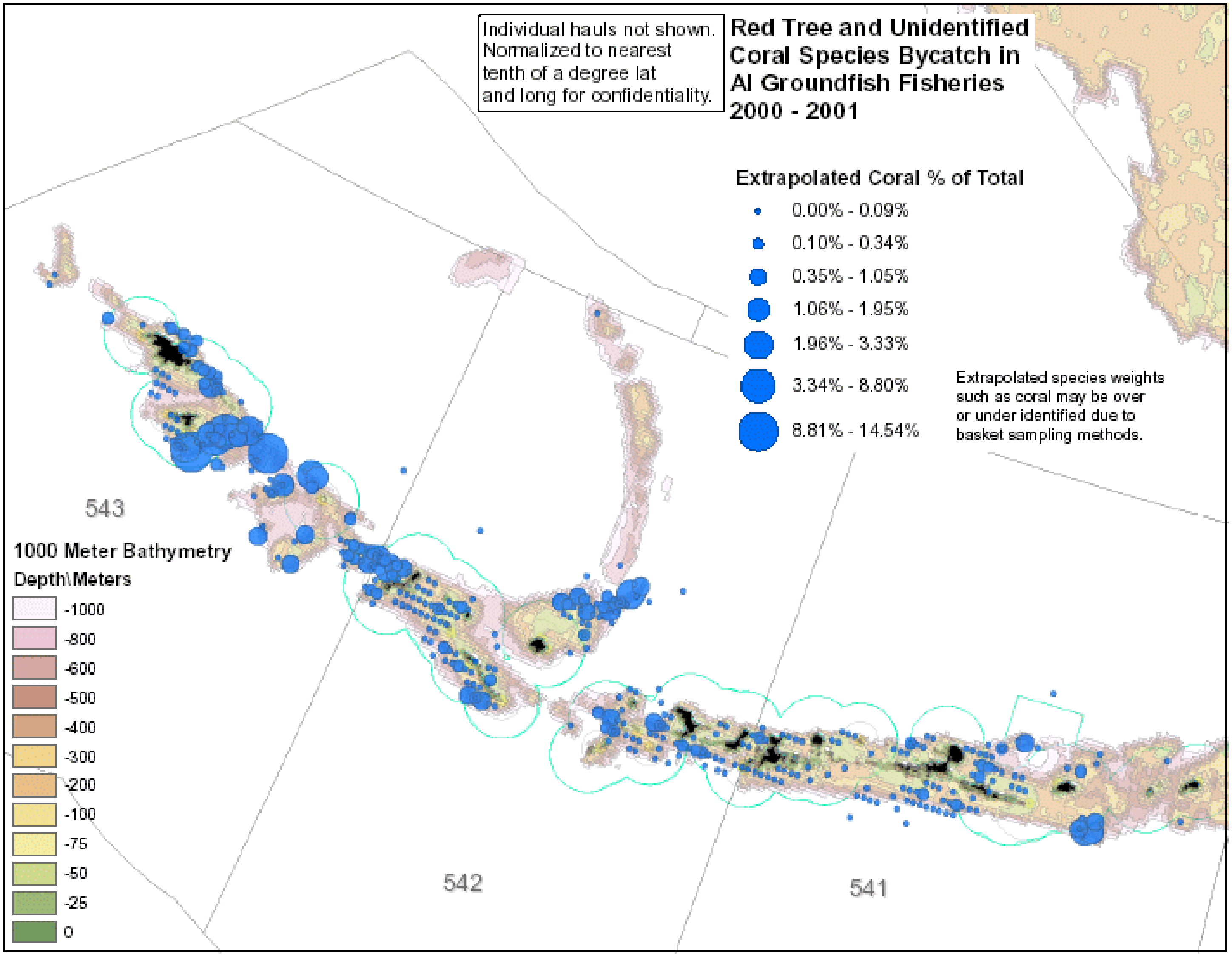
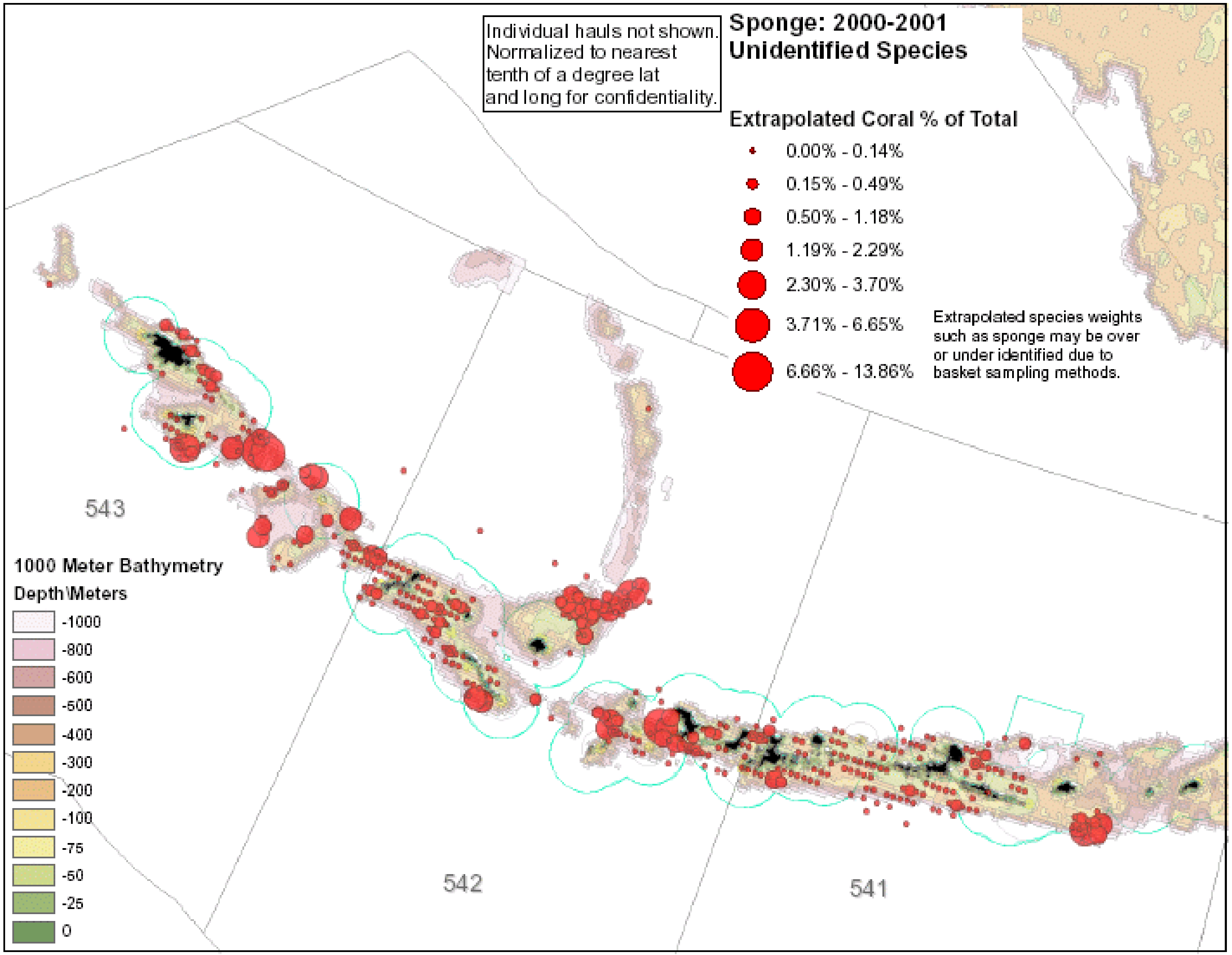


Figure 4.2.2-9 **Location of sponge bycatch in AI groundfish fisheries**



Additional information on marine habitat concerns and on the effects of fishing on benthic habitat is available in two analyses that have been prepared recently by NMFS and the Council: the revised draft Programmatic SEIS (NMFS 2003a) and the draft Essential Fish Habitat EIS (NMFS 2004).

Several sections of the draft PSEIS examine the effects of fishing activity on EFH, including the role of particularly sensitive or vulnerable areas of EFH, referred to here as Habitat Areas of Particular Concern (HAPCs). The draft PSEIS also outlines the history of fishery management actions to protect EFH, including a discussion of the effects of different types of gear on EFH and how gear may affect different types of substrate, as well as a discussion of trawling patterns in the North Pacific and the past and present effects on EFH. The draft PSEIS explains the criteria for evaluating impacts and summarizes these criteria. A habitat impacts model is presented in the draft PSEIS, and discussions of the draft PSEIS alternatives and their probable effects on EFH are provided as is an analysis of each alternative. Additionally, the draft PSEIS contains tables summarizing the projected effects of each alternative on habitat, including the status quo. This material is incorporated here by reference as useful background for this section.

NMFS and the Council have also prepared a draft EIS for Essential Fish Habitat. This draft EIS contains different alternatives for describing EFH, describes a process to identify HAPCs, and presents several alternative management regimes designed to minimize the effects of fishing on EFH. A substantial discussion of the effects on habitat from the gear used in groundfish fisheries can be found in the draft EFH EIS.

Appendix B in the draft EFH EIS is devoted to evaluation of fishing activities that may adversely affect EFH and explains in detail the in-depth analysis using Long-term Effects Indices (LEI). The pelagic fishery of the Eastern Bering Sea has indications of the most substantial effects on habitat but this is due to the large volume of the EBS pollock fishery (EBS pollock catch was about 1.4 million metric tons in 2003 out of a 2 million metric ton BSAI groundfish fishery).

When pelagic trawling, such as for pollock, the trawls are fished with doors that do not contact the sea floor, so any door effects are eliminated. Generally, because the pelagic trawl’s unprotected footrope effectively precludes the use of trawl nets on rough or hard substrates, pelagic trawls do not generally affect the more rare, fragile, and complex habitats that occur on these rougher substrates. However, such light contact could have a potentially greater impact on fragile habitats, such as hard corals and larger sponges in the AI than in the less structured, softer substrates of the EBS.

In the Aleutian Islands pollock fishery no intentional sea floor contact occurs, because the rough bottom conditions would result in torn or lost midwater trawls (EFH Committee 2002). Pollock in the BSAI are targeted exclusively by pelagic trawls. Non-pelagic trawling for pollock has been prohibited since 1999. Bottom contact is discouraged on sea floors that are rough by prohibiting any devices that protect trawl footropes. Pelagic gear is large and fairly delicate compared to more traditional non-pelagic gear. Larger pelagic gear is usually fished near softer substrates, such as the mud and sand of Bering Sea. Rougher substrates easily damage pelagic gear. Fishing areas in the Aleutian Islands are typically rougher in bottom type and more vertical in slope. The roughness of the bottom and the fragile pelagic pollock net configuration discourage even accidental contact of the net and bottom. The high cost of repairing a pelagic net damaged by contact with the bottom provides a built-in protection for habitat from fishing effort in the directed pollock fishery.

In the BSAI, vessels fishing for pollock are also limited by a performance standard that states that if more than 20 crabs are on board this is an indication of bottom trawling. Anecdotal evidence indicates that pelagic trawls are frequently fished at or near the bottom in areas with smooth floors—such as the Eastern Bering Sea; however, because the Aleutian Islands subarea has rough substrates, bottom fishing with pelagic gear is expected to be uncommon.

Under all these alternatives, the Aleutian Islands Steller sea lion Critical Habitat remains closed to directed fishing for pollock. Critical Habitat includes 20 nautical mile buffers around the rookeries and haulouts and also includes the Seguam Pass foraging area.

For the following analysis the 0-1000-meter bathymetry lines in the Aleutian Islands represents the continental shelf and the habitats at risk.[27]

- Steller sea lion Critical Habitat protects approximately 65% of the Aleutian Islands shelf from a pollock fishery. This leaves only 35% of the entire Aleutian Islands shelf potentially vulnerable to benthic impacts from a directed pollock fishery.

- Within 100 nautical miles of Adak, only 9% of the remaining open shelf is not protected from a directed pollock fishery. The open areas include a small area approximately five nautical miles below Tanaga Island and a larger area to the north and south of the western wing of Atka Island.

- Within 200 nautical miles of Adak, only 44% of the remaining open shelf is open to a directed fishery for pollock. The open areas includes a small area to the east of Seguam pass, to the north and south of the western wing of Atka Islands, a small area five miles to the south of Tanaga Island, a section of shelf crossing Amchitka Pass, most of Petrel Banks, and the southern half of Bowers Ridge.

1.1 Effects of apportioning TAC to the AI pollock fishery under the specifications process likely would vary in some proportion to level of TAC. The following discusses possible effects of setting TAC in a range of zero to ABC.

With any increase in pollock fishing in the AI, there will be slightly more gear contact with the sea floor. Because pelagic trawl gear is only estimated to be in contact with the Aleutian Islands sea floor a very small amount of the time, and because only about 35% of the Aleutian Islands shelf will be open to pollock fishing, the impacts would likely be insignificant. Rare occurrences of bottom contact by pelagic pollock gear may occur in areas not currently fished. In the event that biomass significantly increases and the allocation was set at ABC, there could be potential for some effects on living habitat. While this action does not create a pollock allocation in the AI, and so alone has an "insignificant" impact, it is possible that some allocations made in the specifications process could have impacts. While these are likely to be insignificant for many allocation levels, they could

[27] Bathymetry is based on ETOPO2. This is bathymetric data based on NOAA vessel soundings and satellite altimetry. Source: NOAA\NEMA. Boulder, CO.

be significant for some high allocation levels. Such allocations would be analyzed during the harvest specifications process.

Rare occurrences of bottom contact by pelagic pollock gear may occur in areas not currently fished. It is possible that these could impact benthic community structure. The more trawl hauls that occur, the greater the potential area of bottom contact, and thus, the greater the intensity of impact. This could result in damage to, or removals of, some larger coral and sponges. In the event that pollock biomass significantly increases and the allocation was set at ABC, there could be potential for adverse effects to living habitat. While this action does not create a pollock allocation in the AI, and so alone has an "insignificant" impact, it is possible that some allocations made in the specifications process could have impacts. While these are likely to be insignificant for many allocation levels, they could be significant for some high allocation levels.

The change in distribution of fishing effort would be proportional to the amount of the new allocation for pollock in the AI. Because of the current spatial restrictions of Steller sea lion critical habitat out to 20nm from shore, it would be necessary for the fleet to travel at least twenty miles from shore or travel to the nearest open coastline (outside 3 n mi). Much of the early pollock fishery was inside Critical Habitat. After Steller sea lion restrictions increased, some of this effort moved offshore to deep water near the west of the Bogoslof foraging area and east and north of Seguam Pass. Historically these new areas where effort may move were not high pollock catch areas, but under the proposed action these areas likely will be fished, leading to some more intensified fishing effort. Comparing these areas with Figures 4.2.2-8 and 4.2.2-9, there is some potential overlap with known sponge and coral assemblages, but not in areas where sponge or coral are considered to be heavily concentrated. Plus, again, the pelagic trawl restriction would reduce opportunity for trawl contact with these habitats.

While this action does not create a pollock allocation in the AI, and so alone has an "insignificant" impact, it is possible that some allocations made in the specifications process could have impacts. While these are likely to be insignificant for many allocation levels, they could be significant for some high allocation levels. The impact of such allocations would be further analyzed in the annual harvest specifications.

1.2 Effects of this alternative, which is similar to 1.1 but provides for a maximum harvest of 40,000 metric tons of pollock, would be similar to those discussed above but minimized under this cap. This alternative would preclude scenarios where ABC rose high enough such that TACs could be set higher than 40,000 mt. The nature of effects compared with Alternative 1.1 are reduced, and thus the overall impact is considered "insignificant".

1.3 The Council proposed this alternative so that a specific TAC level would be identified early in the schedule of the overall TAC-setting process each year. The alternative would restrict the AI pollock ICA and DPF to the TAC generated from the ABC, or 40,000 mt, whichever is less. This alternative preserves the 40%/60% TAC split required by SSL protection measures in the AI region. Because this alternative sets a specific TAC amount that is either at ABC or less, the impacts are essentially the same as discussed above under Alternative 1.1 but constrained to a level commensurate with a maximum pollock TAC of 40,000 mt. Since the TAC would be constrained by either ABC or the absolute limit of 40,000 mt, the nature of impacts on habitat would likely be similar to those discussed in Alternative 1.2. The constraining nature of this alternative could result in a lowered TAC from what could be considered a maximum (at ABC), with a commensurately lowered level of fishery interactions with the sea floor and such structure as coral or sponge habitat. Thus this alternative would have impacts that could be considered to be "insignificant" for the reasons described under 1.2 above.

1.4 This alternative places a more restrictive limit on DPF that could be apportioned to the AI pollock fishery. It also limits the fishery to the"A"season, January 20 to as late as June 10, annually. It does not allow a"B"season, although it preserves a 40%/60% split in AI pollock DPF to maintain adherence to the intent of the SSL protection measures (the"B"season apportionment of 60% of DPF is set at the beginning of the year but would not be harvested in the AI pollock fishery). Given that this alternative is more restrictive than Alternatives 1.1, 1.2, and 1.3, this would result in a reduction in fishing effort with a likely decreased level of impact of trawl gear on the sea floor compared with these three alternatives. Thus the impacts of Alternative 1.4 on habitat are considered to be "insignificant".

Ecosystem Effects

The proposed action would apportion pollock TAC to the Aleut Corporation. The goal of this action would be to increase the level of harvest of the AI pollock stock so that economic benefit accrues to Adak. At issue is the potential effect on the ecosystem of harvesting pollock in the AI at levels that approach ABC. For analytical purposes, a perspective on these effects can be gained from consideration of historic AI pollock ABC levels and the probable fishing levels and locations in the proposed Aleut Corporation pollock fishery. It is presumed that there is some relationship between harvest level and impact on the ecosystem - i.e., higher levels of harvest might result in greater potential for alteration of predator-prey relationships, energy flow, and species diversity in the AI region.

Historically the AI pollock fishery TACs were around 23,000 mt to as high as 100,000 mt. The fishery is relatively "clean" with little bycatch of non-target species. Incidental harvest of PSC has been low (effects of the action on bycatch of PSC is addressed in a subsequent section). Steller sea lion conservation measures now in force in the AI region will require pollock harvests to be split such that no more than 40 % of the TAC is harvested in the"A"season (60 % in the"B"season). Considering the most recent 39,400 mt ABC set by the Plan Teams for AI pollock, about 15,800 mt could have been harvested in the"A"season in 2004 if the Council had apportioned the entire ABC as TAC for 2004.

Initially, the Aleut Corporation will likely have primary interest in fishing the"A"season because of the high roe content of pollock during winter. Thus harvests in the initial years of this fishery likely will be well below TAC, but may increase as interest increases in fishing the full TAC by fishing in the"B"season also. Also, this fishery likely will be initially prosecuted by larger catcher/processor (C/P) vessels, but gradually smaller vessels will enter the fishery. Thus in the early years, pollock harvest will likely be compressed in time and space because of the harvest and processing power of large C/Ps, but over time smaller vessels will harvest at slower rates and perhaps in locations closer to shore. Constraining harvest location will be the Steller sea lion 20 n mi closures in many areas of the AI, requiring vessels, regardless of size, to fish beyond 20 n mi. This might compress catch in specific areas closest to the 20 n mi closure zones and where potential refuge from inclement weather is closest. These constraints on small vessels might also constrain the harvest of the full TAC set in any given year.

1.1 This alternative provides for the AI pollock apportionment to be determined in the normal specifications process. That process includes a chain of events that includes assembling preliminary stock assessment information for the managed species in the BSAI or the AI subarea, preliminary estimates of bycatch of species not targeted in each specific fishery, updated data on seabird and marine mammal incidental take in these fisheries and seabird and marine mammal population status, and a suite of ecosystem indicator information including predation, energy flow and balance, and species complex diversity perspectives. This information is reviewed and discussed by Plan Teams for the GOA and the BSAI in relation to proposed levels of ABC for each managed stock.

The Plan Teams have annually produced the result of their assessment of fishery effects on various components of the marine environment, including a section on ecosystem considerations, in a Stock Assessment and Fishery Evaluation document. NMFS also produces an EA/RIR/IRFA that summarizes the environmental consequences of setting TAC at various levels. This document and the SAFE document provide the scientific basis upon which the Council weighs the effects of setting TACs on the environment. This entire process annually takes into account the effects on the ecosystem of setting TAC for the various fisheries. This alternative would not change this process. Thus, this alternative is judged to have insignificant impacts on the ecosystem, for the reasons discussed in more detail below.

Ecosystem considerations when setting TAC include addressing effects of the action on predator-prey relationships, energy flow and balance, and biological diversity. Under predator-prey relationships, the action could affect pelagic forage availability. This action will not set the TAC levels but merely provide the process for TAC setting. TACs could be set at zero or as high as the ABC for the AI pollock stock for that year. Presumably lower levels of TAC will result in lower levels of pollock harvest, with the appurtenant lower impacts on the ecosystem. Lower levels of TAC would result in fewer removals of pollock, and other species taken as bycatch, thus removing less forage from the system.

Atka mackerel and pollock are important prey items for marine mammals and other species in the AI marine ecosystem. Over the period 1977-2003, modeled point estimates of Atka mackerel biomass age 1+ ranged between 260,860 mt and 771,360 mt. In recent years (1997-2003) modeled biomass estimates ranged from about 415,000 to about 459,000 mt (2004 SAFE page 749). Pollock biomass from AI groundfish survey estimates has ranged between 77,000 mt and 175,000 mt since 1991 (2004 SAFE page 862). In recent years (since 1997), Atka mackerel catches have ranged from about 46,000 mt to about 66,000 mt. Pollock catches have been very low, only as bycatch for other fisheries (less than 1000 mt annually). The 2004 pollock ABC in the AI was 39,400 mt. TACs in the early 1990s were higher than this. The Aleut Corporation likely will be primarily interested in the pollock roe fishery, which is subject to the 40% of TAC limit of the Steller sea lion protection measures. Thus, actual harvest, especially in the early years of this program, may be significantly less than the TAC. Also, as noted above, fishermen will have to direct their attention to new waters.

Given the above considerations, the TAC setting process would result in TACs being at low or high levels depending on the Council's preferred "mix" of permitted fisheries in the BSAI region given the OY cap that would constrain the sum of TACs for all BSAI fisheries. Regardless of the level of TAC, however, and considering Atka mackerel and pollock as indicators of forage species abundance in this area, the effects of setting TAC for an AI pollock fishery would not likely adversely affect forage availability given the large amounts of forage biomass in the AI region.

The action also could affect spatial and temporal concentration of fishery impacts on forage. This alternative would not change existing regulations governing the timing and location of harvests. And the AI pollock fishery would be subject to Steller sea lion protection measures. These include the 40%/60% "A"/"B" season split and the prohibition of pollock fishing within 20 miles of most Aleutian Islands shoreline. These measures will prevent spatial and temporal concentration of the fishery on forage fish.

The action could result in the removal of top predators. This action will not have a significant impact on removals of marine mammals or seabirds (see the relevant sections in this EA). Sharks did not appear in bycatch in significant numbers during the directed fishery in the 1990s. Steller sea lion protection measures would limit impact on these animals.

The action also could result in the introduction of nonnative species. Of particular concern is the transmission of invasive species in the ballast water of vessels as they move from one region to another. This action represents a modest change in harvest activity in the BSAI area. Some vessels will likely change their operating patterns with the BSAI or between the BSAI and GOA. This action is not expected to attract significant numbers of new vessels from the continental U.S. Any that may come will almost certainly come from the Pacific Northwest, which has been the situation for many years. Invasive species monitoring has not been extensive in areas around Alaska like the AI region, so it is unknown what kinds of impacts have occurred already from other activities.

Under the category of energy flow and balance, the proposed action would result in TACs set either at low levels or up to as high a level as the recommended ABC for the given year. The process of setting

TACs will itself not affect energy flow in the AI marine system, but the consequences of setting low TACs might be considered a smaller effect than setting higher TACs - lower TACs equals lower levels of biomass removals and, in turn, a smaller effect on energy balance in the food chain that includes pollock, either as prey or as predator.

The action could result in energy re-direction. The use of C/Ps to harvest the AI pollock quota and the likely shift in deliveries of harvested pollock to Adak should shift some offal production from the Bering Sea to the AI. Limits on offal production associated with the 40%/60% "A"/"B" season split, and the early emphasis of interest in fishing primarily the "A" season may shift energy into certain areas and seasons. If the fishery concentrates only in the"A"season, and the"B"season apportionment is not harvested, it is possible that larger proportions of the TAC will not be harvested in AI in this situation, but will be rolled over back to the Bering Sea. Also a consideration is gear effects; this fishery will be pursued with pelagic trawl gear, and thus any impacts on benthos should be relatively minor. Certainly some fraction of any discards or offal from C/Ps or catcher vessels will settle through the water column, providing an energy source for pelagic or benthic organisms.

The action could result in energy removal. An increase in pollock removals in the AI may be partially offset by a reduction in pollock and other species removals in the Bering Sea. Concentration of removals of pollock biomass would be limited by the required A/B season split and the 20 n mi closure zones. If a relatively minor interest in fishing the "B" season materializes, this may mean that the full AI TACs won't be harvested, and that some levels of TAC will be rolled over to the Bering Sea.

The action could affect species or ecosystem diversity. However, pelagic pollock trawling is a relatively clean fishery with limited bycatch. Pollock removals will be within ABC. This alternative would not likely affect the diversity of species in the AI region.

The action also could affect functional diversity. Under this alternative, the fishery would be almost purely pollock, with some bycatch of Pacific cod, Atka mackerel, sablefish, flatfish, and rockfish, but at very low levels. Thus there likely would be little change in the trophic level of the catch and the trophic level of the remaining groundfish community. The fishery would be prosecuted only with pelagic gear; and fishing would be prohibited within 20 n mi of most AI shoreline; these factors would limit the potential for impacts on structural habitat diversity.

The action could affect genetic diversity. Under this alternative, the AI pollock fishery would be prosecuted at or below the TACs set by the Council and, while the fishery would likely focus on roe-bearing pollock, especially in the early years of the fishery, the pollock stock would be protected from over harvest because of TACs set at or below ABC. The 40/60 A/B season TAC split would spread out the harvest, reducing the chance for over harvest of pollock. A re-evaluation of the pollock stock structure is currently being conducted by the BSAI Plan Team. TACs set for this fishery in future years may be impacted by the results of this analysis should a different stock structure emerge; in this case, the Plan Team likely would recommend an appropriate ABC or ABCs for the apparent stock(s) in the AI region. The results of this effort would be to enhance protection and conservation of the genetic stock structure of pollock in the overall BSAI system. New information on stock structure or other characteristics of pollock in the AI region might add data that are useful in this re-evaluation of the AI pollock stock.

In summary, Alternative 1.1 is not expected to have a significant impact on predator-prey relationships, energy flow and balance, or ecosystem diversity. This alternative has been given a rating of "insignificant."

1.2 Under this alternative, the Council would be guided in setting TAC for the AI pollock fishery by amounts apportioned to BSAI CDQ groups, and would be subject to a 40,000 mt cap. The overall effect of this would be to potentially constrain the Council from setting TACs at higher levels if ABC for AI pollock increases above these levels.

Ecosystem effects would be similar to those discussed above in 1.1. Only the degree of impact would likely change. However, under Alternative 1.1 any TAC could be apportioned to the AI pollock fishery from zero to ABC, probably encompassing any of the possible TACs that could be set under this alternative. Thus the overall effects would be the same as, or less than, those discussed under Alternative 1.1. Thus, Alternative 1.2 has been rated insignificant.

1.3 Under this alternative, the pollock ICA and DPF would be restricted to the TAC generated from the ABC, or 40,000 mt, whichever is less. This alternative preserves the 40%/60% TAC split required by SSL protection measures in the AI region. Because this alternative sets a specific TAC amount that is either at ABC or less, the impacts are essentially the same as discussed above under Alternative 1.1 but constrained to a level commensurate with a maximum pollock TAC of 40,000 mt. Since the TAC would be constrained by either ABC or the absolute limit of 40,000 mt, the nature of impacts on the ecosystem would likely be similar to those discussed in Alternative 1.2. The constraining nature of this alternative could result in a lowered TAC from what could be considered a maximum (at ABC), with a commensurately lowered level of fishery interactions with the ecosystem components or the system as a whole. Thus this alternative would have impacts that could be considered to be "insignificant" for the reasons described under 1.2 above.

1.4 This alternative places a more restrictive limit on DPF that could be apportioned to the AI pollock fishery. It also limits the fishery to the"A"season, January 20 to as late as June 10, annually. It does not allow a"B"season, although it preserves a 40%/60% split in AI pollock DPF to maintain adherence to the intent of the SSL protection measures (the"B"season apportionment of 60% of DPF is set at the beginning of the year but would not be harvested in the AI pollock fishery). Given that this alternative is more restrictive than Alternatives 1.1, 1.2, and 1.3, this would result in a reduction in fishing effort with a likely decreased level of impact of the AI pollock fishery on the BSAI ecosystem compared with these three alternatives. Thus the impacts of Alternative 1.4 on the ecosystem are considered to be "insignificant".

Effects on State-managed and Parallel Fisheries

1.1 The creation of a new pollock fishery inside state waters would require consultation with BOF. ADF&G and BOF cannot create an exclusive fishery, restricting participants to Aleut Corporation-approved entities. If a pollock fishery were to open inside state waters, it would be subject to Board of Fisheries regulations, but would not be limited to participants of any specific group.

If the Aleut Corporation allocation is determined each year according to the annual specifications process, it would be calculated with the latest scientific information available on pollock and other target species from the most recent surveys. The total allocation could go up or down depending on the estimated abundance of pollock. Because the parallel fisheries inside state waters accrue towards the federal TAC for that target species, if the allocation to the Aleut Corp were to increase towards its upper limit of the ABC, then it is possible that a minor TAC reduction in parallel fisheries in the BS would result. These effects would be very minor, if they existed at all.

As noted in Section 3.6 of the EA, about 95% of state waters in the Aleutian Islands are in areas that are closed to pollock fishing by Steller sea lion protection measures. The opening of these areas to fishing would require consultation by NMFS. A visual inspection of this maps shows that the only state waters in NMFS areas 541, 542, and 543 that are not inside critical habitat are waters south of Atka Island from Vasilief Bay to Sergief Bay, and waters immediately north of Atka Island. Figure 3.2-1 depicts the locations of historical catches of pollock in the AI, and does not show any significant historical catch of pollock in these areas. Upon further communication with ADF&G regional staff and review of observer and fish ticket catch data, this area seems subject to only minimal fishing effort for any species. For this reason, it is likely that this action will be "insignificant" under a wide range of AI pollock allocations. However, a definitive statement can't be made without considering specific AI pollock allocation levels in the specifications process. The current action will not result in any allocation to the AI pollock fishery, and will not itself result in any new fishing activity in the AI or in state waters of the AI. This action is therefore rated "insignificant."

1.2 If the NPFMC were to place a cap on the Aleut Corporation allocation of 40,000 mt, it is likely that any effects to state-managed and parallel groundfish fisheries would be insignificant. Any potential effects to state managed and parallel fisheries in the Aleutian Islands from this potential pollock allocation appear to be minimal; however, the creation of a new pollock fishery inside state waters would require consultation with BOF. ADF&G and BOF cannot create an exclusive fishery, restricting participants to Aleut Corporation-approved entities. If a pollock fishery were to open inside state waters, it would be subject to Board of Fisheries regulations, but would not be limited to participants of any specific group. (Note also that any AI parallel pollock fishery prosecuted inside state waters would trigger reinitiation of formal consultation on the effects of such a fishery on the endangered Steller sea lion.)

Other state-managed and parallel fisheries that occur inside state waters in the Aleutians are briefly described above, and include golden king crab, red king crab, tanner crab (historically), sablefish fisheries, Pacific cod, pollock (prior to 1999), Atka mackerel, and rockfish.

The state-managed sablefish fishery had large catches around Tanaga and Kanaga Islands and to a lesser extent around Adak in 1999. This fishery is restricted to pot, longline, jigs or hand troll, and does not open until May 15. It is likely that the bulk of an"A"season pollock allocation would have been taken before this state-managed fishery opened.

The golden king crab fishery opens August 15th, and has been closed after fewer than 6 weeks in the eastern Aleutians, and after approximately 9 months in the western Aleutians (NPFMC 2002). After the eastern district closes in September, and after the Bristol Bay Red King Crab fishery closes in October, 4-5 vessels move into the western district, west of Adak around the Delarof Islands (pers. comm. Bowers). In January the fishery mostly occurs west of Adak, and closes in mid-February. Pots may be stored, when not in use, in waters less than 75 fathoms deep between 169˚ and 173˚ W around Seguam Island, Islands of Four Mountains, and Amlia Island, however most of this area is Steller sea lion critical habitat, and thus would not be open to pollock fishing as long as ADF&G and BOF continue to mirror federal regulations. Therefore, potential gear conflicts seem to be very minimal. Other crab fishery seasons vary from year to year based on abundance, and may or may not be open to fishing.

Groundfish fisheries that occur inside state waters are subject to federal and state regulations, as described previously. It is likely that similar restrictions would be imposed on a parallel pollock fishery in this area (pers. comm. Wayne Donaldson). Any effects of this allocation on existing groundfish fisheries seem to be insignificant.

1.3 This alternative would have similar effects on state-managed or parallel fisheries as described above for Alternatives 1.1 and 1.2. Under this alternative, pollock harvest would be restricted to the TAC generated from the ABC, or 40,000 mt, whichever is less. This alternative preserves the 40%/60% TAC split required by SSL protection measures in the AI region. Because this alternative sets a specific TAC amount that is either at ABC or less, the impacts are essentially the same as discussed above under Alternative 1.1 but constrained to a level commensurate with a maximum pollock TAC of 40,000 mt. The overall effects are thus judged to be insignificant.

1.4 This alternative places a more restrictive limit on DPF that could be apportioned to the AI pollock fishery. It also limits the fishery to the"A"season, January 20 to as late as June 10, annually. It does not allow a"B"season, although it preserves a 40%/60% split in AI pollock DPF to maintain adherence to the intent of the SSL protection measures. Thus the opportunities for conflicts or interactions with State-managed or parallel fisheries is greatly reduced temporally. Given that this alternative is more restrictive than Alternatives 1.1, 1.2, and 1.3, this would result in a reduction in fishing effort with a likely decreased level of impact of the AI pollock fishery on these fisheries compared with the other three alternatives. Thus, the impacts of Alternative 1.4 on State-managed or parallel are considered to be “insignificant”.

Table 4.2.2-2 Economic and socio-economic significance analysis of allocation size decision

	The Council must decide whether or not to recommend adding language to the FMP amendment constraining its future decisions about the size of the AI pollock allocation. Alternative 1.1 is no action. The Council is considering two constraints under Alternative 1.2: (1) a qualitative statement that the size of CDQ allocations should be considered insetting the AI allocation, and (2) a 40,000 mt maximum limit on future allocations. Alternative 1.3 sets the sum of the ICA and DPF equal to the TAC derived from the ABC for that year, or 40,000 mt, which ever is less. Alternative 1.4 sets the DPF equal to 15,000 mt or 40% of the TAC, which ever is less, and restricts fishing to the "B" season.			
Issue	**Alternative 1.1 (no action)**	**Alternative 1.2**	**Alternative 1.3**	**Alternative 1.4**
Gross revenues	Decision to leave the language as to the size of AI allocation non-specific, in and of itself, will have no impact on gross revenues. Gross revenues impact will depend on size of actual allocation, which will be determined in the annual specifications process. AI Chinook PSC counts against the Chinook limit. An increase in Chinook PSC may affect Chinook Salmon Savings Area closure. This is not, however, affected by this FMP level action. Impact will depend on size of actual allocation determined during specifications process. Not significant.	Decision to add specific numerical allocation language may affect future Council decision making with respect to gross revenues. Impact will depend on what Council would have done in absence of the provision. A requirement to consider CDQ allocations when setting the AI allocation is qualitative and is unlikely to constrain decisions under most circumstances. The 40,000 mt cap is more precise, and may or may not constrain allocation and revenue, depending on ABC and Council willingness to take TAC from other allocations. Changes in revenues to Aleut Corporation would, in large part, be offset by changes in revenues to other BSAI fleets since AI allocation will come from within the OY. Not significant.	Alternative 1.3 is a subset of the options in Alternative 1.2. While Alternative 1.2 caps the DPF at 40,000 mt, but allows the Council to choose other levels below that, Alternative 1.3 requires a DPF plus ICA of 40,000 mt or less if the ABC is less. Since Alternative 1.2 was not significant, Alternative 1.3 is not significant.	Alternative 1.4 is a subset of the options in Alternative 1.2. While Alternative 1.2 caps the DPF at 40,000 mt, but allows the Council to choose other levels below that, Alternative 1.4 requires a DPF of 15,000 mt or the ABC, whichever is less. Since Alternative 1.2 was not significant, Alternative 1.3 is not significant.
Operating costs	Not significant; previous reasoning	Not significant; previous reasoning	Not significant; previous reasoning	Not significant; previous reasoning
Net returns	Not significant; previous reasoning	Not significant; previous reasoning	Not significant; previous reasoning	Not significant; previous reasoning

Issue	Alternative 1.1 (no action)	Alternative 1.2	Alternative 1.3	Alternative 1.4
Safety and health	Not significant; previous reasoning	Lower TACs may be taken with fewer vessel days. This would tend to reduce exposure to potential accidents, theoretically reducing the number of accidents and losses. The impact of adding the provision to the FMP will depend on many other factors and decisions. Future TACs may depend on stock biomass and on Council recommendationss about how to weigh CDQ experience in TAC determination. Future Aleut Corporation decisions about the vessel composition of the fleet will affect the outcome. Moreover, if TACs would otherwise have been larger without the provision, they may only have been modestly larger. Lower TACs means that the Aleut Corporation will have less to invest in Adak and the development at Adak that could increase safety for fleets already operating in the Aleutians would be less. There are a number of other development initiatives underway at Adak, involving other fisheries, fuel distribution, and national defense related work. The pollock fishery is only part of this development effort. The modest changes in pollock allocations implied in this decision would have a relatively modest impact on Adak development efforts, and a modest impact on safety. Not significant	Not significant; previous reasoning	Not significant; previous reasoning

Issue	Alternative 1.1 (no action)	Alternative 1.2	Alternative 1.3	Alternative 1.4
Related fisheries	Choice of allocation size can have impacts on related fisheries in the BSAI, by leaving them with less fish for a directed fishery. Allocation size may also make it more or less likely for vessels from GOA to participate. However allocations are likely to be small compared to overall BSAI OY (2%) Actual impact will depend on ultimate size of allocation in specifications decision. This action may affect salmon escapement to directed commercial, recreational, or subsistence fisheries. While this may have adverse impacts for these fisheries, these are not expected to be significant, for reasons discussed in Sections 4.2.4 and 4.7. Not significant.	The changes in harvesting patterns associated with this action will be small (2%) compared to normal fluctuations in BSAI OY. Any constraints implied by this alternative would also have a small impact. Not significant.	Not significant; previous reasoning	Not significant; previous reasoning
Consumer effects	Reallocations would account for relatively small amounts of OY in BSAI (2%). Under any scenario, at least 50% of the reallocation will involve an increased harvest of pollock in one area and a reduction in the other. There should be little impact on quality, quantity, or price of product reaching consumers. Not significant.	Reallocations would account for relatively small amounts of OY in BSAI (2%). Under any scenario, at least 50% of the reallocation will involve an increased harvest of pollock in one area and a reduction in the other. There should be little impact on quality, quantity, or price of product reaching consumers. Not significant.	Not significant; previous reasoning	Not significant; previous reasoning
Management and enforcement	No significant change in management and enforcement efforts are contemplated under any scenario. Not significant.	No significant change in management and enforcement efforts are contemplated under any scenario. Not significant.	Not significant; previous reasoning	Not significant; previous reasoning
Excess capacity	The changes in harvesting patterns associated with this action will be small (2%) compared to normal fluctuations in BSAI OY. Associated changes in excess capacity will also be small. In any event, there will be no changes until specifications for this fishery are adopted. Not significant.	The changes in harvesting patterns associated with this action will be small (2%) compared to normal fluctuations in BSAI OY. Any constraints implied by this alternative would also have a small impact. Associated changes in excess capacity will also be small. In any event, there will be no changes until specifications for this fishery are adopted. Not significant.	Not significant; previous reasoning	Not significant; previous reasoning

Issue	Alternative 1.1 (no action)	Alternative 1.2	Alternative 1.3	Alternative 1.4
Bycatch and discards	The impacts of the alterative on the bycatch and discard of prohibited species and on other target species are discussed elsewhere in this section. Impacts will depend on size of actual pollock allocation which will be determined in the annual specifications process. Not significant.	The impacts of the alternative on the bycatch and discard of prohibited species are discussed under the “Effects on prohibited species” section. These ratings have been adopted for this criterion. Not significant	Not significant; previous reasoning	Not significant; previous reasoning
Subsistence use	Little is known about local subsistence uses of pollock. However, any pollock fishery will take place at least 20 miles from shore and should not affect any subsistence harvests. As discussed above (under “related fisheries”) there may be adverse impacts on subsistence salmon fisheries in Western Alaska. However, these are not expected to be significant impacts. Not significant.	Little is known about local subsistence uses of pollock. However, any pollock fishery will take place at least 20 miles from shore and should not affect any subsistence harvests. Not significant.	Not significant; previous reasoning	Not significant; previous reasoning
Impacts on benefits from marine ecosystems	Harvests will be within ABC. Harvests will not affect the continued existence of the pollock stocks, or any passive use values for those stocks. Pollock are prey species for SSL. Any fishery would be consistent with SSL protection measures. No known direct eco-tourism use of pollock stocks. Eco-tourism may depend or come to depend on pollock predators, such as SSL. As noted in ecosystem section, pollock harvests are not expected to have a significant impact on forage availability. Not significant.	Harvests will be within ABC. Harvests will not affect the continued existence of the pollock stocks, or any passive use values for those stocks. Pollock are forage species for SSL. Any fishery would be consistent with SSL protection measures. No known direct eco-tourism use of pollock stocks. Eco-tourism may depend or come to depend on pollock predators, such as SSL. As noted in ecosystem section, pollock harvests are not expected to have a significant impact on forage availability. Not significant.	Not significant; previous reasoning	Not significant; previous reasoning
Community impacts	Aleut Corp. development objectives will be affected by size of the allocation. The “no action” alternative will not affect the ultimate allocations, which will be determined in the annual specifications process. Not significant.	Constraint on DPF may reduce the pollock available for Adak Development, if the BSAI TAC would otherwise have been higher and the Council had wished to increase the Aleut Corp. share. Adak Development is dependent on many other factors, however. Also, allocation of TAC to Adak development may lead to less fish landed in other Aleutian ports, and/or for CDQ groups. Impact of Adak development on Atka unclear. Not significant.	Not significant; previous reasoning	Not significant; previous reasoning

4.2.3 Analysis of the allocation size alternatives in the Council's April motion

In April 2004 the Council adopted a motion requesting analysis of two additional alternatives that address the size of allocation for the AI pollock fishery. The intent of this motion was to provide two alternatives that would establish the specific size of the allocation to this fishery so that industry would know the approximate magnitude of the TAC prior to industry negotiations. In the review of this motion, the Council's intent was interpreted by the analysts preparing this EA/RIR and phrased as Alternatives 1.3 and 1.4 which are analyzed in the preceding section (4.2.2). Upon reflection on the phraseology differences between the analysts' interpreted alternatives and the very specific language in the Council motion, some differences are evident. Thus, an analysis of the specific wording in the Council motion is provided in the following materials.

This section, which is provided as an addendum to the revised draft EA/RIR, provides the NEPA analysis of these alternatives. Alternatives 1.3 and 1.4, analyzed in the preceding section are similar to, but not identical to, the following two alternatives. This section introduces the alternatives from the Council motion, discusses issues they raise with respect to the Steller sea lion BiOps, contrasts the Council's alternatives with the alternatives described in the preceding section, and provides a NEPA analysis of these alternatives. These alternatives will be called Alternatives 1.3^C and 1.4^C (see further discussion below).

The Council's April Motion

In April 2004, the Council specified the following alternatives for analysis in the EA/RIR regarding the limitation on the allocation of AI pollock:

> 1.3 The Council shall allocate a combined Aleutian Islands ICA and DPF equal to the lesser of the ABC or 40,000 mt. This allocation shall be subject to the 40% A season, 60% B season allocation required by the SSL protection measures.
>
> 1.4 Beginning in 2005, and until changed, the annual Aleutian Islands pollock TAC shall be the lesser of 15,000 mt or 40% of the AI pollock ABC. One hundred percent of the Directed Fishing Allowance (DPF) shall be available for harvest in the pollock "A" season."

In the remainder of this section, these alternatives will be described as 1.3^C and 1.4^C, to indicate that these are the Council motions, and to distinguish them from Alternatives 1.3 and 1.4 that were analyzed in section 4.2.2.

The purpose of these alternatives was to establish a fixed amount of AI pollock allocation from the overall BSAI TAC amounts in November to facilitate industry negotiations on distribution of TACs under the OY for the following fishing year. Alternative 1.3^C caps the amount of the annual TAC (ICA + DPF) at no more than 40,000 mt. If the ABC is below 40,000 mt, the TAC would be the ABC. Alternative 1.4^C caps the amount of TAC at no more than 15,000 mt, but the TAC may be lower if 40 percent of ABC is less than 15,000 mt.

In the initial analysis of the Council's motion and these alternatives, two Endangered Species Act (ESA) concerns were identified:

1. These alternatives require the Council to set TAC equal to ABC or a fixed proportion of ABC, even if the Council determines that a directed fishery is not appropriate based on ecological, social, or economic concerns. In either alternative, the Council would not be able to recommend a TAC well below ABC, as currently is done in the AI pollock fishery. The Council's informed decision making process in recommending TAC is compromised with these alternatives. This may not be consistent with the decision making process in the preferred alternative of the Programmatic groundfish SEIS.

2. By requiring the TAC to be set equal to ABC or a fixed proportion of ABC, the usual harvest specifications process would be bypassed. The 2000 and 2001 Steller sea lion protection measures BiOps analyzed the effects of the groundfish fisheries on Steller sea lions, taking into account the process currently used to develop ABC and TAC recommendations.

As a result of these concerns, the analysts developed wording for Alternatives 1.3 and 1.4 to alleviate concerns over these ESA issues, but at the same time preserve what was believed to be the intent of the motion. These two alternatives, then, were analyzed in Section 4.2.2. However, upon further reflection, Alternatives 1.3 and 1.4 did not fully comport with the intent of the Council to have a fixed amount of TAC for the AI pollock fishery, but were similar to the Council's motion alternatives and addressed the issues initially identified above. Upon further analysis, NMFS determined that Alternative 1.3^{C}, if implemented with Alternative 2.5, and Alternative 1.4^{C} would not pose the ESA consultation concerns initially identified. Thus, the premise for adjusting the wording of the motion that established Alternatives 1.3 and 1.4 is not believed to be sufficient to rule out the viability of the Council's original phraseology.

Contrast Between the Council Motion Alternative 1.3^{C} and Alternative 1.3

Alternative 1.3 as analyzed in the revised draft EA/RIR reads "The Council shall allocate a combined AI ICA and DPF equal to the lesser of the TAC generated from the ABC for that year or 40,000 mt. The DPF shall be subject to the 40% "A" season and 60% "B" season apportionment required by the Steller sea lion protection measures." Alternative 1.3 is similar to the Council's motion (1.3^{C}), which is, "The Council shall allocate a combined Aleutian Islands ICA and DPF equal to the lesser of the ABC or 40,000 mt. This allocation shall be subject to the 40% A season, 60% B season allocation required by the SSL protection measures."

There are, however, two substantive differences between these two alternatives. First, the Council's motion (Alternative 1.3^{C}) set the sum of the ICA and DPF equal to the ABC or 40,000 mt, whichever was less. The wording of Alternative 1.3 made the sum of the ICA and DPF equal to the TAC or 40,000 mt, whichever was less. Alternative 1.3 creates the possibility that the TAC might be less than the ABC, and ends the direct dependence of the ICA and DPF on the ABC. This direct dependence was meant to prevent annual industry TAC negotiations from becoming more difficult with the introduction of the AI pollock allocation.

Second, the Council's Alternative 1.3^C potentially allocates a larger directed fishing allowance to the Aleut Corporation than Alternative 1.3. Under the Council motion, so long as the ABC is less than 40,000 mt, the sum of the DPF and ICA will be equal to the ABC. Under Alternative 1.3, so long as the ABC is less than 40,000 mt, the sum of the DPF and ICA (TAC) may be *less than*, or equal to, the ABC.

Contrast Between the Council Motion Alternative 1.4^C and Alternative 1.4

Alternative 1.4 reads "Beginning in 2005, and until changed, the AI pollock "A" season DPF shall be the lesser of 15,000 mt or 40% of the AI pollock annual TAC after subtraction of the ICA. No part of the annual DPF shall be allocated to the "B" season." The Council's motion (1.4^C) is: "Beginning in 2005, and until changed, the annual Aleutian Island pollock TAC shall be the lesser of 15,000 mt or 40% of the AI pollock ABC. One hundred percent of the Directed Fishing Allowance (DPF) shall be available for harvest in the pollock "A" season."

There are, however, substantive differences between the Council's motion and Alternative 1.4.

The alternative in the Council motion (1.4^C) incorporates language in the FMP that makes TAC a determinate function of ABC. This was meant to prevent annual industry TAC negotiations from becoming more difficult with the introduction of the AI pollock allocation. Under the Council motion the AI pollock allocation would be a known quantity and not subject to negotiation. That is, the amount of the allocation would be known as soon as the stock assessment process that develops a recommended ABC is completed. This is not the case with Alternative 1.4, in which the TAC could be the subject of industry negotiations.

Another difference is that the Alternative in the Council motion would not create a "B" season allocation. But it would make it possible for the Aleut Corporation to use unfished "A" season allocation in the "B" season if it chose. The language in 1.4 prevents the Aleut Corporation from doing this. Under 1.4, pollock allocation that is not fished in the "A" season cannot be rolled over to the "B" season.

And another difference is that, since the alternative in the Council motion does not create a "B" season allocation, no "B" season roll back is possible. This means that the Council's Alternative 1.4^C and Alternative 2.5 would be incompatible. Alternative 2.5 requires a roll back of the "B" season allocation. Alternative 1.4 creates an annual DPF and allocates 40% of it to the "A" season. The remaining 60% of the DPF would have to be rolled back to the funding fisheries. This would happen immediately in the final specifications. Alternative 1.4 is, therefore, consistent with Alternative 2.5.

Alternatives 1.4 and 1.4^C have somewhat different implications for the size of the allocation to the Aleut Corporation. The calculations are shown in Table 4.2.3-1, below. In general, Alternative 1.4 makes it possible for the Council to allocate somewhat more fish to the Aleut Corporation (depending on the size of the TAC it chooses). The potentially larger allocations under 1.4 range between 1,200 mt and 2,200 mt for ABCs between 10,000 mt and 40,000 mt. At a 40,000 mt ABC, the Aleut Corporation could receive 2,200 more metric tons under Alternative 1.4 than under Alternative 1.4^{C}. Using a royalty value of $304 per metric ton in the "A" season, this could be as much as $670,000.

Table 4.2.3-1 Comparison of allocation sizes under Alternatives 1.4 and 1.4^{C} and under different assumptions about ABC levels (measured in metric tons)

Alternative 1.4				Alternative 1.4^{C} (Council's original language)			
ABC	**TAC**	**ICA**	**DPF**	**ABC**	**TAC**	**ICA**	**DPF**
10,000	10,000	2,000	3,200	10,000	4,000	2,000	2,000
20,000	20,000	2,000	7,200	20,000	8,000	2,000	6,000
30,000	30,000	2,000	11,200	30,000	12,000	2,000	10,000
40,000	40,000	2,000	15,200	40,000	15,000	2,000	13,000
50,000	50,000	2,000	15,200	50,000	15,000	2,000	13,000
60,000	60,000	2,000	15,200	60,000	15,000	2,000	13,000

Notes: TAC under 1.4 is assumed to equal the ABC and is thus the highest TAC the Council could choose in each year. The ICA is subtracted from this to give an annual DPF. The "A" season allocation is 40% of the annual DPF; the remainder is rolled back. Under 1.4^{c} the TAC is 40% of the ABC. Subtracting the ICA leaves the DPF. Fish unused in the "A" season could be used in the "B" season.

For these reasons, therefore, while Alternatives 1.4 and 1.4^{C} are very similar, they have different implications and are not the same.

The TAC Setting Process and Alternatives 1.3^{C} and 1.4^{C} :

The first step in the harvest specifications process is intended to identify the level of catch that allows the maximum yield while protecting the target stock from overfishing. The next step is to consider the ABC and OFL in the context of ecological, social, and economic factors related to the fish stock. TAC is set less than or equal to the ABC as necessary to account for ecological, social, and economic factors for the management area. The following is the description of the ABC and TAC development from the 2000 BiOp.

> ABC and OFL are first recommended by the stock assessment authors, who evaluate the biological state of the fished stock and its tolerance for fishing. Their recommendations are summarized in Stock Assessment and Fishery Evaluation (SAFE) reports. SAFE reports provide the Council with "a summary of information concerning the most recent biological condition of stocks and the marine ecosystems in the fishery management unit and the social and economic condition of the recreational and commercial fishing interests, fishing communities, and the fish processing industries. They summarize periodically, the best

available scientific information concerning the past, present, and possible future condition of the stocks, marine ecosystems, and fisheries being managed under Federal regulation" (50 CFR § 600.315(e)(1)). Each SAFE report must be scientifically based and should contain (50 CFR § 600.315(e)(2-3)).

(1) information on which to base harvest specifications,

(2) a description of the maximum fishing mortality threshold and the minimum stock size threshold for each stock or stock complex, along with information by which the Council may determine (a) whether overfishing is occurring or any stock is overfished, and whether overfishing or overfished conditions are being approached, and (b) any measures necessary to rebuild an overfished stock.

Each report may also contain "additional economic, social, community, essential fish habitat, and ecological information pertinent to the success of management or the achievement of objectives of each FMP" (50 CFR § 600.315(e)(4)).

The BSAI FMP (p. 287) and GOA FMP (p. 20) require the following minimum contents of the SAFE reports.

(1) Current status of Bering Sea and Aleutian Islands area groundfish resources, by major species or species group.

(2) Estimates of MSY and ABC.

(3) Estimates of groundfish species mortality from nongroundfish fisheries, subsistence fisheries, and recreational fisheries, and differences between groundfish mortality and catch, if possible.

(4) Fishery statistics (landings and value) for the current year.

(5) The projected responses of stocks and fisheries to alternative levels of fishing mortality.

(6) Any relevant information relating to changes in groundfish markets.

(7) Information to be used by the Council in establishing prohibited species catch limits (PSCs) for prohibited species and fully utilized species with supporting justification and rationale.

(8) Any other biological, social, or economic information which may be useful to the Council.

The stock assessments and recommendations are reviewed by the BSAI and GOA groundfish plan teams, which consist of members from the Alaska Fisheries Science Center, ADF&G, the Washington Department of Fisheries, the U.S. Fish and Wildlife Service, the International Pacific Halibut Commission, and the University of Alaska at Fairbanks. The plan teams then prepare their recommendations to the Council's Advisory Panel and Scientific and Statistical Committee, and the main body of the Council. The Council's Scientific and Statistical Committee has final authority for determining whether a given item of information is "reliable" for the purpose of determining ABCs and OFLs, and may use either objective or subjective criteria in making such determinations.

TAC

Based on the reviews and recommendations of the stock assessment authors, the plan teams, the Scientific and Statistical Committee, and the Advisory Panel, the Council then considers the ABC and OFL levels for each stock, and pertinent ecological, social, and economic information to determine a total allowable catch (TAC) for each stock or stock complex under the BSAI and GOA FMPs.

The TAC for a specific stock or stock complex may be sub-divided for biological and socio-economic reasons according to percentage formulas established in FMP amendments. For particular target fisheries, TAC specifications are further allocated within management areas (eastern, central, western Aleutian Islands; Bering Sea; eastern, central, western GOA; Figs. 2.4 and 2.5), among management programs (open access or community development quota program), processing components (inshore or offshore), specific gear types (trawl, non-trawl, hook-and-line, pot, jig), and seasons according to regulations.

The 2000 and 2001 Steller sea lion protection measures BiOps considered the effects of the groundfish fisheries on Steller sea lions in context of the complete ABC to TAC process, as described above. ABC and TAC determinations are separate processes with the development of TAC dependent on and limited by the ABC. These processes permit consideration of a range of important issues specific to ABC and TAC. The process that determines TAC determines the magnitude of fishery effects on the target species, listed species, critical habitat, and the ecosystem. The reductions in the biomass and prey availability are a direct consequence of the TAC-setting process. The long-term reduction in standing biomass with all its ecological consequences follows directly from the catch in accordance with the TACs.

Under Alternatives 1.3^{C} and 1.4^{C}, TAC is determined by formula from ABC. The AI pollock fishery would be subject to annual analysis in the specifications EA (which includes (a) analysis of the impacts on Steller sea lions and ESA considerations, and (b) a detailed SAFE chapter on the AI pollock fishery (as an appendix) along with other fisheries. However, the Council would lose its normal discretion to respond to considerations raised in the EA, and by the plan teams and the SSC, through TAC adjustments in the annual specifications. The Council and NMFS would not lose all ability to respond; if circumstances required it, ecosystem considerations could be introduced as an ABC consideration, or NMFS could change the TAC with an emergency rule. In the longer term the Council could adopt a new FMP amendment. However, these are more difficult ways to address any problems. The linking of the TAC and the ABC in a deterministic way is a change that was not contemplated in the 2000 and 2001 SSL BiOps.

When the annual ABC is less than 40,000 mt, Alternative 1.3^C requires the Council to recommend a TAC that is equal to the ABC. During years when the annual ABC is estimated to be less than 37,500 mt, Alternative 1.4^C would require the setting of TAC at 40 % of ABC. In both of these cases, the requirement to set TAC at the ABC or a percentage of the ABC may be less protective of Steller sea lions and contrary to the 2000 and 2001 BiOps. These alternatives are a departure from the current TAC setting process and may allow for more removal of prey species than anticipated in the 2000 and 2001 BiOps. In years of low ABC, these alternatives require the Council to recommend TAC at a higher level than may have been done if ecological, social, and economic concerns were considered. Requiring the setting of TAC at the ABC or at 40 percent of the ABC, regardless of ecological, social, and economic concerns, may lead to harvest levels that would remove more prey than the normal TAC-setting process. The 2000 and 2001 BiOps considered the effects of the groundfish fisheries in the context of the Council's unlimited ability to adjust TAC from the ABC.

Alternatives 1.3^C and 1.4^C cap the amount of TAC that may be recommended. Under Alternative 1.3^C, with Alternative 2.5 and its associated roll back of the "B" season TAC, it is much less likely that there would be adverse effects for Steller sea lions. The roll back ensures that the total amount of harvest in the Aleutian Islands area will be at a relatively low level. Under Alternative 1.4^C, in years when the annual ABC is more than 37,500 mt, it would be unlikely that there would be adverse effects on Steller sea lions because the harvest would be capped at 15,000 mt, regardless of the size of the ABC over 37,500 mt. This would limit the impact that the pollock fishery would have on the pollock prey availability for Steller sea lions.

Harvest Control Rule and the Alternatives:

The Harvest Control Rule (HCR) established by the Steller Sea Lion Protection Measures may also be a concern under these alternatives. The 2001 BiOp provides the following explanation of the HCR:

> The setting of TAC for the pollock, Pacific cod and Atka mackerel fisheries would be based on a global control rule which is modified from the one detailed in the FMP biological opinion[2000 BiOp]. The allowable biological catch (ABC) for pollock, Pacific cod, and Atka mackerel in the BSAI and GOA would be reduced when the spawning biomass is estimated to be less than 40% of the projected unfished biomass. The reduction would continue at the present rate established under the tiers described in the groundfish FMPs, but when the spawning biomass is estimated to be less than 20% of the projected unfished biomass, directed fishing for a species would be prohibited.

The potential problems discussed above under Alternatives 1.3^C and 1.4^C are reduced by the HCR, which requires the Regional Administrator to stop all directed fishing if the spawning biomass is at or below 20 percent of the unfished spawning biomass.[28] The rate of adjustment of ABC under the HCR at and below the B_{20} level continues to follow the present rate established under the tiers described in the groundfish FMPs. This continuation of the rate of reduction of ABC below B_{20} results in the ABC still being specified at the level determined appropriate under the HCR, even though directed fishing may be prohibited. The Plan Team may recommend an ABC that supports bycatch only if the biomass is equal to or below B_{20}[29], but the ABC may be adjusted by the SSC to a level appropriate for the fish stock, without consideration of the directed fishery closure. It was intended that the directed fishery closure would be established by the setting of TAC.

If the ABC were <= B_{20} under Alternatives 1.3^C and 1.4^C, the Council could be required to set TAC at 40 percent of the ABC even though the Regional Administrator likely would take action to close the directed fishery, regardless of the Council's TAC recommendation. The Council would be unable to make an informed decision about the appropriate level of TAC (such as recommending TAC at bycatch levels when the spawning biomass reaches or is below B_{20}). The Council may be put into the awkward situation of recommending a TAC that could support a directed fishery at the same time conditions prohibiting a directed fishery exist. By requiring a TAC recommendation based on ABC or a percentage of ABC and without consideration of the HCR or other ecological factors, the Council would not be able to be proactive in management recommendations.

This may be addressed if the Council amended Alternatives 1.3^C and 1.4^C to incorporate the HCR in the recommendation of TAC when the spawning biomass is at or below $B_{20.}$

2000 and 2001 BiOp Concerns

While Alternatives 1.3^C and 1.4^C both involve the deterministic relationship between TAC and ABC, under certain circumstances these impacts may be mitigated sufficiently to avoid the need for formal Section 7 Consultation under the ESA.

Alternative 1.3^C was introduced with Alternative 2.5 in the Council motion. Among other features, Alternative 2.5 requires the roll back of all of the "B" season DPF, and unused "A" season DPF, no later than June 10. Since Alternative 2.5 can materially change the impact of Alternative 1.3^C, Alternative 1.3^C must be evaluated with and without Alternative 2.5.

If Alternative 1.3^C is adopted without Alternative 2.5, the TAC cap would be 40,000 mt. This TAC cap is larger than any Aleutian Islands pollock ABC since 1996 (see Table 3.2-1). ABCs ranged from 23,800 mt to 39,400 mt during this period. This means that under 1.3^C, TAC would have been set equal to ABC in each year from 1996 to 2004. Even though the seasonal apportionment of harvest would still apply (40/60 split), the ABC of pollock could still be taken from the Aleutian Islands subarea during the fishing year. Given that the Western Aleutian SSL sub-population

[28] 50 CFR 679.20(d)(4) "Harvest Control Rule for pollock, Atka mackerel and Pacific cod. If a biological assessment of stock condition for pollock, Atka mackerel, or Pacific cod with in an area projects that the spawning biomass in that area will be equal or below 20 percent of the projected unfished spawning biomass during a fishing year, the Regional Administrator will prohibit the directed fishery for the relevant species within the area. ....."

[29] Dr James Ianelli, Personal Communication, May 27, 2004. Alaska Fisheries Science Center, Seattle, WA.

continues to be the one of most concern for NMFS, the combination of deterministic linkage and high cap is sufficient cause for concern to require formal consultation for this alternative.

In years when the AI pollock ABC is more than 40,000 mt under Alternative 1.3^C with Alternative 2.5, or 37,500 mt under Alternative 1.4^C, the amount of harvest is capped and would likely be less than the current TAC setting process allows. Because of the limitation on harvest in either situation, no adverse effects on Steller sea lions beyond effects analyzed in the 2000 and 2001 BiOps are likely. In years when the AI pollock ABC is below 40,000 mt under Alternative 1.3^C or 37,500 mt under Alternative 1.4^C, the effects of setting TAC will be analyzed in the annual harvest specifications analysis to determine if an adverse effect at the amount of harvest is likely. The 2000 and 2001 BiOps recognized that TAC may be set at the ABC level.

The issue of relationship between TAC and ABC remains if Alternative 1.3^C is adopted in conjunction with Alternative 2.5, or if Alternative 1.4^C is adopted. This conclusion is contingent on Council clarification that the alternatives are consistent with the harvest control rule (HCR) under the BiOp, which provides that there would be no directed fishery for pollock biomass under B_{20}. However, for a combination of Alternatives 1.3^C with 2.5, the maximum DPF (assuming a 2,000 mt ICA) is 15,200 mt and for Alternative 1.4^C the TAC is capped at 15,000 mt. Under Alternative 1.3^C with Alternative 2.5, the combined ICA and DPF would be about 28% below the lowest ABC (assuming a 2,000 mt ICA) in the period from 1991 to 2004, while under Alternative 1.4^C the TAC would be about 37% below the lowest ABC from that period. Thus, in each of the years during this period, the TAC would have been bound significantly below ABC by the alternative. Given this mitigating factor and the annual NEPA process for the annual harvest specifications, the harvest control rule, and the 2 million OY cap, the derivation of TAC based on a percent of ABC is not likely to cause an adverse effect under current biomass conditions, and formal consultation is not necessary for either a) Alternative 1.3^C implemented with Alternative 2.5 or b) Alternative 1.4^C.

NEPA Significance Analysis of the Council's Alternative 1.3^C

Alternative 1.3^C differs from other alternatives that set the amount of the allocation of the AI pollock fishery under consideration. Alternatives 1.1 and 1.2 do not set a TAC, but allow the Council to determine future TACs in the course of the annual specifications process. Alternative 1.2 imposes some constraints on the Council's decisions into the FMP. Alternative 1.3^C incorporates a formula in the FMP that determines the TAC once the ABC for the fishery is known. TACs will be equal to the ABC or 40,000 mt, whichever is less.

Moreover, Alternative 1.3^C was introduced in tandem with funding Alternative 2.5. Funding Alternative 2.5 includes a provision for a required roll back of the "B" season AI pollock allocation, and any unused "A" season allocation, no later than June 10. Thus, if 1.3^C is adopted in combination with 2.5, it will have considerably different effects than if it is not. Alternative 2.5 requires the roll over of the entire "B" season allocation. In combination with Alternative 2.5, Alternative 1.3^C would produce a maximum "A" season AI pollock directed fishing allocation of 15,200 mt. (Assuming a 40,000 mt ABC, TAC=ABC, 2,000 mt ICA, and "A" season DPF equal to 40% of the DPF. The calculations are illustrated in Table 4.2.3-2.). This combination would have potential impacts that would be very similar to those under Alternative 1.4^C.

Thus, it has been necessary to evaluate Alternative 1.3^C under two sets of conditions: with and without the adoption of Alternative 2.5.

Without Alternative 2.5, Alternative 1.3^C would create a TAC that was equal to the ABC, but with a cap at 40,000 mt. This alternative has similarities to 1.2 which allowed the Council to choose the directed fishing allowance so as to reflect similar pollock allocations to CDQ groups but with a cap at 40,000 mt. However, Alternative 1.3^C without 2.5 differs from 1.2 in that the allocation in 1.3^C is determined by a formula in the FMP. The following analyses address implementation of Alternative 1.3^C alone:

- *Effects on pollock stocks:* This alternative would constrain the AI TAC to 40,000 mt a year if the ABC were 40,000 mt or greater. If the ABC were less than 40,000 mt, the TAC would equal the ABC. Since TACs never exceed ABCs under any circumstances, and would be less than ABCs for ABCs of 40,000 mt and more, this alternative is not expected to have significant impacts on pollock stocks with respect to the relevant criteria: "insignificant."
- *Effects on other target species and fisheries:* As noted in the discussion of 1.1 in Section 4.2.2, pelagic pollock trawling tends to be a "clean" fishery with relatively little bycatch of other species. The pelagic gear should have little impact on the habitat for these other species. Moreover, there appears to be limited overlap between pollock and fixed gear fishing areas. This alternative has therefore been ranked "insignificant" with respect to these impact.
- *Effects on incidental catch of other and non-specified species:* As noted in Section 4.2.2, the pelagic trawling for pollock is a relatively "clean" fishery that appears to harvest relatively limited volumes of other or non-specified species. Several of the other species are benthic oriented, and as should normally appear in relatively small volumes in pelagic gear. Fishermen have an incentive to avoid harvesting non-specified species, as these have little economic value. Methods, amounts, and locations of harvest are not changed with this alternative in a manner that would be expected to impact incidental catch of other and non-specified species beyond impacts that have already been identified for the groundfish fisheries (Programmatic SEIS). Therefore, this impact has been rated "insignificant."
- *Effects on incidental catch of forage fish species*: Presumably the incidental catch of forage species would be similar to the patterns of catch in the historic pollock fishery, where levels were very low but in many cases unknown. The incidental catch of forage fish under this alternative likely would be in some proportion to the level of catch of the target species. But the levels of incidental catch are unknown. Overall BSAI removals are expected to change modestly because of the OY cap. The overall effects of this alternative likely would be negligible. This impact has therefore been rated "insignificant."
- *Effects on incidental catch of prohibited species:* As noted in the discussion of Alternative 1.2 in Section 4.2.2, if the Council were to place a cap on the Aleut Corporation allocation of 40,000 mt, it is likely that any effects would be insignificant to stocks of prohibited species, to directed fisheries for these species, and to levels of incidental catch of these species in the groundfish fisheries. Alternative 1.3^C falls within the scope of Alternative 1.2, and this impact has been rated "insignificant."
- *Effects on Steller sea lions*: As noted earlier, because of the combination of the deterministic linkage between TAC and ABC, the relatively high cap, and the concerns over STELLER

SEA LIONS in the Western Aleutians, this alternative will require formal consultation. The significance of the potential effect of this alternative on Steller sea lions cannot be determined without the analysis that would be provided through a formal consultation. For this reason, the significance level has been determined to be "unknown."

- *Effects on other marine mammals*: A wide range of potential impacts are discussed under Alternative 1.1 in Section 4.2.2. The fact that this fishery has occurred in the region before without adversely impacting other marine mammals suggests that it will not have adverse impacts in the future. Also, this fishery will be a small incremental addition to fishing and other maritime activity already taking place in the region. This impact has been rated "insignificant."
- *Effects on seabirds*: A wide range of potential impacts are discussed under Alternative 1.1 in Section 4.2.2. Alternatives 1.1, 1.2, and 1.3 draw an insignificance conclusion in large part from their status as process setting alternatives, which defer consideration of specific TACs to the annual specifications process. Alternative 1.3^C is not a current TAC-setting process alternative, but, as noted in the discussion above, imposes limits on the ability of the Council to take account of some issues by modifying TAC in the specifications process. However, the end result of implementing this alternative is establishing a quota for a fishery in the AI region. Such a fishery has occurred in the past without major impacts on seabird populations. This fishery would be by offshore trawl vessels, with some potential for seabird mortality from vessel structure or third wire strikes, partly from attraction offered by processing offal discharge from some processing vessels. However, industry also is working on seabird avoidance measures, particularly to minimize third wire concerns, and thus this alternative would not result in an appreciable potential for additional seabird mortality, and thus is rated "insignificant".
- *Effects on habitat*: The pollock fishery created under Alternative 1.3^C would use mid-water pelagic fishing gear, which does not normally come in contact with the bottom. Fishermen have an incentive to avoid damaging the gear and incurring costs by bringing the gear in contact with the bottom. The SSL protection measures protect about 65% of the Aleutian Islands shelf from the pollock fishery. For these reasons, the potential impact of fishing under Alternative 1.3 on habitat is expected to be "insignificant."
- *Effects on ecosystem*: A wide range of potential impacts, including impacts on predator-prey relationships, energy flow and balance, and ecosystem diversity, are discussed under Alternative 1.1 in Section 4.2.2. On the basis of an evaluation of forage availability, spatial and temporal concentration on forage, removal of top predators, introduction on non-native species, energy redirection and removal, or species, functional or genetic diversity, Alternative 1.1 was found to have "insignificant" impacts. Because 1.3^C represents a subset of possible 1.1 outcomes, 1.3^C has been given an "insignificant" significance ranking for this impact.
- *Effects on state managed and parallel fisheries*: As noted under Alternative 1.1 in Section 4.2.2, about 95% of the state waters in the Aleutian Islands are in areas that are closed to pollock fishery by SSL protection measures. Those waters that are open do not show significant historical pollock fishing, and only minimal effort for any species. As noted under Alternative 1.2, with a 40,000 cap on the AI pollock allocation, it is likely that any effects to state-managed and parallel groundfish fisheries would be insignificant. Alternative 1.3^C, which places a similar 40,000 mt cap on the AI pollock allocation, is therefore considered to be "insignificant."

- *Social and economic effects*: Alternative 1.3^C, falls within the range of impacts analyzed under Alternative 1.2, which allows the Council to set an ABC with a 40,000 mt cap. Alternative 1.2 was determined to be "not significant." Key factors in the determination were the fact that changes in the Aleutians would generally be offset in the EBS. For example, changes in revenues and profits to Aleut Corp would be offset by reductions in revenues and profits in the funding sectors. Moreover, EBS changes were expected to be small compared to changes in harvesting levels these fisheries could expect normally. Thus impacts on related fisheries, consumers, and excess capacity are likely to be small. Because Alternative 1.3^C is a subset of Alternative 1.2 was determined to be "not significant" alternative is therefore determined to be "insignificant."

When Alternative 1.3^C is adopted in combination with Alternative 2.5, the impacts are "not significant." The impact analysis for 1.4^C below applies to 1.3^C with 2.5 and has not been duplicated.

The two alternatives have AI pollock allocations that are very similar. Alternative 1.3^C does have a somewhat larger directed fishing allowance than Alternative 1.4^C. The directed fishing allowances under 1.3^C are 1,200 mt greater than under 1.4^C for ABCs up to 40,000 mt, and 2,200 mt at that level and above. These calculations are illustrated in Table 4.2.3-2 below. While Alternative 1.4^C appears to provide an effective TAC cap 37% below the lowest TAC between 1991 and 1998, Alternative 1.3^C with Alternative 2.5 appears to provide an effective cap 28% below that level. This difference is judged to have minimal impact, and not to affect the significance of Alternative 1.3^C compared to Alternative 1.4^C.

In addition, Alternative 1.3^C would prevent a "B" season allocation, while Alternative 1.4^C would make it possible for the Aleut Corporation to use unused "A" season TAC in the "B" season. Given the price differential, it seems likely that the Corporation would normally seek to use its entire allocation, or as much as possible, in the "A" season. This difference, therefore, is judge to have a minimal impact as well, and not to affect the significance of Alternative 1.3^C compared to Alternative 1.4^C.

Table 4.2.3-2 Comparison of allocation sizes under Alternatives 1.3^C and 1.4^C and under different assumptions about ABC levels (measured in metric tons)

Alternative 1.3^C (Council's language)					Alternative 1.4^C (Council's language)			
ABC	TAC	ICA	DPF w/o 2.5	DPF with 2.5	ABC	TAC	ICA	DPF
10,000	10,000	2,000	8,000	3,200	10,000	4,000	2,000	2,000
20,000	20,000	2,000	18,000	7,200	20,000	8,000	2,000	6,000
30,000	30,000	2,000	28,000	11,200	30,000	12,000	2,000	10,000
40,000	40,000	2,000	38,000	15,200	40,000	15,000	2,000	13,000
50,000	50,000	2,000	38,000	15,200	50,000	15,000	2,000	13,000
60,000	60,000	2,000	38,000	15,200	60,000	15,000	2,000	13,000

Notes: TAC under 1.3^C is assumed to equal the ABC. The ICA is subtracted from this to give an annual DPF. The "A" season allocation is 40% of the annual DPF; the remainder is rolled back. Under 1.4^C the TAC is 40% of the ABC. Subtracting the ICA leaves the DPF. Fish unused in the "A" season could be used in the "B" season.

NEPA Significance Analysis of the Council's Alternative 1.4^C

Alternative 1.4^C has been determined to be not significant with respect to the impact criteria:

- *Effects on pollock stocks:* This alternative would constrain the annual directed fishing allowance below 15,000 mt a year (the actual amount below 15,000 mt will depend on the choice of pollock ICA for the Aleutians; in-season managers currently advise that a 2,000 mt ICA would be appropriate. If adopted, that would lead to a 13,000 mt DPF). TACs will be equal to 15,000 mt for ABCs equal to or greater than 37,500 mt and 40% of ABC for smaller ABCs. Since TACs would be considerably less than ABCs under any circumstances, this alternative is not expected to have significant impacts on pollock stocks with respect to the relevant criteria: "insignificant."
- *Effects on other target species and fisheries:* This alternative limits pollock harvests below levels that would be allowed by the ABC and at least 35% below the lowest level taken in the historical fishery. In the past the pollock fisheries have only caught small incidental amounts of other target species. There appears to be limited overlap between pollock and fixed gear fishing areas. This alternative has therefore been ranked "insignificant" with respect to these criteria.
- *Effects on incidental catch of other and non-specified species:* This alternative limits pollock harvests below levels that would be allowed by the ABC and at least 35% below the lowest level taken in the historical fishery. Less constrained alternatives were judged to be insignificant with respect to this criterion. This impact has been rated "insignificant."

- *Effects on incidental catch of forage fish species*: This alternative limits pollock harvests below levels that would be allowed by the ABC and 37% below the lowest ABC from 1991 to 2004. Less constrained alternatives were judged to be insignificant with respect to this criterion. This impact has been rated "insignificant."
- *Effects on incidental catch of prohibited species:* This alternative limits pollock harvests below levels that would be allowed by the ABC and at 37% below the lowest ABC between 1991 and 2004. Less constrained alternatives were judged to be insignificant with respect to this criterion. This impact has been rated "insignificant."
- *Effects on Steller sea lions:* This alternative constrains potential TACs to 15,000 mt and thus is expected to have smaller impacts on Steller sea lions than the other alternatives. This alternative does create a formula that determines the TAC once the ABC is known. This alternative limits the ability of the Council to reduce the TAC below ABC to address ecosystem concerns. The BiOps acknowledged the fact that TAC could be set equal to ABC for any prey species and that the SSL protection measures, the harvest control rule, and the 2 million metric ton BSAI OY provided additional precautionary margin for Steller sea lions. Although the TAC specification process, together with the 2 million mt cap, means that most species TACs will be less than ABC, the AI pollock TAC being set at ABC or a percentage of ABC will be analyzed for impacts on the human environment annually during the harvest specifications process. For this reason, the significance level has been determined to be "insignificant."
- *Effects on other marine mammals*: A wide range of potential impacts are discussed under Alternative 1.1 in Section 4.2.2. The fact that this fishery has occurred in the region before without adversely impacting other marine mammals suggests that it will not have adverse impacts in the future. Moreover, this alternative limits pollock harvests at 37% below the lowest ABC taken between 1991 and 2004. The impacts of a reopened AI pollock fishery would thus likely be less than those impacts realized in this fishery in prior years. Also, this fishery will be a small incremental addition to fishing and other maritime activity already taking place in the region. This impact has been rated "insignificant."
- *Effects on seabirds*: This alternative is significantly more restrictive than the other alternatives. Even given the uncertainties in impacts on some seabirds from an AI pollock fishery described under Alternative 1.1 in Section 4.2.2, the element of a reduction in fishing effort embodied in this alternative that suggests a reduced level of impact on seabirds compared with the other alternatives. The constrained TAC should minimally impact potential seabird prey. The constrained level of directed fishing for pollock under this alternative would result in lower levels of fishing vessel activities in the AI region, with the resultant likely lower levels of seabird take through trawl cable or superstructure strikes. Since these levels are currently not of major concern, this alternative would not appreciably change this situation. While the issue of potential rat entry to an uninfested Aleutian island is of concern, as discussed above the likelihood of an event that would lead to this is very small; this alternative would be associated with lower levels of fishing activity than the others, and therefore would have a lower probability of potential effect. This alternative is considered "insignificant."
- *Effects on habitat*: Alternative 1.4 was determined to be "not significant" with respect to these criteria. Alternative 1.4^C constrains potential pollock harvests even more than 1.4. Alternative 1.4^C would therefore be expected to be associated with lower habitat impacts than Alternative 1.4. This alternative limits pollock harvests below levels that would be

allowed by the ABC and at 37% below the lowest ABC between 1991 and 2004. Alternative 1.4^C is therefore determined to be "insignificant" with respect to habitat impacts.

- *Effects on ecosystem*: As noted above, Alternative 1.1 was determined to be "insignificant" after a consideration of an evaluation of forage availability, spatial and temporal concentration on forage, removal of top predators, introduction on non-native species, energy redirection and removal, or species, functional or genetic diversity. Alternative 1.4^C limits pollock harvests below levels that would be allowed by Alternative 1.1, and 37% below the lowest ABC between 1991 and 2004. Alternative 1.4^C is therefore considered to be "insignificant" with respect to this criterion.
- *Effects on State managed and parallel fisheries*: As noted under Alternative 1.1 in Section 4.2.2, about 95% of the State waters in the Aleutian Islands are in areas that are closed to pollock fishery by SSL protection measures. Those waters that are open do not show significant historical pollock fishing, and only minimal effort for any species. As noted under Alternative 1.2, with a 40,000 cap on the AI pollock allocation, it is likely that any effects to State-managed and parallel groundfish fisheries would be insignificant. Alternative 1.4^C, which places a 15,000 mt cap on the AI pollock allocation, is therefore considered to be "insignificant."
- *Social and economic effects*: Alternative 1.3^C, falls within the range of impacts analyzed under Alternative 1.2, which allows the Council to set an ABC with a 40,000 mt cap. Alternative 1.2 was determined to be "not significant." Key factors in the determination were the fact that changes in the Aleutians would generally be offset in the EBS. For example, changes in revenues and profits to Aleut Corp would be offset by reductions in revenues and profits in the funding sectors. Moreover, EBS changes were expected to be small compared to changes in harvesting levels these fisheries could expect normally. Thus impacts on related fisheries, consumers, and excess capacity are likely to be small. Because Alternative 1.3^C is a subset of Alternative 1.2 was determined to be "not significant" alternative is therefore determined to be "insignificant."

4.2.4 Council's Preferred Alternative

The Alternatives

The Council's final motion, as clarified in October 2004, states:

Starting in 2005:

1. Annual TAC

   (a) When the AI ABC is equal to or more than 19,000 mt, the AI TAC shall equal 19,000 mt.

   (b) When the AI ABC is less than 19,000 mt, the AI TAC shall be no more than the ABC.

2. The AI pollock CDQ directed fishing allowance shall be established as 10 percent of the AI TAC. The remaining amount will be termed the initial TAC (ITAC).[30]

3. The ICA shall be deducted from the annual ITAC.

4. Seasonal Apportionments

The A season apportionment of the DPF shall be the lesser of

(a) no more than 40% of the ABC or
(b) the annual TAC after subtraction of the ICA

The total harvest in the A season (DPF, CDQ, and ICA) shall not exceed 40% of the ABC.

The B season apportionment will be equal to the annual ITAC minus the ICA and minus A season DPF. The B season apportionment may be further adjusted by rollover of unharvested A season pollock.

Table 4.2.4-1 summarizes AI pollock ITACs, and “A” and “B” season DPF levels for a range of AI pollock ABCs from 5,000 mt to 55,000 mt. Purely for illustrative purposes, these estimates assume that the ICA will be 1,000 mt, divided 60%/40% between the “A”/”B” seasons. The line with the 2004 ABC is shaded.

[30]The CDQ pollock directed fishing allowance is seasonally apportioned 40/60 between the A/B seasons, respectively, under 50 CFR 679.23(e)(2).

Table 4.2.4-1 "A" and "B" season DPFs under different assumptions about ABCs (mt)

ABC (mt)	TAC (mt)	ICA (mt)	CDQ (mt)	DPF (mt)	DPF(A) (mt)	DPF(B) (mt)	Royalty (million $)	First wholesale gross revenues (million $)
5,000	5,000	1,000	500	3,500	1,200	2,300	0.9	2.4
10,000	10,000	1,000	1,000	8,000	3,000	5,000	2.0	5.5
15,000	15,000	1,000	1,500	12,500	4,800	7,700	3.2	8.6
20,000	19,000	1,000	1,900	16,100	6,640	9,460	4.1	11.3
25,000	19,000	1,000	1,900	16,100	8,640	7,460	4.3	12.2
30,000	19,000	1,000	1,900	16,100	10,640	5,460	4.5	13.1
35,000	19,000	1,000	1,900	16,100	12,640	3,460	4.6	13.9
39,400	19,000	1,000	1,900	16,100	14,400	1,700	4.8	14.7
40,000	19,000	1,000	1,900	16,100	14,640	1,460	4.8	14.8
45,000	19,000	1,000	1,900	16,100	16,100	0	4.9	15.4
50,000	19,000	1,000	1,900	16,100	16,100	0	4.9	15.4

Notes: Assumes an ICA of 1,000 mt (as in recent years) divided 60%/40% between A/B seasons and a 40/60 SSL split for CDQ.

TACs shown for ABCs under 19,000 mt are maximum TACs for those ABC levels; for ABCs under 19,000 mt the Council may set TACs below the ABC level.

Royalty and first wholesale gross revenue estimates are based on values and prices reported in Table 7.7.2 of the RIR.

Source: G:\FMGROUP\AI pollock\After October Council meeting\DPF formula.xls

These estimates are contingent on the assumption that the spawning biomass in the AI is above 20% of the projected unfished spawning biomass. Federal regulations promulgated as part of the measures implemented to protect the SSL require that, if a biological assessment of the pollock stock in the AI is equal to or below 20% of the projected unfished spawning biomass during a fishing year, the Regional Administrator will prohibit the directed fishery, and that the fishery will remain closed until a subsequent biological assessment projects that the spawning biomass for the species in the area will exceed 20% of the projected unfished spawning biomass (679.20(d)(4)).

The AI pollock DPF, CDQ, and ICA combined are capped at 19,000 mt per year. The CDQ fishery receives 10% of the TAC, or a total of 1,900 mt at the cap. Allowing for a 1,000 mt ICA, the DPF would be 16,100 mt. The lowest ABC during between 1991 and 2004 was 23,800 mt. Thus, the DPF and CDQ combined are about 24% below the lowest ABC in recent years. The lowest targeted catch in that period was 23,159 mt in 1998. The DPF and CDQ combined are thus about 22% below the lowest catch. (NMFS, 2004, page 24)

For ABCs under 19,000 mt, the action allows the Council to select a TAC at any level between zero and the ABC. Moreover, the 18,000 mt DPF and CDQ represents the potential maximum catch impact from the specifications. Recent ICA harvests have exceeded 1,000 mt, perhaps due to some targeting of pollock. Consideration has been given to increasing the ICA to 2,000 mt. If this is found to be necessary, the current action represents a DPF plus CDQ of 17,000, rather than 18,000 mt.

In addition, it is not clear if the entire DPF can be harvested. A large proportion of the historical domestic fish production (in the 1990s) came from waters that are now closed to pollock fishing because of Steller sea lion protection measures. If the Aleut Corporation and its associated fishermen are unable to fully harvest the allocation, the Council's recommendation would require a roll back of the unused portion of the pollock allocation to the EBS pollock ITAC. CDQ groups which are unable to harvest their AI CDQ allocations may also request a rollover of these allocations into the EBS. A maximum of 1,900 mt may be rolled over through this mechanism.

Effects on Pollock

The criteria for the evaluation of target species are described in Section 4.1, and summarized in Table 4.1-1. Target species affected include: (1) AI pollock, (2) species taken as bycatch in AI pollock (flatfish, rockfish, Pacific cod and Atka mackerel), and (3) EBS pollock (as the funding source).

This alternative requires that any AI pollock TAC be less than or equal to the ABC level; no TAC may exceed ABC. For ABCs under 19,000 mt, this alternative gives the Council complete discretion to set the TAC at any level between zero and the ABC in any given year. For ABCs equal to or above 19,000 mt, the alternative mandates a TAC of 19,000 mt. As noted above, this means that TACs will be at least 24% less than the lowest ABC in the AI. For ABCs just above 19,000 mt, the rule will mandate that the Council choose a TAC of 19,000 mt. Thus for ABCs in this range, which are fairly low compared to historical ABCs, the rule requires that the Council choose a TAC that is equal to (if the ABC=19,000 mt) or fairly close to the ABC. As noted above, these considerations are contingent on a spawning pollock biomass in the AI that is above 20% of the projected unfished spawning biomass. For a biomass below this level, the DPF would have to equal zero, and only incidental catches would be allowed.

Under the proposed action the TAC can never exceed the ABC. The proposed action appears to leave the Council considerable freedom of action to recommend the TAC lower than ABC for ABCs under 19,000. For ABCs similar to those seen in the past, the TACs would be at least 25% below the ABC. For ABCs in the area just above the TAC, the rule leaves little discretion to the Council to set TAC below the ABC should that be appropriate for management reasons. Note, however, that ABCs are frequently adjusted to take account of uncertainties, and may be adjusted to take account of the impact of a fishery on the ecology. These considerations could lead a Council to choose ABCs below the level they might otherwise have chosen, if the difference between TAC and ABC were not an issue. Moreover, NMFS retains the option of implementing an emergency rule to modify the TAC if that is necessary for conservation purposes.

The 2003 SAFE document noted that the fish to the east of 174°W and the fish west of 174°W may belong to two different stocks. In the 2003 assessment proposal the Aleutian Islands region was divided into areas where discontinuities in pollock distribution were apparent (see Fig. 3.2-1 in Section 3.2). These breaks separate the northern "Basin" area from the Aleutian Islands chain and split the eastern-most portion of the Aleutian Islands region from the Aleutian Islands. Two regional partitions were developed, one called NRA (for Near, Rat, and Andreanof Island groups) extending to 170°E, and another that excludes the eastern portion between 174°W and 170°W. This partitioning was done based primarily on fishery distribution data. Also, the resulting sub-areas are more consistent with the area covered by summer bottom-trawl surveys.

The 2004 AI ABC was calculated by adding separate Tier 5 ABC estimates for these two areas. The ABC for the western area was 27,400 mt, while the ABC for the eastern area was 12,000 mt. These totaled the AI pollock ABC of 39,400 mt. (SAFE, page 852) If an entire AI pollock DPF of 18,000 mt were harvested from the area between 170°W and 174°W, the catch in that area would exceed the ABC, at current ABC levels. The Aleut Corporation is not expected to take its whole DPF from this area. However, it is impossible to be certain what will happen.

If this becomes a concern, the Council may choose, during the annual specifications process, to allocate the AI pollock ITAC among the different management areas defined for the region. For illustrative purposes, it could impose a 12,000 mt ITAC in the easternmost management area, Area 541, and could impose a separate 27,400 mt ITAC in the central and western Aleutians management areas (Areas 542 and 543).

Area 541 includes waters that fall outside the 170°W and 174°W range identified in the SAFE document as the waters within which the eastern AI pollock stock is located. This smaller area itself, however, could not be assigned a separate ITAC until regulatory action was taken to create an appropriate management area. Given such a regulatory action, however, it would be possible to more finely tune the areas to the fish stocks.

The 2003 SAFE document noted that "given uncertainty in the status of the pollock in the NRA area east of 174°W **it may be prudent to declare this area, along with the Bogoslof area, a protected transition zone between the Aleutian Islands, the Eastern Bering Sea, Central Bering Sea, and the Gulf of Alaska pollock stocks.** [emphasis in the original] This would provide some measure of insurance over stock structure uncertainty and better justify current regional management stocks (since they will no longer be contiguous). We expect that this will also enhance the current conservation measures in place for the Bogoslof region related to the Central Bering Sea and Aleutian Basin pollock..." (SAFE, page 852) Should the Council close the areas east of 174°W to protect weaker elements of the overall AI pollock stock, the ABC recommendations for the remaining fishable areas in the AI region west of 174°W might be lower, reflecting only the NRA biomass.

The constraints on the specifications process associated with this action are not expected to jeopardize the capacity of the pollock stock to produce MSY on a continuing basis, and would not be expected to alter the genetic structure, change reproductive success, change prey availability, or affect habitat, so as to jeopardize the ability of the stock to sustain itself at or above MSST.[31] The ultimate impact of FMP and regulatory amendments to implement this action would depend on future policy actions by the Council. These might include a regulatory amendment to close Area 541 east of 174°W to further pollock fishing. They would also include the setting of ABC, TAC, and the possible division of TAC among areas in the AI in the specifications process. These actions would be subject to NEPA analysis. This impact has thus been rated "not significant."

Effects on Other Target Species

The bycatch of species targeted in other fisheries by an AI pollock fishery could reduce the quantity of fish available for harvest in these other fisheries, causing some economic effects. Quotas for other target fisheries might be affected if this incidental harvest becomes large. Mortality to non-target species could affect potential yield from these stocks or affect the spatial or temporal distribution of these species. Harvest of pollock also may reduce the yield from the AI pollock population, possibly reducing production of juvenile pollock that are important prey for fish species harvested in other directed fisheries.

This action imposes a limit on potential removals of pollock from the AI of 19,000 mt/year. At least 1,000 mt are needed to maintain existing incidental catch limits, leaving a maximum of 18,000 mt for directed harvests. At an AI pollock DPF of 18,000 mt, the effects on other target fisheries are likely to be small. The four other target species that appear in non-trivial amounts in pollock bycatch during the domestic fishery of the 1990s (from 1991 to 1998) were Atka mackerel, flatfish (primarily Greenland turbot), rockfish (primarily Pacific ocean perch) and Pacific cod.

The average bycatch rate for Atka mackerel during this period was 0.0005 mt of Atka mackerel for each ton of pollock. The low yearly rate was zero, while the high yearly rate was .0058. At the average rate, the incidental Atka mackerel catch associated with 18,000 mt of pollock harvest would be 10 mt. At the low rate it would be zero and at the high rate it would be 104 mt. (NMFS AKR blend) The Atka mackerel biomass estimate from the most recent (2002) survey was about 773,000 mt (2003 SAFE, page 720).

The average bycatch rate for flatfish during this period was 0.0011 mt of flatfish for each ton of pollock. The low yearly rate was 0.0001, while the high yearly rate was 0.0074. At the average rate, the incidental flatfish catch associated with 18,000 mt of pollock harvest would be 19 mt. At the low rate it would be 2 and at the high rate it would be 133 mt. (NMFS AKR blend)

The average bycatch rate for Pacific cod during this period was 0.0085 mt of cod for each ton of pollock. The low yearly rate was 0.0011, while the high yearly rate was 0.0085. At the average rate, the incidental Atka mackerel catch associated with 18,000 mt of pollock harvest would be 20 mt. At the low rate it would be 1 and at the high rate it would be 154 mt. (NMFS AKR blend)

[31]The assessment authors use the size of the female spawning biomass with respect to the B_{35} biomass level for MSST determinations in the NRA stock. They do not have a similar threshold for the stock east of 174°W.

The average bycatch rate for rockfish during this period was 0.00085 mt of rockfish for each ton of pollock. The low yearly rate was 0.000125, while the high yearly rate was .0035. At the average rate, the incidental Atka mackerel catch associated with 18,000 mt of pollock harvest would be 15 mt. At the low rate it would be 2 and at the high rate it would be 63 mt. (NMFS AKR blend) The rockfish harvest is almost entirely Pacific ocean perch (NMFS, AKR Blend). The Aleutian Islands Pacific ocean biomass, based on the 2002 survey, is about 452,000 mt. (2003 SAFE, page 596).

These bycatches would count against the rockfish TACs in the AI, reducing the TAC available for targeted harvests, and buffering any impact these small amounts might have on the total harvest of rockfish in the AI. Because these bycatches would come at the expense of other groups fishing in the BSAI, they would impose an economic cost on these groups. This cost is addressed under the economic and social criteria.

A future AI pollock fishery will be prosecuted with smaller vessels than in previous years, and perhaps more intensively in some geographic areas (because of SSL closures). The trawl nets used, the horsepower of participating vessels, and fishing strategies used may all be quite different than prior to 1998, resulting in bycatch rates and patterns quite different from historic. These differences may create problems with the extrapolation of future bycatch rates in the AI pollock fishery.

An AI pollock fishery would be prosecuted with pelagic trawls, and would not likely affect habitat for such non-target species as Pacific cod, Atka mackerel, sablefish, flatfish, or rockfish since these species are more demersal or benthic oriented, are often associated with benthic structure and relief, and pollock fishing would be targeting schools of pollock that would likely be more bathypelagic or midwater oriented.

Higher removals of pollock may be associated with incidental catches of juvenile pollock, and may reduce the biomass of pollock, thereby reducing the production of juvenile pollock. Juvenile pollock are preyed upon by other pollock, Pacific cod, and other species of fish. Juvenile pollock are important components of the diet of other fishes, with pollock being the number one consumer of juvenile pollock followed by Pacific cod and arrowtooth flounder as numbers two and three, respectively (Lang et al. 2003). But the levels of reduced yield are very small and are judged to be insignificant given the very large biomass of pollock in the AI region. Thus this alternative is not likely to impact prey items for fish species harvested in other target fisheries in the AI.

Historical evidence indicates that pelagic pollock fisheries will only catch small amounts of these other target species incidentally. There appears to be limited potential for overlap between pollock and fixed gear fishing areas. This alternative addresses the process by which TAC is apportioned, in this case using the normal specifications process. The above considerations are routinely evaluated in the specifications process, and that analysis is provided in an annual NEPA analysis. The constraints on the specifications process associated with this action are not expected to jeopardize the capacity of the other target stocks to produce MSY on a continuing basis, and are not expected to alter the genetic structure, change reproductive success, change prey availability, or affect habitat, so as to jeopardize the ability of these stocks to sustain themselves at or above MSST. For these reasons, the impacts of this alternative on other target species have been rated "insignificant."

The pollock TAC in the EBS would have to be reduced by 18,000 mt to fund an AI allocation at this level. Historical and current pollock ABCs and TACs in the EBS are very high. An 18,000 mt reduction in the AI TAC is a change of about 1% in the 2003 harvests. Moreover, a reduction in removals in the EBS is not considered likely to have adverse impacts. The constraints on the specifications process associated with this action are not expected to jeopardize the capacity of the pollock stock to produce MSY on a continuing basis, and would not be expected to alter the genetic structure, change reproductive success, change prey availability, or affect habitat, so as to jeopardize the ability of the stock to sustain itself at or above MSST.[32]

The Council's proposal provides for the rollover of unused AI pollock DPF and CDQ to the ITAC and CDQ fisheries in the EBS, if the Aleut Corporation or CDQ groups are unable to harvest them in the AI. It is possible that as much as 18,000 mt might be rolled over (the TAC minus the AI pollock ICA level in recent years). Such a reallocation would provide for harvest of pollock in the EBS above the annual TAC amount established for the EBS. This will not lead to a significant adverse impact on the EBS pollock stock. The maximum amount in question would be about 1.3% of the 2005 proposed BS pollock TAC (1,474,450 mt). The TAC plus any rollover would be far below the recommended 2005 EBS ABC of 2,363,000 mt. (20005 TAC and ABC from NMFS, 2004). Implications for Steller sea lions in the EBS area discussed in a later part of this section.

Effects on Incidental Catch of Other and Non-specified Species

Other species include sculpins, skates, sharks, and octopus. This category also includes squid, which in the BSAI are separately assessed annually by the Plan Team. Information on these species is generally limited when compared with other species upon which directed fisheries are prosecuted. However, these species have some current or potential economic value, are an integral part of the marine ecosystem, and thus are monitored by NMFS. Catch levels are small when compared with target species, but levels of catch are increasing (NPFMC 2003b).

Non-specified species are marine organisms which have little or no economic value and are generally discarded and certainly not targeted; non-specified species catch levels presumably track the catches of the target species in various fisheries. Since target fishers realize adverse effects from harvest of species not targeted, efforts are generally made to minimize catch of these species to reduce the time it takes to sort or otherwise deal with unwanted catch. Thus, levels of catch of other or non-specified species are generally low.

Between 1999 and 2003, groundfish fishermen have taken between 98,000 and 120,000 mt of groundfish from the Aleutian Islands each year. (AKR Blend and Catch Accounting System) The proposed FMP and regulatory amendments would structure an AI pollock fishery that might add a maximum of 18,000 mt to that (1,000 mt are already taken as incidental catch), if the entire DPF can be harvested. Assuming that other and non-target harvests would increase or decrease in proportion to the total volume of groundfish harvested in the AI, the increase in pollock harvest would not

[32] The assessment authors use the size of the female spawning biomass with respect to the B_{35} biomass level for MSST determinations in the NRA stock. They do not have a similar threshold for the stock east of 174°W.

change the incidental catches of these species by more than 50% (See Table 4.1-2 in Section 4.1 for the relevant significance criteria). This impact is therefore classified as "insignificant."

Effects on Incidental Catch of Forage Fish Species

Forage species are taken incidentally in many groundfish fisheries, and prior to 1998 these species were primarily capelin and eulachon. Since 1998, no commercial fishery on forage species has been allowed (BSAI FMP Amendment 36). At the present time, the incidental catch of forage species likely would be very small to negligible. Current regulations permit maximum retainable forage species catch of 2 percent of total catch.

Between 1999 and 2003, groundfish fishermen have taken between 98,000 and 120,000 mt of groundfish from the Aleutian Islands each year. The proposed FMP and regulatory amendments would structure an AI pollock fishery that might add a maximum of 18,000 mt to that (1,000 mt are already taken as incidental catch), if the entire DPF can be harvested. Assuming that forage fish harvests would increase or decrease in proportion to the total volume of groundfish harvested in the AI, the increase in pollock harvest would not change the incidental catches of these species by more than 50% (See Table 4.1-3 in Section 4.1 for the relevant significance criteria). This impact is therefore classified as "insignificant."

Effects on Incidental Catch of Prohibited Species

The average bycatch mortality rate for halibut during this period was 0.00002 mt of halibut for each ton of pollock. The low yearly rate was zero, while the high yearly rate was .00011. At the average rate, the incidental halibut catch associated with 18,000 mt of pollock harvest would be 0.4 mt. At the low rate it would be zero and at the high rate it would be 2 mt. (NMFS AKR blend). This compares to BSAI groundfish fisheries halibut bycatch mortality of 3,790 mt in 2003.

The average bycatch rate for bairdi during this period was 0.00315 crabs for each ton of pollock. The low yearly rate was zero, while the high yearly rate was .01968. At the average rate, the incidental bairdi catch associated with 18,000 mt of pollock harvest would be 57 crabs. At the low rate it would be zero and at the high rate it would be 354 crabs. (NMFS AKR blend). This compares to BSAI groundfish fisheries bairdi bycatch of about 897,000 crab in 2003.

The average bycatch rate for red king crab during this period was almost zero crabs for each ton of pollock. The low yearly rate was zero, while the high yearly rate was .00002. At the average rate, the incidental red king crab catch associated with 18,000 mt of pollock harvest would be zero crabs. At the low rate it would be almost zero and at the high rate it would be less than one crab. (NMFS AKR blend). This compares to BSAI groundfish fisheries red king crab bycatch of 73,378 crab in 2003.

The average bycatch rate for Chinook salmon during this period was 0.02389 salmon for each ton of pollock. The low yearly rate was 0.00365, while the high yearly rate was .04326. At the average rate, the incidental Chinook salmon catch associated with 18,000 mt of pollock harvest would be 430 salmon. At the low rate it would be about 66 salmon and at the high rate it would be 779 salmon. (NMFS AKR blend). This compares to a BSAI Chinook salmon bycatch of 44,706 salmon in 2003.

The average bycatch rate for other salmon (almost all chum) during this period was 0.01658 salmon for each ton of pollock. The low yearly rate was 0.00167, while the high yearly rate was 0.15724. At the average rate, the incidental other salmon catch associated with 18,000 mt of pollock harvest would be 299 salmon. At the low rate it would be about 30 salmon and at the high rate it would be 2,830 salmon. (NMFS AKR blend). This compares to a BSAI other salmon bycatch of 187,323 salmon in 2003.

There are limited data on the origins of Chinook salmon taken as bycatch in the BSAI. Witherall, et al. find that the most recent information is scale pattern analysis data from 1979-1982. These are data from the early years of the foreign and joint venture harvests. These data suggested that the Chinook harvested in the BSAI came from Western Alaska, Southcentral Alaska, Asia, Southeast Alaska, and Canada. Somewhat over half of the salmon came from Western Alaska. Witherall et al point to more recent scale pattern and genetic data for chum salmon from the mid-1990s. Chum salmon also originated in many places around the North Pacific. Some what smaller proportions of the chum catch (on the order of 20% to 25% appear to have originated in Western Alaska. (Witherall et al., pages 59-60).

Witherall et al. also point out that BSAI groundfish fisheries can take salmon as bycatch one or two years before they return to their natal streams. Given normal mortality some proportion of the salmon harvested as bycatch would not have lived to return to their natal streams if they had not been caught. They use the concept of “adult equivalents” to refer to the reduction in fish returning to their streams as adults for any given bycatch of salmon. For example, a bycatch of 18,000 Chinook translates into a reduction in returning salmon of 14,581 adult equivalents. (Witheral et al., page 61) The calculations are rough, and are only provided here to illustrate the general concept, and provide a sense of the possible difference between bycatch and adult equivalent returns.

Figure 4.2.2-7a in Section 4.2.2, showed locations of salmon bycatch in pollock fisheries in the Aleutian Islands. A relatively large part of historical AI bycatch of Chinook salmon occurred outside of critical habitat on the eastern border of Area 541, and north of Atka Island. A large part of AI Chinook bycatch appears to have occurred outside of Steller sea lion critical habitat, so additional pollock trawling there could lead to additional Chinook salmon bycatch in the Aleutian Islands. A relatively large part of historical AI bycatch of other (primarily chum) salmon occurred between the Rat Islands and the Near Islands in waters outside of SSL critical habitat, and also in the waters just north of Atka, some of which are outside critical habitat. Additional pollock trawling in these waters could also lead to additional salmon bycatch.

The average bycatch rate for herring during this period was 0.00033 mt of herring for each ton of pollock. The low yearly rate was zero, while the high yearly rate was 0.00248. At the average rate, the incidental herring catch associated with 18,000 mt of pollock harvest would be 6 mt At the low rate it would be about zero mt and at the high rate it would be 45 mt. (NMFS AKR blend). This compares to a BSAI herring bycatch of 1,099 mt in 2003 (almost all in the EBS pollock fishery).

The average bycatch rate for other tanner during this period was 0.00275 crab for each ton of pollock. The low yearly rate was zero, while the high yearly rate was 0.02049. At the average rate, the incidental herring catch associated with 18,000 mt of pollock harvest would be 50 crab At the low rate it would be about zero mt and at the high rate it would be 369. (NMFS AKR blend). This compares to a BSAI other tanner bycatch of about 615,000 crab in 2003.

The average bycatch rate for other king crab during this period was 0.00022 crab for each ton of pollock. The low yearly rate was zero, while the high yearly rate was 0.00088. At the average rate, the incidental herring catch associated with 18,000 mt of pollock harvest would be 4 crab At the low rate it would be about zero mt and at the high rate it would be 16. (NMFS AKR blend).

The AI pollock fishery may be prosecuted with smaller vessels than in previous years, and perhaps more intensively in some geographic areas (because of SSL closures). The trawl nets used, the horsepower of participating vessels, and fishing strategies used may all be quite different than prior to 1998, resulting in bycatch rates and patterns that differ from historical experience. Thus there are concerns about extrapolation or inferring the future bycatch rates in the AI pollock fishery.

In 2003 and 2004, NMFS stock assessment biologists have reevaluated the stock structure of pollock in the AI region given uncertainty over stock composition. Future AI pollock ABCs may be changed in amount, and geographic boundary, in future stock assessments. A change in pollock stock structure, with possible changes in where pollock may be fished, and at what levels, may result in a change in the overall PSC bycatch scenario, placing some uncertainty in predicting future effects of these alternatives on PSC bycatch.

Not all vessels in the AI pollock fishery will be observed. In the absence of observer coverage, NMFS cannot be certain that vessels are accurately reporting PSC bycatch. Catcher vessels under 60 feet are not normally required to carry observers, and catcher vessels from 60 to 120 feet are only required to carry observers 30% of the time. Under the provisions of the Council's final action establishing the AI pollock fishery, vessels under 60 feet are required to carry a NMFS Cadre observer if requested to do so by NMFS. However, the number of Cadre observers is limited. It is not clear that the Cadre requirement will generate observer data. Pollock vessels tend to sort their catch at sea somewhat less than other fishing operations, and deliveries will be monitored under this program. Moreover, in 2005-2006, the use of catcher vessels under 60 feet in this fleet may be limited. Program rules prohibit more than 25% of the harvest from being taken by vessels of this class in these years. It is also likely that the main focus of the Aleut Corporation in these years will be harvests by larger vessels, with the smaller trawlers used experimentally. The Council has committed to a review of the observer issue at its June 2006 meeting.

The proposed FMP and regulatory amendments would structure an AI pollock fishery that might create an ITAC of a maximum of 18,000 mt of pollock (1,000 mt are already taken as incidental catch), if the entire DPF can be harvested. As noted earlier, using low and high bycatch rates from 1991 to 1998, this implies Chinook bycatches between 66 and 779 salmon. Using the average bycatch rate over the period, the bycatch would be 430 salmon. Similar estimates for chum salmon are a range between 30 and 2,830 salmon, with a mean of 299 salmon toward the lower end of this. At the high ends, this is about 1.7% of the 2003 BSAI Chinook salmon bycatch, and 3% of BSAI chum salmon bycatch. At the mean bycatch rates from 1999 to 1998, these are 1% and a third of a percent.

Considering the modest levels of expected bycatch, the evidence of the dispersed origins of the salmon taken as bycatch in the BSAI groundfish fisheries, the relationship between bycatch and salmon adult equivalent returns, and the fact that increased AI bycatches would be offset to some extent by reduced EBS bycatches, PSC bycatch amounts are not expected to be large enough to jeopardize the capacity of the PSC stocks to maintain benchmark population levels, produce 20% decreases in harvest levels in directed fisheries, or increase BSAI harvests of prohibited species by more than 50%. Bycatch of other species are relatively small. For these reasons, the PSC impacts are rated "not significant" for these alternatives.

Effects on Marine Mammals

The Aleutian Islands would be open to a directed pollock fishery with the TAC set as previously described (see Table 4.4-1) and apportioned to A and B seasons. The current regulations (and ESA consultations) provide for an Aleutian Islands Subarea pollock fishery that is outside of Steller sea lion designated critical habitat, with TAC apportioned 40%/60% to the "A"and "B"seasons respectively, and based upon an ABC value which conforms to the harvest control rule and is based on the annual pollock stock assessment which appropriately evaluates the stock being harvested. Possible adverse effects of an offshore (i.e., outside of critical habitat) fishery for pollock were fully considered in the 2001 Biological Opinion and those adverse effects were accounted for under the incidental take statement provided by that consultation. An AI pollock fishery would fall within the terms of that previous consultation and would not be considered an adverse impact on Steller sea lions.

The Aleutian Islands area previously has been open to a directed pollock fishery. Prior to 1999, this fishery's TAC was as high as 100,000 mt. In recent years the TAC has been much lower (since 1999 basically only an ICA apportionment), and the BSAI Plan Team's reevaluation of the AI pollock structure may lead to recommended closure to fishing east of 174 degrees W and perhaps lowered ABCs for the remainder of the AI region. The impacts of a reopened fishery on marine mammals would likely be similar to those impacts realized in this fishery in prior years. Those impacts were reviewed periodically in previous years as the fishery was prosecuted in these years, and those levels of harvest were not judged to be adversely impacting marine mammals. Where issues of concern arose, the Council established appropriate measures to mitigate these concerns. However, a reopened fishery will occur in areas outside of Steller sea lion protection areas; these protection areas will remain closed to pollock trawling. This may displace the Aleut Corporation pollock fishing activities into areas perhaps not fished as intensely as before.

The proposed pollock fishery would be prosecuted in compliance with existing SSL protection measures. Several potential direct and indirect effects on Steller sea lions are considered in this analysis. Annual levels of fishery-related incidental mortality to Steller sea lions are estimated by comparing the ratio of observed incidental take of animals to observed groundfish catch (stratified by area and gear type). Incidental take frequencies also reflect locations where fishing effort is highest. In the Aleutian Islands and GOA, incidental takes are often within Steller sea lion critical habitat. In the Bering Sea, takes are farther off shore and along the continental shelf. Otherwise there seems to be no apparent "hot spot" of incidental take disproportionate with fishing effort. Given that critical habitat is closed to directed fishing for pollock in the Aleutian Islands, an AI pollock fishery apportionment would not likely result in an increase in the incidental take of Steller sea lions. Use of areas beyond critical habitat by sea lions is very limited in the Aleutian Islands subarea (2001 BiOp). Also, it is unlikely that the allocational regime chosen for the offshore fishery would result in additional adverse impacts. Therefore, incidental take would be insignificant under this alternative.

The spatial and temporal effects on Steller sea lion prey by the Aleutian Islands pollock fishery previously has been analyzed and the fishery modified to comply with the Endangered Species Act (ESA)(2001 BiOp). The fishery as prosecuted under this alternative would be conducted according to these protection measures and no impacts are expected beyond those already analyzed. The specifics of the fishery seasonal apportionments and fishery location were described above. Telemetry data suggest that most Steller sea lions forage relatively close to haulouts and rookeries, generally within 10 nm and most within 20 nm, although in winter they may forage further offshore. The Steller sea lion protection measures provide a buffer around haulouts and rookeries to provide an area protected from fishery removals of fish species important in Steller sea lion diets. In parts of the AI region, especially the western Aleutians, Steller sea lions continue to decline, and there is heightened concern over these animals in this particular area. Aerial surveys of Steller sea lions conducted in 2004 will provide valuable data on population levels in this region. Overall, with the current Steller sea lion protection measures in place, no aspect of this alternative would include types of actions that would be likely to impact the prey availability for Steller sea lions.

There could be some effect of an AI pollock fishery if spatial concentration of fishing activity occurs. This could result from either larger AFA vessels fishing a relatively small TAC concentrating their efforts in an area or areas that yield good CPUEs, encouraging the vessels to remain in such areas to attain their TAC quotas as quickly and efficiently as possible. Also, when small vessels enter this fishery, and given the continued closures of areas near shore within 20 nm of SSL protection areas, conceivably small vessels also could concentrate in areas open to fishing that are closest to ports or areas of refuge in stormy weather. In either case, some local depletion of marine mammal prey items could occur, but the volumes of potential harvest are small compared with available biomass. These impacts on marine mammals would be in proportion to the amount of TAC apportioned to this fishery.

Steller sea lion protection measures require the control of overall harvest of pollock, Pacific cod, and Atka mackerel, which are considered key Steller sea lion prey species (50 CFR 679.20(d)(4)). If the spawning biomass of a prey species is predicted to fall below 20 percent of its unfished spawning biomass, directed fishing for that species would be prohibited. The analysis of the harvest control rule is in the Steller sea lion protection measures SEIS (NMFS 2001). This alternative would not allow directed fishing for pollock if the spawning biomass fell below 20 % of the unfished spawning biomass, and therefore would have insignificant impacts on the global availability of pollock in the Aleutian Islands area. Further, the resumption of a fishery in the Aleutian Islands area would be provided such that the 2 million metric ton cap for the BSAI would not be exceeded, as required by the 2000 Biological Opinion.

Vessel traffic, nets moving through the water column, or underwater sound production may all represent perturbations that could affect Steller sea lion behavior. An increase in fishing activity in the AI region could result in increased discard or accidental loss of fishing materials such as nets, package bands, lines, etc. that could increase the incidence of entanglement with Steller sea lions. Foraging could potentially be affected not only by interactions between vessel and species, but also by changes in fish schooling behavior, distributions, or densities in response to harvesting activities. In other words, disturbance to the prey base may be as relevant a consideration as disturbance to the predator itself. For the purposes of this analysis, we recognize that some level of prey disturbance may occur as a fisheries effect. The impact on marine mammals using those schools for prey is a function of both the amount of fishing activity and its concentration in space and time. The criterion set for insignificant impacts is a similar level of disturbance as that which was occurring in 2001. In 2001, the total pollock catch in the Aleutian Islands was only 824 mt (Table 3.2-1); thus a fishery up to the ABC would be a substantial increase in the amount of catch compared to 2001. However, the test for significance is whether there would be more disturbance to the Steller sea lion population. Given that all of sea lion critical habitat is closed in the Aleutian Islands, and the effects of a fishery up to ABC was considered in the 2001 BiOp and the Steller sea lion protection measures SEIS (NMFS 2001), no substantial disturbance effects are likely given the vast area beyond 20 nm from land and the very limited use of this area by sea lions in the Aleutian Islands due to the bathymetry (i.e., deep water off the continental shelf). Thus, the effect under this alternative is insignificant according to the criteria set for significance.

In October 2004, the Council clarified its intent regarding the allocation of TAC in the AI and BS subareas to the directed pollock fisheries. A separate TAC will be established for each subarea with 10 percent of each TAC allocated to the CDQ program in each subarea. In June 2004, the Council recommended that any TAC that is not likely to be harvested in the AI directed pollock fishery be reallocated to the BS subarea directed pollock fishery. The CDQ groups also may request a reallocation of unharvested AI CDQ pollock to the BS subarea CDQ pollock directed fishing allowance due to logistical difficulties in harvesting pollock in the AI subarea. Reallocation of unharvested AI pollock to the BS AFA and CDQ directed pollock fisheries would provide for harvest of pollock in the BS above the annual TAC amount established for the BS.

The Steller sea lion protection measures require harvest of pollock to be within the annual TAC amounts to ensure harvest is appropriate to the amount of available pollock biomass and other considerations. Because of the current condition of the BS pollock stock and the 2 million mt optimum yield cap for the BSAI, the BS pollock TAC is set well below the BS pollock ABC. The maximum amount of reallocation that could occur from the AI subarea to the BS subarea is 19,000 mt, approximately 1.3 percent of the 2005 proposed BS pollock TAC (1,474,450 mt). The proposed acceptable biological catch (ABC) for pollock in the BS subarea is 2,363,000 mt. 19,000 mt is 2 percent of the difference between the BS pollock TAC and ABC. Even with a reallocation of 19,000 mt from the AI subarea, the amount of pollock available for harvest in the BS (1,493,450 mt) would be well below the ABC.

The reallocation of any unharvested AI pollock TAC likely would be substantially less than 19,000 mt and likely would occur in the later part of the A season or in the B season. Based on the 19,000 mt annual TAC limit for AI pollock and on the current biomass size of the BS pollock stock, the reallocation of unharvested AI pollock TAC is not likely to result in harvest in the BS that is excessive in relation to available pollock biomass. As long as the gap between the BS pollock ABC and the BS pollock TAC is wide, the reallocation of unharvested pollock from the AI to the BS is not likely to adversely affect Steller sea lions or their critical habitat. If the biomass of the BS pollock stock declines substantially in the future so that the gap between the ABC and the TAC is substantially reduced and potential reallocated amounts would exceed TAC by more than 2 percent, the potential reallocation of unharvested AI pollock would need to be analyzed by informal consultation before commencing an inseason action for the reallocation. The current condition of the BS stock and the amount of AI pollock reallocation would need to be considered at that time to determine the likelihood of an adverse effect on Steller sea lions or their critical habitat. No reallocation would occur if the action was likely to adversely affect Steller sea lions or their critical habitat.

The northern fur seal population has declined over the past decade, and recent counts in the Bering Sea region suggest the decline is continuing. Fur seals breed and pup on the Pribilof Islands and on a few other islands in the Bering Sea region, and lactating females forage at sea to maintain a nutritional status sufficient to successfully nurse pups during the summer months. These foraging areas are primarily in the Bering Sea, and thus an AI pollock fishery would not likely overlap this foraging habitat. However, most of the Bering Sea fur seal population migrates through Aleutian Island passes en route to/from summer habitat and winter habitat. The fur seal is pelagic during the winter months in the north Pacific, although some remain in the Bering Sea region in winter. Since an AI pollock fishery could occur in areas and during times of fur seal migration, there is a potential for encounters between this fishery and fur seals. However, there likely will be very few vessels participating in the AI fishery, particularly in the early years when it is projected that much of the quota may be taken by one or a few AFA catcher/processors. As small vessels enter the fishery, opportunities for encounters may increase, but again, the number of vessels will likely be small, particularly compared with all of the other vessel traffic already occurring in this area from other target fisheries, shipping, military activity, and other activities. Also, the A season will be the primary focus of this fishery, with most of the harvest effort likely to occur in January through March, which does not overlap with the April-July movement of fur seals through the AI region en route to the Pribilof Islands in the spring. There may be some overlap during the fall migration as fur seals move south to the North Pacific, but interest in the B season will likely be small, particularly in the early years. Thus the potential for incidental take of fur seals in AI pollock fishing operations is very small and is judged to be insignificant.

Fur seals are susceptible to entanglement with derelict fishing gear because of their seasonal pelagic activity, and often entangle with lost nets and line around rookery areas. Even today, efforts to remove derelict gear, nets, lines, and other debris from beaches on the Pribilof Islands have resulted in large amounts of such debris. Fur seals feed on pollock, although primarily juvenile fish, and a pollock fishery could remove prey items used by fur seals; however, given the difference in size between fishery-targeted pollock and pollock consumed by fur seals, this overlap may be of less concern. Also, the AI pollock fishery is very distant from the main Bering Sea fur seal foraging areas, and would unlikely affect foraging fur seals. Thus the potential for prey removal by an AI pollock fishery is very small and judged to be insignificant.

Some cetaceans migrate through the AI region, and special concern has been expressed over the extremely small population of northern right whale that seasonally occupies habitat in the Bering Sea. This highly endangered whale may be sensitive to encounters with fishing activity; as is currently understood, this whale is susceptible to vessel strikes because of its low profile when at the water surface making it difficult to see. Members of the right whale group (including the Atlantic stock) may entangle with lines from floating buoys, damaging baleen plates and impairing feeding. However, very little is known about the northern right whale's habitat, movement patterns, or other vital activities in the north Pacific region. Other cetaceans also may be susceptible to gear entanglement. Some mortality to humpback whales has been reported for trawl fisheries in the Bering Sea, and mortality to fin whales also has been reported from BSAI groundfish trawl fisheries (Angliss and Lodge 2002). Most baleen whales do not consume food species that would be harvested in an AI pollock fishery (although some baleen plates in larger whales may sieve large quantities of larval or small juvenile pollock, among other fish species). And the AI pollock fishery will be prosecuted with pelagic nets which do not contact the bottom to any great degree and thus are not very susceptible to loss, and thus gear loss and subsequent entanglement with whales is considered to likely be very rare. Overall, the potential for encounters between AI pollock fishing operations and cetaceans is low. There will be few vessels participating, and fishing operations will be primarily during the A season which will be before the main migration of those whales that migrate seasonally through the AI passes en route to summer feeding grounds in the Bering Sea. Given the very small incremental increase in vessel activities, the low likelihood of gear loss, very little concern over prey removal, and a low level of spatial and temporal overlap with cetacean habitat, the potential for adverse effects from an AI pollock fishery is very small. Thus this is considered an insignificant concern.

The Bering Sea stock of northern harbor seal experiences mortality from BSAI trawl fisheries of 2 or more individuals annually (Angliss and Lodge 2002). However, this level of mortality likely comes from a variety of groundfish fishery activities, and at these levels is not considered a threat to this population. Increased fishing in the AI by trawl vessels will likely be a small fraction of any future injury or mortality to harbor seals, primarily because these fisheries will be prosecuted distant from shore where harbor seals tend to concentrate throughout the year. Some heightened concern may remain, however, as the Alaskan populations of harbor seals (their stock structure is still not understood and is the subject of ongoing genetic and other research) have declined in some areas and managers are seeking to understand reasons so that mitigative actions might be taken in the future.

The southwest Alaska stock (Distinct Population Segment or DPS) of the northern sea otter is a candidate for listing as threatened under the Endangered Species Act (65 *FR* 67343; 11/9/00). This DPS of sea otter (see Figure 4.2.2-7b) is under a heightened level of concern because of the significant population decline in the Aleutian Islands in the past several years. It is unlikely that the AI pollock fishery would have any appreciable effect on sea otters because this species is very coastal oriented, does not migrate from area to area, and feeds on prey items not targeted by the fishery. Fuel spills and loss of nets and lines could result in direct contact and mortality to sea otters. However, the AI pollock fishery would be prosecuted well offshore and not in contact or proximity to sea otters, and thus would not likely have measurable effects on the sea otter population. Future impacts on this DPS may depend on action taken by Congress and the U.S. Fish & Wildlife Service on defining critical habitat. It is possible that some features of critical habitat may be susceptible to impact from groundfish fishing activities, although it again appears unlikely that an AI pollock fishery will overlap with sea otter critical habitat to any extent such that significant concern results.

Springer et al. (2003) discuss a possible mechanism that could explain the decline over recent decades in some north Pacific marine mammal species, including seals, sea lions, and sea otters. Their thesis is that industrial whaling in the mid 20th Century may have removed the primary prey (great whales, particularly fin, sei, and sperm) important to killer whales, thus causing killer whales to shift to feeding on smaller marine mammal prey in a sequential fashion causing a one-by-one collapse in population size of harbor seas, fur seals, sea lions, and most recently sea otters. The scientific community is not unified in acceptance of this hypothesis, but it is a potential factor that may have influenced marine mammal populations in the north Pacific, with the consequence of either absolving fishery activities as possible causes or reducing marine mammal populations sizes to such a low level that they are more susceptible to effect from smaller perturbations. Most scientists and managers likely agree that the reasons for how these various factors interweave and affect the population dynamics of the various species of marine mammals in this region is elusive.

The overall combination of effects described above seem to indicate a limited impact on marine mammals of an AI pollock fishery with a maximum DPF of 18,000 mt apportioned to A and B seasons under the proposed FMP and regulatory amendments (see Table 4.2.4-1). Some species are known to have potential interactions with groundfish fisheries (some whales, northern fur seals), and in some cases the effects of the proposed action in the context of this interaction are unknown. For some marine mammals, pollock are a component of their diet (harbor seals, Steller sea lions, northern fur seals), and some localized prey depletion might be a concern, depending on how the fishery is actually prosecuted. In the past, groundfish fishery effects on prey availability was one reason SSL protection measures were put in place, limiting prey removals within 3, 10, or 20 nm from SSL haulouts and/or rookeries. Thus, setting a TAC that could result in prey removals is of some concern. In some other cases insufficient information is available on the distribution, abundance, or habitat use patterns by many marine mammal species, making it impossible to predict impact, although from past history with the AI pollock fishery no significant concerns were raised. Some marine mammals that likely use the AI region for seasonal habitat, or migrate through the AI passes en route to or from seasonal habitat in the Bering Sea, are endangered, heightening the level of concern over any fishery prosecuted in their habitat. Some are in continued decline (e.g. northern fur seals) or have declined such that their population condition is uncertain (northern harbor seals, northern right whale). Given the potential for some overlap of this fishery with pelagic fur seals, movement corridors for northern right whales en route to/from summering areas in the Bering Sea, and movement corridors for some other cetaceans, the impacts of this alternative could be of concern; but the fact that this fishery has occurred in the region before without adversely impacting these marine mammals suggests that it likely will not have adverse impacts in the future. Also, this will be a small incremental addition to fishing activity in the region. Plus many other marine activities occur in the area, and this small pollock fishery is considered insignificant in light of the larger picture.

In summary, and in light of the significance criteria set for this issue, the AI pollock fishery are not expected to have significant adverse impacts on marine mammals. Given that the AI pollock fishery will be prosecuted by a small number of vessels, the potential for disturbance and increased marine mammal take that would result in a downward change in any marine mammal population trajectory of >10% is extremely small. The AI fishery will not likely be significantly concentrated in time or space, and will be prosecuted outside Steller sea lion closed areas, thus minimizing potential impacts on the prey base for marine mammals, especially coastal species. And the global harvest control rule specified in the Steller sea lion protection measures, which will remain in force in this fishery, obviates any concern over overharvest of pollock. Overall, then, the effects of an AI pollock fishery at a DPF of about 18,000 mt are considered to be insignificant.

Effects on Seabirds

The Aleutian Islands would be open to a directed pollock fishery with the TAC set as previously described (see Table 4.4-1) and apportioned to A and B seasons. The proposed pollock fishery would be prosecuted in compliance with existing seabird protection measures. Several potential direct and indirect effects on seabirds are considered in this analysis. Annual levels of fishery-related incidental mortality to seabirds are estimated by comparing the ratio of observed incidental take of dead birds to observed groundfish catch (stratified by area and gear type). Incidental take frequencies also reflect locations where fishing effort is highest. In the Aleutian Islands and GOA, overlap between seabirds and trawl fishing effort is most likely to occur near shore or the relatively narrow band of the continental shelf. In the Bering Sea, trawling overlaps with birds along the continental shelf and mid shelf regions, thus extending farther from land masses than in the GOA (see GOA and BSAI SAFE documents).

The most frequent incidental take in trawl fisheries is of the northern fulmar (about 75% of trawl seabird bycatch), and over 500,000 northern fulmars nest on the Aleutian Islands. The next most common, shearwaters and Laysan albatross, do not nest in Alaska. Birds which utilize bottom fish and crustaceans, such as some alcids and cormorants (< 2% of total bycatch), may be taken in trawls or have their foraging affected. Between 5 - 7 % of birds taken in trawls are not identified, which may mean that alcids comprise a larger proportion of incidental take than previously recognized. The species most commonly subject to vessel strike mortality (especially in dark, stormy conditions or where lights are used) include five species of small auklets; auklets comprise about 32% of the colonial birds that nest on these islands.

In the Aleutian Islands (Unimak Pass to Attu), the Beringian Seabird Colony Catalog (USFWS 2004) lists approximately 10.5 million seabirds nesting at 274 colony sites. The colonies would usually be occupied by nesting birds from May through September, although some species, notably fulmars, may be raising chicks through October. Thus, primarily the “B” pollock season would substantially overlap temporally with colonially nesting birds, although the same species listed below are likely to be in the Aleutian area, further offshore, during their non-breeding season. These colonially nesting birds consist of 29 species, with the most abundant being fork-tailed storm-petrel (22% of total), leach’s storm-petrel (24%), least auklet (22%) and tufted puffin (12%).

In terms of bird distribution at sea, the North Pacific Pelagic Seabird Database (NPPSD) (See SAFE 2002 report for figures) indicates that northern fulmars overlap with trawl fisheries in the Aleutians near the major passes and around the eastern Aleutian Islands. Shearwaters also occur primarily around Unimak Pass and the central to eastern Aleutians. Laysan albatrosses are most likely to overlap in the western Aleutians, whereas black-footed albatrosses are relatively rare in the Aleutians. In the Aleutians, short-tailed albatrosses have been observed most frequently near the central Aleutians and on the GOA side of the eastern Aleutians.

Because of the 20 nm closure around SSL critical habitat, and the consequent closure of these areas to any pollock trawl fishery, many of the nearshore feeding birds, such as guillemots, cormorants, and sea ducks, should not experience significant increase in incidental take from the proposed trawl fishery in the AI. Species that may experience a shift in location of incidental take in the Aleutians include albatrosses and shearwaters, although the global take should not increase significantly. An exception may be the Laysan albatross, which occurs primarily in the central and western Aleutians, and thus could experience an increase in total incidental take. The short-tailed albatross has only been observed to be taken in long-line fisheries, and the spectacled and Steller's eiders have not been recorded as incidental take in groundfish fisheries.

Recently, the US Fish & Wildlife Service (USFWS) issued a Biological Opinion and Incidental Take Statement on the effects of the TAC setting process in the BSAI/GOA (USFWS 2003) that recognizes the potential for take of short-tailed albatross in the groundfish trawl fisheries. That take statement recognizes the potential take of two birds over the period of time the BiOp is in effect. Of concern is the potential for collision between this albatross and trawl third wire gear based on observed mortality to Laysan albatross. However, the USFWS requires a suite of Reasonable and Prudent Measures with specific Terms and Conditions that, when implemented, will mitigate some of the potential for STAL and trawl fishing operations. Also, industry is voluntarily implementing measures to reduce the opportunity for albatross and third wire interactions. Finally, the AI pollock fishery will involve very few vessels, thus providing a very minimal possibility for interactions with short-tailed albatross. Since STAL mortalities have not been reported in groundfish trawl operations to date, and given the considerations discussed above, the potential adverse impact on STAL from an AI pollock fishery is likely to be very small and thus is considered insignificant.

Piscivorous seabirds utilize a wide variety of forage fish, as well as the juvenile stages of some commercial species such as pollock and Pacific cod. Forage fish are not commercially fished, and although their bycatch in trawl fisheries is not well defined, they do not appear to be a large proportion of fish bycatch (SAFE Ecosystem Considerations chapter, Forage fish, 2004). The AI pollock fishery will target large adult pollock, and will not harvest to any appreciable extent fish species consumed by seabirds. Thus this is considered an insignificant concern.

Vessel traffic, nets moving through the water column, or underwater sound production may all represent perturbations that could affect seabird behavior. Foraging could potentially be affected not only by interactions between vessel and species, but also by changes in fish schooling behavior, distributions, or densities in response to harvesting activities. In other words, disturbance to the prey base may be as relevant a consideration as disturbance to the predator itself. For the purposes of this analysis, we recognize that some level of prey disturbance may occur as a fisheries effect. The impact on seabirds using those schools for prey is a function of both the amount of fishing activity and its concentration in space and time. The AI pollock fishery will be prosecuted by a small number of vessels, outside Steller sea lion closed areas, and thus will likely not impact schooling or other behavior of fish species consumed by seabirds; this issue is not considered significant.

Some seabirds dive to the ocean bottom to obtain food, particularly eiders and scoters as well as guillemots and cormorants. If there is major damage to their feeding areas, adverse impacts could accrue, which would be particularly of concern to the threatened Steller's eider which winters throughout the AI region's coastal areas. However, the AI pollock fishery will be prosecuted by pelagic trawl gear that normally does not encounter the seafloor. Thus the potential for disturbance or damage to important seabird food resources on the sea floor is considered to be insignificant.

Offal may be produced during the AI pollock fishing operations. Offal may attract seabirds to vessels and birds may be subject to incidental mortality through vessel superstructure collisions (primarily at night when disoriented by bright deck lights), encounters with cables and warps, or capture in nets. On the other hand, offal production also may be an important seasonal food source for some seabirds, and thus may be considered a positive effect of some fishing operations. The AI pollock fishery will involve very few vessels. Issues around offal attraction will therefore be very minor. Thus the concern over offal production and subsequent fishery interactions with seabirds is considered to be insignificant.

Fishing vessels may carry rats, although to an unknown extent. Vessel sinkings or visits to islands may introduce rats to those islands. The introduction of rats to a previously rat-free island can have adverse impacts on local bird populations since rats may predate on birds, bird eggs and chicks. Bird species that nest in burrows such as storm petrels, puffins and auklets, may be at risk to a greater extent than other species. Local populations may be reduced, and potentially driven to extinction. This issue was discussed at more length in the 2004 EA/RIR for Amendment 82. There is already vessel traffic in the region from military, cargo shipment, other target fisheries, tendering, subsistence, and recreational activity. The incremental addition of a small number of vessels fishing the AI pollock resource would likely have a very small probability of contributing rats to an uninfested island that harbors a significant population of burrow-nesting seabirds. These AI pollock vessels would be required to fish outside of SSL critical habitat, generally keeping them well offshore while engaged in fishing, and further reducing the likelihood of the introduction of rats. Given available information, it is unlikely that the proposed action would lead to an incident that accidentally brought rats to an uninfested island, and thus is judged to be an "insignificant" impact.

The FMP and regulatory amendments needed to implement the Council's recommended action will generate an AI pollock DPF no greater than 18,000 mt. The test for significance is whether there would be sufficient take, prey removal, production of offal, or damage to important benthic habitat that it would cause impacts at the colony or population level. Because sea lion critical habitat is closed in the Aleutian Islands, no substantial disturbance effects are likely within the 20 nm zone around those islands. This closure would continue to provide 'protection' of food resources for guillemots, cormorants, and eiders near the protected rookeries and haulouts. Many species of birds forage extensively beyond this zone, however, and may also be attracted to fishing activity. Also some effects may occur with respect to birds nesting during the "B" pollock season; the "B" season overlaps with seabird occupation of nesting areas from May through September. This would also be the period when obtaining sufficient prey is critical to building reserves for egg laying, and for supplying food to newly hatched chicks. However, the level of fishing activity in an AI pollock fishery will be very small and would not likely result in an appreciably increased level of incidental mortality from vessel strikes, third wire encounters, or other fishery-related take or mortality. Also the fishery will focus almost exclusively on adult pollock, and this coupled with the small level of vessel activity should not result in any appreciable impact on prey availability for seabirds. Trawling will be by pelagic gear, reducing the likelihood of damage to benthic habitat important to diving birds, and offal production will likely be limited in offshore areas where seabird encounters may occur. Finally, while there are also concerns over rats gaining access to non-infested islands, and having subsequent adverse impacts on nesting seabirds, the potential for such an event is considered so small as to render this an issue of very little concern. Thus, the overall impacts on seabirds from the AI pollock fishery are expected to be insignificant.

Effects on Habitat

The primary habitat concerns in the AI region are the potential adverse effects of an AI pollock fishery on the coral and sponge assemblages that are evident throughout the region; the locations of these habitat types are known based on bycatch of these organisms in previous trawl hauls over the past several decades. These distributions are shown in Figures 4.2.2-8 and 4.2.2-9 in Section 4.2.2.

Pollock in the BSAI are targeted exclusively by pelagic trawls. Non-pelagic trawling for pollock is prohibited (679.24(b)(4). In the Aleutian Islands pollock fishery no intentional sea floor contact is expected, because the rough bottom conditions would result in torn or lost pelagic trawls (EFH Committee 2002). Bottom contact is discouraged on sea floors that are rough by prohibiting the use of chafe protection gear to protect pelagic trawl footropes (679.2). Pelagic gear is large and fairly delicate compared to more traditional non-pelagic gear. While larger pelagic gear is usually fished near softer substrates, such as the mud and sand of Bering Sea, rougher substrates easily damage pelagic gear. Fishing areas in the Aleutian Islands are typically rougher in bottom type and more vertical in slope. The roughness of the bottom and the fragile pelagic pollock net configuration discourage even accidental contact of the net and bottom. The high cost of repairing a pelagic net damaged by contact with the bottom provides a built-in protection for habitat from fishing effort in the directed pollock fishery. When pelagic trawling, such as for pollock, the trawls are fished with doors that do not contact the sea floor, so any door effects are eliminated. Because the pelagic trawl's unprotected footrope effectively precludes the use of trawl nets on rough or hard substrates, pelagic trawls do not generally affect the more rare, fragile, and complex habitats that occur on these rougher substrates. Moreover, in the BSAI, vessels fishing for pollock are also limited by a performance standard that states that if more than twenty crabs are on board this is an indication of bottom trawling.

Under all these alternatives, the Aleutian Islands Steller sea lion Critical Habitat, and significant parts of the AI shelf, remain closed to directed fishing for pollock. Critical Habitat includes 20 nautical mile buffers around the rookeries and haulouts and also includes the Seguam Pass foraging area. For the following analysis the 0-1000-meter bathymetry lines in the Aleutian Islands represent the continental shelf and the habitats at risk.[33]

- Steller sea lion Critical Habitat protects approximately 65% of the Aleutian Islands shelf from a pollock fishery. This leaves only 35% of the entire Aleutian Islands shelf potentially vulnerable to benthic impacts from a directed pollock fishery.
- Within 100 nautical miles of Adak, only 9% of the remaining open shelf is not protected from a directed pollock fishery. The open areas include a small area approximately five nautical miles below Tanaga Island and a larger area to the north and south of the western wing of Atka Island.

- Within 200 nautical miles of Adak, only 44% of the remaining open shelf is open to a directed fishery for pollock. The open areas includes a small area to the east of Seguam pass, to the north and south of the western wing of Atka Islands, a small area five miles to the south of Tanaga Island, a section of shelf crossing Amchitka Pass, most of Petrel Banks, and the southern half of Bowers Ridge.

The change in distribution of fishing effort would be proportional to the amount of the new allocation for pollock in the AI. Because of the current spatial restrictions of Steller sea lion critical habitat out to 20nm from shore, it would be necessary for the fleet to travel at least twenty miles from shore or travel to the nearest open coastline (outside 3 n mi). Much of the early pollock fishery was inside Critical Habitat. After Steller sea lion restrictions increased, some of this effort moved offshore to deep water near the west of the Bogoslof foraging area and east and north of Seguam Pass. Historically these new areas where effort may move were not high pollock catch areas, but under the proposed action these areas likely will be fished, leading to some more intensified fishing effort. Comparing these areas with Figures 4.2.2-8 and 4.2.2-9, there is some potential overlap with known sponge and coral assemblages, but not in areas where sponge or coral are considered to be heavily concentrated.

Rare occurrences of bottom contact by pelagic pollock gear may occur in areas not currently fished. It is possible that these could impact benthic community structure. The more trawl hauls that occur, the greater the potential area of bottom contact, and thus, the greater the intensity of impact. This could result in damage to, or removals of, some larger coral and sponges. Large pelagic trawl nets full of target species catch may touch the sea floor in some situations. Such light contact could have a potentially greater impact on fragile AI habitats, such as hard corals and larger sponges, than in the less structured, softer substrates of the EBS.

However, given the nature of pelagic fishing gear, and the potential costs to operators of fishing too close to the rugged bottoms in the AI, given the limited amount of AI shelf area open to pollock fishing, and given the relatively small size of the maximum AI DPF that would be permitted by this action (18,000 mt), the pollock fishery is expected to have limited contact with bottom habitat.

[33]Bathymetry is based on ETOPO2. This is bathymetric data based on NOAA vessel soundings and satellite altimetry. Source: NOAA\NEMA. Boulder, CO.

Thus, the introduction of a pelagic pollock fishery in the AI is expected to produce levels of mortality and damage to living habitat, changes to benthic community structure, and changes in the distribution of fishing effort and geographic diversity of management measures that are similar to baseline levels. The action is has been rated “non significant” with respect to these criteria.

Table 4.2.4-2 Ecosystem Effects

Issue	Effect	Discussion	Significance
Predator-prey relationships	Pelagic forage availability	Atka mackerel and pollock are important prey items for marine mammals and other species in the AI marine ecosystem. Over the period 1977-2003, point estimates of Atka mackerel biomass age 1+ ranged between 260,860 mt and 771,360 mt. In recent years (1997-2003) modeled biomass estimates ranged from about 415,000 to about 459,000 mt (2004 SAFE page 749). Pollock biomass from AI groundfish survey estimates has ranged between 77,000 mt and 175,000 mt since 1991. In recent years (since 1997), Atka mackerel catches have ranged from about 46,000 mt to about 66,000 mt. Pollock catches have been very low (less than 1,000 mt), as only pollock bycatch in other target fisheries was allowed. The 2004 pollock ABC in the AI was 39,400 mt. The ITAC cap of 19,000 mt means that any pollock harvest will be far below current ABC. The Aleut Corporation likely will be primarily interested in the pollock roe fishery, which is subject to the 40% Steller sea lion protection measure limit. Thus, actual harvest, especially in the early years of this program, may be significantly less than the ITAC. Also, as noted above, fishermen will have to direct their attention to new waters. Considering Atka mackerel and pollock as indicators of forage species abundance in this area, the effects of a 19,000 mt ITAC for an AI pollock fishery would not likely adversely affect forage availability given the large amounts of forage biomass in the AI region.	Not significant
	Spatial and temporal concentration of fishery impact on forage	No more than 40% of the ABC may be harvested in the "A" season. Thus, although the ITAC is 19,000 mt in 2004, given an ABC of 39,400 mt, no more than 15,160 mt may be taken in the "A" season (in both the ICA and DPF). The balance, 2,840 mt, must be taken in the "B" season. While ICA harvests may be taken within 20 miles of shore in connection with other target fisheries, such as that for Pacific cod,Steller sea lion protection measures will prevent DPF harvests from taking place within 20 miles of shore. These measures will limit spatial and temporal concentration of the fishery on forage fish.	Not significant
	Removal of top predators	As discussed earlier, the impacts on marine mammals were designated as "not significant." Sharks did not appear often in historical bycatch. This action will not have a significant impact on removals of marine mammals or seabirds (see the relevant sections in this EA).	Not significant

Issue	Effect	Discussion	Significance
	Introduction of non-native species	These could include non-native species introduced in ballast water of vessels as they move from one region to another, or rats introduced into rat-free islands through vessel visits or sinkings. Rats are a concern because of the threat they pose to burrowing bird species. There is already significant fishing activity in the AI for Pacific cod, Atka mackerel, halibut and sablefish, flatfish, crab and other species. This action represents a modest change in overall harvest activity in the BSAI area. Some vessels that may be active in the pollock fishery may already be active locally (for example, the Aleut Corporation may use the pollock allocation to provide additional targets for vessels already fishing for Pacific cod in the AI. Some vessels will likely change their operating patterns within the BSAI or between the BSAI and GOA. This action is not expected to attract significant numbers of new vessels from the continental U.S. Any that may come will almost certainly come from the Pacific Northwest, which has been the situation for many years. While the introduction of rats is a concern, the increased likelihood of this because of fishing in 2004 is likely to be low, since the fishery will probably involve a relatively small number of vessels in 2004, many of the vessels (small trawlers) may already be involved in AI fisheries, and the fishery will be conducted outside of critical habitat, which generally provides a 20 mile buffer between fishing activity and shore.	Not significant
Energy flow and balance	Energy redirection	The use of C/Ps to harvest the AI pollock quota and the likely shift in deliveries of harvested pollock to Adak should shift some offal production from the Bering Sea to the AI. Limits on offal production associated with the "A"/"B" season split, and the early emphasis of interest in fishing primarily the "A" season may shift energy into certain areas and seasons. If the fishery concentrates only in the "A" season, and the "B" season apportionment is not harvested, it is possible that larger proportions of the TAC will not be harvested in AI in this situation, but will be rolled over back to the Bering Sea. This fishery will be pursued with pelagic trawl gear, and thus any impacts on benthos should be relatively minor. Certainly some fraction of any discards or offal from C/Ps or catcher vessels will settle through the water column, providing an energy source for pelagic or benthic organisms. The total ITAC of 19,000 mt, will also limit energy redirection.	Not significant
	Energy removal	An increase in pollock removals in the AI may be partially offset by a reduction in pollock and other species removals in the Bering Sea. Concentration of removals of pollock biomass would be limited by the required A/B season split and the 20 n mi closure zones. If a relatively minor interest in fishing the "B" season materializes, this may mean that the full AI ITACs won't be harvested, and that some levels of ITAC will be rolled over to the Bering Sea. The total AI ITAC of 19,000 mt represents a relatively modest amount compared to overall AI groundfish biomass (as noted above, pollock biomass alone has ranged from 77,000 to 175,000 mt since 1991), and to overall groundfish biomass, and to overall groundfish removals from the BSAI (90,000 mt to 120,000 mt per year since 1999).	Not significant
Diversity	Species diversity	Pelagic pollock trawling is a relatively clean fishery with limited bycatch. Pollock removals will be capped by a 19,000 mt ITAC, and will be well below the ABC of 39,400 mt. A DPF as large as 18,000 mt is not expected to affect the diversity of species in the AI.	Not significant

Issue	Effect	Discussion	Significance
	Functional (tropic, structural habitat) diversity	The fishery would be almost purely pollock, with some bycatch of Pacific cod, Atka mackerel, sablefish, flatfish, and rockfish, but at very low levels. Thus there likely would be little change in the trophic level of the catch and the trophic level of the remaining groundfish community. The fishery would be prosecuted only with pelagic gear; and fishing would be prohibited within 20 n mi of most AI shoreline. The FMP and regulatory amendments would limit the fishery to a maximum DPF of 18,000 mt. These factors would limit the potential for impacts on structural habitat diversity.	Not significant
	Genetic diversity	While the fishery would likely focus on roe-bearing pollock, in 2005 the pollock stock would be protected from over harvest because the 19,000 mt ITAC will be set well below the ABC of 39,400 mt. The A/B season split would spread out the harvest somewhat, reducing the chance for over harvest of pollock. A re-evaluation of the pollock stock structure is currently being conducted by the BSAI Plan Team. ITACs set for this fishery in future years may be impacted by the results of this analysis should a different stock structure emerge; in this case, the Plan Team likely would recommend an appropriate ABC or ABCs for the apparent stock(s) in the AI region. The results of this effort would be to enhance protection and conservation of the genetic stock structure of pollock in the overall BSAI system. New information on stock structure or other characteristics of pollock in the AI region might add data that are useful in this re-evaluation of the AI pollock stock. Impacts on other species would be small since the pelagic pollock fishery has relatively small bycatches.	Not significant

Effects on State-managed and Parallel Fisheries

The creation of a new state managed pollock fishery inside state waters would require action by the BOF. ADF&G and BOF cannot create an exclusive fishery, restricting participants to Aleut Corporation-approved entities. If a pollock fishery were to open inside state waters, it would be subject to Board of Fisheries regulations, but would not be limited to participants of any specific group. Groundfish fisheries that occur inside state waters are subject to federal and state regulations, as described previously. It is likely that similar restrictions would be imposed on a parallel pollock fishery in this area (pers. comm. Wayne Donaldson).

About 95% of state waters in the Aleutian Islands are in areas that are closed to pollock fishing by Steller sea lion protection measures. The opening of these areas to fishing would require consultation by NMFS. The only state waters in NMFS areas 541, 542, and 543 that are not inside critical habitat are waters south of Atka Island from Vasilief Bay to Sergief Bay, and waters immediately north of Atka Island. There does not appear to have been any significant historical catch of pollock in these areas. ADF&G regional staff communication, and review of observer and fish ticket catch data, indicates that this area has been subject to only minimal fishing effort for any species. For these reasons, it is likely that this action will be “insignificant” for AI pollock ITACs up to the 19,000 mt cap.

Any AI pollock fishery prosecuted inside state waters that are currently closed under SSL protection measures would trigger reinitiation of formal consultation.

Impacts in the EBS pollock fishery are likely to be small. In 2004, the EBS TAC was 1,492,000 mt. Implying an ITAC of 1,342,800 mt. An 18,000 mt reallocation of ITAC from the EBS to the AI would reduce the EBS ITAC by about 1%. Even if a large decrease in EBS biomass led to a new ITAC of 1,000,000 mt, the 18,000 mt reallocation would only account for 2% of the ITAC.

The specifications criterion for significance was a 50% change in harvest levels in state waters. This criterion implicitly incorporates an assumption that there is an existing fishery in place, however, when there is no existing fishery and a zero harvest, the 50% change harvest is not defined. A qualitative analysis has been substituted here. Because (a) only a small part of the AI state waters (about 5%) would be available for fishing, (b) because it appears that these areas have not been important pollock (or other species) target areas in the past, (c) because opening additional state waters to pollock fishing would trigger a formal consultation, and (d) because the action would only have a small (about 1%) impact on EBS pollock ITAC at current EBS TAC levels, this impact has been given a “not significant” rating.

Socio-economic Effects

Table 4.2.4-3 Economic and socio-economic significance analysis

Issue	Discussion	Significance analysis
Gross revenues	At historical ICA levels, this action could create a combined AI DPF and CDQ allocation of as much as 18,000 mt. Valuing this at an “A” season EBS first wholesale price of $959/mt, this would be associated with about $17.3 million. This is only a rough approximation. At current ABC levels, the fishery would not be able to harvest all the pollock in the “A” season, the harvest of almost 3,000 mt would be deferred to the “B” season and would bring a lower price. Moreover, it is not clear that the fishery will be able to fully harvest the DPF. There is some hope that larger roe bearing fish in this fishery will bring a higher price. Gross revenues received by the Aleut Corporation would offset to some extent by reduced revenues to EBS pollock fishermen.	Not significant
Operating costs	Operating costs are not known. Aggregate BSAI pollock costs are likely to rise somewhat since it may cost more to harvest pollock in the AI than in the EBS. Efforts to increase the proportion of the harvest taken with small trawlers (under 60 feet) may also increase operating costs.	Not significant
Net returns	At historical ICA levels, this action could create a combined AI DPF and CDQ of as much as 18,000 mt. Valuing this at an “A” season EBS royalty rate of $304/mt, this would be associated with about $5.5 million. This is only a rough approximation. For example, it is not clear that the fishery will be able to fully harvest the DPF, there is some hope that larger roe bearing fish in this fishery will bring a higher royalty rate. Moreover, at the 2004 ABC level, almost 3,000 mt would have to be harvested in the “B” season, and would bring a lower royalty rate.	Not significant
Safety and health	The weather can be very poor in the AI in winter. This may be a dangerous area for fishing operations, particularly for fishing pelagic trawlers under 60 feet. Serious concerns have been expressed about the potential for the loss of a small trawler and its crew. It is difficult to estimate the likelihood that this will happen. To some extent it will depend on decisions made by the Aleut Corporation about the numbers of small trawlers to involve in the program.	unknown
Related fisheries	Pelagic pollock fishing is a relatively clean, with relatively small amounts of bycatch of other species. Four other groundfish target species appeared in non-trivial amounts in the AI pollock fisheries of the 1990s: Atka mackerel, Pacific cod, flatfish (mainly Greenland turbot) and rockfish (almost entirely Pacific ocean perch). The discussion of impacts on other fisheries, earlier in this section, indicated that pollock fishery bycatch of these species based on low and high annual bycatch rates between 1991 and 1998, could range between zero and 104 mt of Atka mackerel, 2 and 133 mt of flatfish, 1 and 154 mt of Pacific cod, and 2 and 63 mt of rockfish. Chinook and chum salmon bycatch could affect salmon commercial, recreational, and subsistence fisheries western Alaska, or, through shared PSC caps, other BSAI pollock fisheries. While the bycatch has some potential for adverse impacts, these were rated “not significant” in the discussion of PSC impacts earlier in this section. Under the Council’s motion, AI Chinook PSC don’t count against the BSAI Chinook PSC cap, and will not contribute to closure of the Chinook salmon savings area in the EBS. As noted earlier in Section 4.2, there appears to be little potential for gear conflicts and fishery overlap between pollock fishing and fishing for other targets, and found little potential for problems.	Not significant
Consumer effects	This action is not expected to have noticeable effects on U.S. consumers. A relatively small part of the overall BSAI pollock quota is being shifted from the EBS to the AI. To the extent that the AI fishery is not economically viable, some of this quota may not be caught. Much of it is destined for foreign markets and consumers.	Not significant
Management and enforcement	The creation of a new fishery will add new management and enforcement tasks, but the changes are not expected to be significant.	Not significant
Excess capacity	This action will reduce EBS pollock ITACs by a small amount (about 1%) and will create a new fishery in the AI. Some of the AFA operations which will have lost ITAC in the EBS will be able to fish in the AI. Moreover, the AI fishery may create fishing opportunities for small vessels, including vessels already fishing for other species in the Aleutians, or for vessels fishing out of Sand Point or King Cove. Overall creation or utilization of excess	Not significant

Issue	Discussion	Significance analysis
	capacity will be very small.	
Bycatch and discards	By catch of other target species, non-specified species, forage species and PSC species were described in earlier sections, and found to not to be significant in the AI. Moreover, since the action represents a shifting of pollock harvest from the EBS to the AI, to some extent increased bycatch in the AI will be offset at the BSAI scale by reduced bycatch in the EBS. Pelagic pollock fishing is a relatively clean fishery with smaller levels of bycatch than other bottom trawl fisheries for other species.	Not significant
Subsistence use	Pollock are not an important subsistence product. Chinook and chum salmon are taken as bycatches in the BSAI pollock fisheries and are important subsistence species, particularly in western Alaska. Increases in BSAI salmon bycatch could have an adverse impact on subsistence fisheries. Notwithstanding the potential for adverse impacts, the small numbers of salmon involved, the wide variety of locations of their natal streams, the potential, and the difference between bycatch the reduction in adult equivalent returns to natal streams, all indicate that an adverse impact on subsistence harvests will not be significant.	Not significant
Impacts on benefits from marine ecosystems	As noted in the discussions of habitat and ecosystems, this action is not expected to have significant impacts on these elements of the human environment. Thus, this action is not expected to have significant impacts on benefits received from the environment (other than the commercial benefits described in other sections of this table).	Not significant
Community impacts	The Aleut Corporation will be able to use the allocation in different ways to promote economic development in Adak. Royalty value could be in excess of $5 million. This will be accompanied by a reduction in deliveries to other Alaskan ports; 9,000 mt of the DPF could have been expected to be delivered by CV to Dutch Harbor if this program had not been initiated (this is compared to an overall shoreside CV allocation of almost 700,000 mt in 2003). Benefits may accrue to Sand Point and King Cove if their under 60 foot vessel fishermen enter the AI pollock fishery. In general, benefits accruing to one community appear to offset costs to others. Overall impacts appear modest compared to BSAI pollock production.	Not significant

4.3 Funding the AI Pollock Allocation

Section 803 incorporates the Council's longstanding BSAI OY cap of two million mt into statute, but allows the Council to create AI pollock allocations in addition to the OY cap for the years 2004 to 2008. However, in February 2004, the Council decided to apportion any AI pollock allocations within the OY cap.[34] For this reason an AI pollock allocation to the Aleut Corporation may require reductions in the groundfish fishery TACs for one or more other species because all of the 2 million mt yield in the BSAI is now essentially fully allocated to existing fisheries. The Council must decide whether to provide itself future direction on the appropriate approach to TAC setting, and, if so, what sort of direction to provide. The essence of this decision is how to "fund" the AI pollock fishery - i.e. where to find the quota to apportion to the Aleut Corporation fishery since it must come from the 2 million mt OY.

The Council requested a consideration of four approaches to fund the AI pollock allocation. These are analyzed in this section. In June 2004, the Council chose Alternative 2.2 as its preferred alternative. Under Alternative 2.2, the AI pollock TAC would be funded by a reduction in the EBS pollock TAC. In October 2004, the Council clarified its intention that CDQ groups receive a CDQ allocation of 10% of the AI pollock TAC if an a pollock TAC was created in the Aleutian Islands. This reaffirmed the current regulatory approach to CDQ allocation, under which CDQ groups received 10% of the EBS pollock TAC and/or 10% of the AI pollock TAC, pursuant to the provisions of the AFA.

This section is divided into three general parts. Sub-section 4.3.1 provides some general background on the different alternatives under consideration, sub-section 4.3.2 contains the NEPA analysis, and sub-section 4.3.3 addresses the significance of the Council's preferred alternative.

Sub-section 4.3.1 organizes the discussion of this topic under the following headings:

- *Statutory text and Senator Stevens' floor language*
- *Description of the Council's motion and the alternatives*
- *Review of the statutory language governing the alternatives*
- *Funding Alternative 2.2*
- *Funding Alternatives 2.3 and 2.4*
- *Funding Alternative 2.5*
- *Roll back issues*

[34] See Appendix A.6 for the transcript of the Council's discussion.

4.3.1 Introduction

Statutory text and Senator Stevens' floor language

Currently the OY for the BSAI is fully allocated among existing fisheries. If a new AI pollock fishery allocation was counted against the OY, some other fishery or fisheries would have to find their effective allocations reduced to accommodate the new fishery. While Section 803(c) allows the Council to create an AI pollock allocation in addition to the BSAI OY for the years 2004 to 2008, the Council indicated its intent in February 2004 not to do so.

Section 803(d) states:

> (d) MANAGEMENT AND ALLOCATION. - For the purposes of this section, the North Pacific Fishery Management Council shall recommend and the Secretary shall approve an allocation under subsection (a) to the Aleut Corporation for the purposes of economic development in Adak, Alaska pursuant to the requirements of the Magnuson-Stevens Fishery Conservation and Management Act.

Section 803(d) gives the Council and the Secretary the authority to create an AI pollock allocation pursuant to the requirements of the Magnuson-Stevens Act. The BSAI FMP and its implementing regulations require NMFS, after consultation with the Council, to specify annually the total allowable catch for each target species and the "other species" category, the sum or which must be within the OY range of 1.4 million to 2.0 million mt. (679.20(a)(1)(i)). The language of 803(d) therefore appears to provide positive direction to the Council to determine the AI pollock allocation in the context of the annual specifications process, taking account of the issues it would normally consider in balancing the increase in one allocation with decreases in others.

Senator Stevens (R-AK) made comments about funding in his floor remarks. After noting that under certain conditions, the statute allowed the AI pollock allocation to be in addition to the BSAI OY during the 2004 to 2008 fishing years, Stevens said that:

> Eventually this pollock allocation will come under the combined optimum yield for all groundfish in the Bering Sea and Aleutian Islands 2 million metric ton cap by taking proportional reductions in the total allowable catches for each of the existing groundfish fisheries as necessary to accommodate the establishment of the Aleutian Island pollock fishery.

As noted in Section 4.2, the legislative record is helpful in interpreting the intent of Congress in cases where the statutory language is silent on some point or is ambiguous. It does not have the prescriptive force of statutory language, however. The more complete the legislative record, including committee reports, and records of debates in committee and on the floor, the more useful the record is.

Description of the Council's Motion and the Alternatives

The February 2004 Council motion requested an analysis of the following options:

- Option 1: The pollock allocation to the AI fishery will be funded by a reduction in the EBS pollock fishery TAC. Any unused pollock TAC from the AI fishery will be rolled back to the EBS pollock fishery TAC. This will occur at the earliest time possible in the calendar year.

- Option 2: The pollock allocation to the AI fishery will be funded by taking equal proportional reductions in the TACs for each of the existing groundfish fisheries in the BSAI. Any unused pollock TAC from the AI fishery will be rolled back on a pro-rata basis to the fisheries from where it originated in the same proportions. This should occur at the earliest possible time in the calendar year.

- Suboption 2.1: Exempt the BSAI sablefish IFQ fishery from the proportional reduction.

In April 2004 the Council clarified that it intended funding under these three options to be taken from species-fishery allocations only if the 2 million mt OY did not exceed the sum of species TACs - i.e. there was "room" to accommodate the AI fishery without reducing other fishery quotas and at the same time not exceed 2 million mt in the BSAI from all fisheries combined. In addition, the Council requested evaluation of the following additional alternative:

- If possible, the AI Directed Fishing Allocation (DFA) is to be funded from the difference between the sum of the BSAI groundfish fishery TACs and the BSAI OY cap. No allocation to the AI DFA shall be made from a groundfish fishery TAC unless the difference between the sum of the groundfish fishery TACs and the OY cap is not large enough to fund the AI DFA. If this difference is not large enough to fund the AI DFA, 10% of the allocation to the AI pollock DFA shall be taken from the BSAI rock sole ITAC, 10% from the BSAI yellowfin sole ITAC, and 80% from the Eastern Bering Sea (EBS) pollock ITAC. No later than June 10 (start of the "B" season), unused AI "A" season pollock DFA, and the entire AI "B" season DFA, shall be rolled back to the EBS pollock fishery.

These have been translated into the following five alternatives for this analysis:

2.1 The Council takes no action. Section 803(a) requires that "Effective January 1, 2004 and thereafter, the directed pollock fishery in the Aleutian Islands Subarea (AI) of the BSAI...shall be allocated to the Aleut Corporation.." However, currently the FMP does not authorize the Council to make an allocation exclusively to the Aleut Corporation. Pursuant to the AFA, and Section 13.4.7.3.4 of the BSAI FMP, 10% of BSAI pollock must be allocated to the CDQ program. Moreover, the FMP is not explicit about excluding AI pollock from the AFA program. The "no action" alternative is, therefore, in conflict with existing statutes and is not a legally viable alternative. Note, however, that the Council can make allocations between the AI and EBS pollock fisheries through its normal specifications process. Under the SSL protection measures, the Council has been able to make a pollock allocation to the AI since 2003. However, the status quo would have to be changed for the Council to assign the AI pollock allocation to the Aleut Corporation, as required by law;

2.2 The pollock allocation to the AI fishery will be funded by a reduction in the EBS pollock TAC. Any unused pollock TAC from the AI fishery will be rolled back to the EBS pollock fishery TAC. This will occur at the earliest time possible in the calendar year. This alternative is to occur only if funding the AI pollock fishery cannot be made from the difference between the combined BSAI groundfish fishery TACs and the 2 million mt OY cap;

2.3 The pollock allocation to the AI fishery will be funded by making equal proportional reductions in the TACs for each of the existing groundfish fisheries in the BSAI. Any unused pollock TAC from the AI fishery will be rolled back on a prorated basis to the fisheries from where it originated in the same proportions. This should occur at the earliest time in the calendar year. This alternative is to occur only if funding the AI pollock fishery cannot be made from the difference between the combined BSAI groundfish fishery TACs and the 2 million mt OY cap;

2.4 The pollock allocation to the AI fishery will be funded by making equal proportional reductions in the TACs for each of the existing groundfish fisheries in the BSAI, excluding the sablefish fishery. The IFQ sablefish fishery would be excluded since rolling back unused TAC to an IFQ fishery may not be feasible. This alternative is to occur only if funding the AI pollock fishery cannot be made from the difference between the combined BSAI groundfish fishery TACs and the 2 million mt OY cap; or

2.5 The pollock allocation to the AI fishery will be funded by taking 10% of the BSAI rock sole fishery ITAC, 10% of the BSAI yellowfin sole fishery ITAC, and 80% of the EBS pollock fishery ITAC. No later than June 10, unused AI “A” season pollock DFA, and the entire AI “B” season DFA, shall be rolled back to the EBS pollock fishery. This alternative is to occur only if funding the AI pollock fishery cannot be made from the difference between the combined BSAI groundfish fishery TACs and the 2 million mt OY cap.

A recommendation by the Council to place language in the FMP amendment identifying how to fund the AI pollock allocation would constrain Council decision making in the short run, but not in the medium to long term. Between the Plan Team ABC recommendations in November, and the Council’s ABC and TAC recommendations in December, there would be no time to alter the FMP should the Council decide to fund the AI pollock allocation in a different manner. However, over a period of one to two years, it would be possible to amend the FMP and restrict Council decision making in new ways, or to eliminate the restrictions.

Review of the Statutory Requirements Governing the Alternatives

Section 206(a) of the AFA requires that:

Effective January 1, 1999, 10 percent of the total allowable catch of pollock in the Bering Sea and Aleutian Islands Management Area shall be allocated as a directed fishing *allowance to the western Alaska community development quota program established under section 305(i) of the Magnuson-Stevens Act (16 U.S.C. 1855(i)).*

This requires that 10% of the TAC in the BSAI be set aside for the CDQ groups. This might be 10% of a joint BSAI TAC or 10% of the sum of the BS and AI TACs. It does not appear to mean that 10% of the BS TAC and 10% of the AI TAC be allocated. For example, the requirement could be met if the AI TAC were greater than zero, but none of it were allocated to the CDQ groups, and somewhat more than 10% of the BS TAC were allocated to the CDQ groups. The requirement could also be met if an AI TAC were not defined and 10% of the BS TAC were allocated to the CDQ groups (in this case we could have an AI ICA and an AI DFA, but no explicit AI TAC would be defined).

Section 206(b) of the AFA requires that:

INSHORE/OFFSHORE. - Effective January 1, 1999, the remainder of the pollock total allowable catch in the Bering Sea and Aleutian Islands Management Area, after the subtraction of the allocation under subsection (a) and the subtraction of allowances for the incidental catch of pollock by vessels harvesting other groundfish species (including under the western Alaska community development quota program) shall be allocated as directed fishing allowances as follows -

1.1 50 percent to catcher vessels harvesting pollock for processing by the inshore component;

1.2 40 percent to catcher/processors and catcher vessels harvesting pollock for processing by catcher/processors in the offshore component; and

1.3 10 percent to catcher vessels harvesting pollock for processing by motherships in the offshore component.

The allocation under subsection (a) refers to the CDQ allocation discussed above. The BSAI pollock TAC, after CDQ and incidental catch deductions, is to be divided among the three categories of vessels.

Section 305(i) of the Magnuson-Stevens Act (MSA) gives the Council the authority to make allocations of the total allowance catches of other species to CDQ groups. The determination of the actual percentage allocations is left to the Council:

(Ii) With respect to a fishery management plan, plan amendment, or regulation for a Bering Sea fishery that –

(I) allocates to the western Alaska community development quota program a percentage of the total allowable catch of such fishery; and

(II) was approved by the North Pacific Council prior to October 1, 1995; the Secretary shall, except as provided in clause (iii) and after approval of such plan, amendment, or regulation under section 304, allocate to the program the percentage of the total allowable catch described in such plan, amendment, or regulation....

The Council has made allocations of total allowable catch for the groundfish species in the BSAI in the following three sections of its BSAI FMP:

13.4.7.3.3 Fixed Gear Sablefish CDQ Allocation

The NMFS Regional Director shall hold 20 percent of the annual fixed-gear Total Allowable Catch of sablefish for each management area in the Bering Sea/Aleutian Islands Area for the western Alaska sablefish community quota. The portions of sablefish TACs for each management area not designated to CDQ fisheries will be allocated as QS and IFQs and shall be used pursuant to the program outlined in Section 13.4.7.1.

13.4.7.3.4 Pollock CDQ Allocation

For a Western Alaska Community Quota, 50% of the BSAI pollock reserve as prescribed in the FMP will be held annually. This held reserve shall be released to communities on the Bering Sea Coast which submit a plan, approved by the Governor of Alaska, for the wise and appropriate use of the released reserve.

13.4.7.3.5 Multispecies Groundfish and Prohibited Species CDQ Allocations

In addition to the CDQ allocations authorized in Section 13.4.7.3.3 (fixed gear sablefish) and Section 13.4.7.3.4 (pollock), 7.5% of the TAC for all BSAI groundfish species or species groups, except squid, will be issued. A pro-rata share of PSC species will also be issued. PSC will be allocated before the trawl/nontrawl splits. The program will be patterned after the pollock CDQ program, but will not contain a sunset provision.

Section 803(a) of the Consolidated Appropriations Act (CAA) requires:

Effective January 1, 2004 and thereafter, the directed pollock fishery in the Aleutian Islands Subarea (AI of the BSAI (as defined in 50 CFR 679.2) shall be allocated to the Aleut Corporation..”

The AI directed fishing allocation is to be allocated to the Aleut Corporation. The CAA does not speak about the AI TAC. Since the entire directed fishery in the AI is to be allocated to the Aleut Corporation, Congress appears to have superceded the direction it gave in the AFA to make an allocation to the three vessel classes identified in the AI.

Funding Alternative 2.2

Table 4.3.1-1 shows the distribution of funding requirements for six different assumptions about AI pollock DPF and CDQ levels. The top DPF and CDQ level shown is the maximum permitted by one of the allocation size alternatives (Alternatives 1.1 to 1.4) for an ABC of 60,000 mt (assumeing a 2,00 mt ICA). Under Alternative 2.2, funding comes from the EBS pollock TAC.

The table shows maximum annual funding, and funding requirements assuming a complete roll back of "B" season apportionments. The later, equal to 40% of the maximum annual allocation, are indicated in parentheses.

Table 4.3.1-1 Funding under Alternative 2.2, for different assumptions about the size of the AI pollock DPF and CDQ to be funded (in metric tons)

AI pollock DPF and CDQ to be funded	EBS Pollock DPF and CDQ reduction (net reduction assuming roll back of "B" season AI pollock allocation in parentheses)
10,000	10,000 (4,000)
20,000	20,000 (8,000)
30,000	30,000 (12,000)
40,000	40,000 (16,000)
50,000	50,000 (20,000)
58,000	58,000 (23,200)
Notes: AI pollock DPF and CDQs reflect the potential range for AI pollock ABCs up to a 60,000 mt ABC. A 2,000 mt ICA has been assumed for the purposes of illustration.	

Funding Alternatives 2.3 and 2.4

In 2004, the EBS pollock TAC accounted for almost three-quarters of the BSAI OY. If Alternative 2.2 is chosen, and the Council decided to take all future allocations from the EBS pollock TAC, 100% of the AI allocation would come from AFA pollock operations. However, if the Council chose Alternative 2.3, at current TAC levels three quarters of the allocation would still come from AFA operations. Since the impacts of this decision will vary, depending on the relative sizes of the pollock and other species fishery TACs, this analysis has also looked at allocations in 1999, the recent year in which pollock accounted for the lowest proportion of OY in the BSAI. In 1999, the EBS pollock TAC accounted for about 50% of the BSAI OY. In this year, about 50% of any AI pollock allocation would have come from the BS pollock fishery.

Tables 4.3.1-2 through 4.3.1-5 show alternative allocations under Alternatives 2.3 and 2.4 for the two base years, 2004 and 1999. An analysis of the impacts of different funding arrangements will change as the size of the allocation to be funded changes. These tables provide estimates for allocations ranging from 10,000 mt to 58,000 mt. The 25,000 mt allocation is the average allocation to a CDQ group; the 40,000 mt allocation is suggested by Senator Steven's floor language, and is only slightly higher than the 2004 AI pollock ABC (39,400 mt).

If all of the AI pollock allocation were funded from the EBS pollock TAC, as Alternative 2.2 would require, the EBS pollock allocation would drop by three or four percent. In 1999, the EBS pollock TAC was 992,000 mt. If all of the AI pollock allocation were taken from a TAC of that size, it would create a reduction of about 4% in the AFA and CDQ pollock allocation. In 2004, the EBS pollock TAC was 1,492,000 mt. If all of the AI pollock allocation were taken from a TAC of that size, it would create a reduction of almost 3% in the AFA and CDQ pollock allocation.

Under Alternative 2.3, the reductions in the EBS pollock would be smaller. In 1999, if each species TAC was reduced by an equal proportion, the need to fund a 40,000 mt AI pollock allocation would have meant that the EBS pollock fishery would have had to fund 19,840 mt. This would have been a 2% reduction in the EBS pollock TAC. In 2004, the impact on the EBS pollock fishery TAC would have been 29,840 mt. This would have been a reduction of about 1.5% in the EBS pollock TAC. Alternative 2.3 does impose reductions in the TACs for other species.

Tables 4.3.1-2 to 4.3.1-5 provide estimates of the funding requirements for Alternatives 2.3 and 2.4. Alternative 2.3 imposes equal proportionate funding on each of the BSAI species TACS. Alternative 2.4 is similar, except that the sablefish IFQ fishery is exempted from the funding process. Since sablefish TACs are small in any event, there is little difference in the results for most species.

Calculations are based on the 2004 species TACs. For each species, columns show the 2004 TAC, and estimated contributions to the AI pollock DPF and CDQ allocations for each species under different assumptions about potential AI DPF/CDQ levels. The top level shown is the maximum AI DPF/CDQ permitted by one of the allocation size alternatives (Alternatives 1.1 to 1.4) for an ABC of 60,000 mt.

Maximum annual calculations for different AI DPF/CDQs are shown. In addition, the last six columns in the tables show the allocations that would be made if there were 100% roll back of the AI pollock "B" season DPF/CDQ.

Table 4.3.1-2 Funding under Alternative 2.3 using the 2004 base year (equal proportions from all TACs) under different assumptions about AI pollock DPF/CDQ levels. With and without "B" season rollbacks. Metric tons.

Species	Area	TAC	Contributions to AI pollock DPF/CDQ by species group for a range of DPF/CDQ levels (all in metric tons)						Contributions to AI pollock DPF/CDQ by species group, assuming 100% roll back of "B" season ABC for a range of DFA levels (all in metric tons)					
			10,000	20,000	30,000	40,000	50,000	58,000	10,000	20,000	30,000	40,000	50,000	
Pollock	BS	1,492,000	7,465	14,931	22,396	29,861	37,326	43,298	2,986	5,972	8,958	11,944	14,931	17,319
	AI	1,000	0	0	0	0	0	0	0	0	0	0	0	0
	Bogoslo	50	0	0	0	0	0	0	0	0	0	0	0	0
Pacific cod	BSAI	215,500	1,078	2,155	3,233	4,310	5,388	6,250	431	862	1,293	1,724	2,155	2,500
Yellowfin	BSAI	86,075	430	861	1,291	1,722	2,152	2,496	172	344	516	689	861	998
Greenland	BS	2,700	14	27	41	54	68	78	5	11	16	22	27	31
	AI	800	4	8	12	16	20	23	2	3	5	6	8	9
Arrowtoothh	BSAI	12,000	60	120	180	240	300	348	24	48	72	96	120	139
Rock sole	BSAI	41,000	205	410	615	820	1,025	1,189	82	164	246	328	410	476
Flathead	BSAI	19,000	95	190	285	380	475	551	38	76	114	152	190	220
AK plaice	BSAI	10,000	50	100	150	200	250	290	20	40	60	80	100	116
Other flat	BSAI	3,000	15	30	45	60	75	87	6	12	18	24	30	35
Sablefish	BS	2,900	15	29	44	58	73	84	6	12	17	23	29	34
	AI	3,100	16	31	47	62	78	90	6	12	19	25	31	36
POP	BS	1,408	7	14	21	28	35	41	3	6	8	11	14	16
	EAI	3,059	15	31	46	61	76	89	6	12	18	24	31	35
	CAI	2,926	15	29	44	59	73	85	6	12	18	23	29	34
	WAI	5,187	26	52	78	104	130	150	10	21	31	41	52	60
Northern	BSAI	5,000	25	50	75	100	125	145	10	20	30	40	50	58
Shortraker	BSAI	526	3	5	8	11	13	15	1	2	3	4	5	6
Rougheye	BSAI	195	1	2	3	4	5	6	0	1	1	2	2	2
Other rock	BS	460	2	5	7	9	12	13	1	2	3	4	5	5
	AI	634	3	6	10	13	16	18	1	3	4	5	6	7
Atka mack.	EAI	11,240	56	112	169	225	281	326	22	45	67	90	112	130
	CAI	31,100	156	311	467	622	778	902	62	124	187	249	311	361
	WAI	20,660	103	207	310	413	517	599	41	83	124	165	207	240
Squid	BSAI	1,275	6	13	19	26	32	37	3	5	8	10	13	15
Other spec.	BSAI	27,205	136	272	408	544	680	789	54	109	163	218	272	316
Total		2,000,000	10,000	20,000	30,000	40,000	50,000	58,000	4,000	8,000	12,000	16,000	20,000	23,200

Table 4.3.1-3 Funding under Alternative 2.4, using the 2004 base year (equal proportions from all TACs, excluding sablefish) under different assumptions about AI pollock DPF/CDQ levels. With and without "B" season rollbacks. Metric tons.

Species	Area	TAC	Contributions to AI pollock DPF/CDQ by species group for a range of DPF/CDQ levels (all in metric tons)						Contributions to AI pollock DPF/CDQ by species group, assuming 100% roll back of "B" season ABC for a range of DFA levels (all in metric tons)					
			10,000	20,000	30,000	40,000	50,000	58,000	10,000	20,000	30,000	40,000	50,000	58,000
Pollock	BS	1,492,000	7,479	14,959	22,438	29,917	37,397	43,380	2,992	5,983	8,975	11,967	14,959	17,352
	AI	1,000	0	0	0	0	0	0	0	0	0	0	0	0
	Bogos	50	0	0	0	0	0	0	0	0	0	0	0	0
Pacific cod	BSAI	215,500	1,080	2,159	3,239	4,318	5,398	6,261	432	864	1,295	1,727	2,159	2,505
Yellowfin	BSAI	86,075	431	862	1,294	1,725	2,156	2,501	172	345	517	690	862	1,000
Greenland	BS	2,700	14	27	41	54	68	78	5	11	16	22	27	31
	AI	800	4	8	12	16	20	23	2	3	5	6	8	9
Arrowtoothh	BSAI	12,000	60	120	180	240	301	349	24	48	72	96	120	139
Rock sole	BSAI	41,000	205	411	616	822	1,027	1,191	82	164	246	329	411	476
Flathead	BSAI	19,000	95	190	286	381	476	552	38	76	114	152	190	221
AK plaice	BSAI	10,000	50	100	150	200	250	291	20	40	60	80	100	116
Other flat	BSAI	3,000	15	30	45	60	75	87	6	12	18	24	30	35
Sablefish	BS	2,900	7	15	22	29	36	42	3	6	9	12	15	17
	AI	3,100	4	8	12	16	19	23	2	3	5	6	8	9
POP	BS	1,408	7	14	21	28	35	41	3	6	8	11	14	16
	EAI	3,059	15	31	46	61	77	89	6	12	18	25	31	36
	CAI	2,926	15	29	44	59	73	85	6	12	18	23	29	34
	WAI	5,187	26	52	78	104	130	151	10	21	31	42	52	60
Northern	BSAI	5,000	25	50	75	100	125	145	10	20	30	40	50	58
Shortraker	BSAI	526	3	5	8	11	13	15	1	2	3	4	5	6
Rougheye	BSAI	195	1	2	3	4	5	6	0	1	1	2	2	2
Other rock	BS	460	2	5	7	9	12	13	1	2	3	4	5	5
	AI	634	3	6	10	13	16	18	1	3	4	5	6	7
Atka mack.	EAI	11,240	56	113	169	225	282	327	23	45	68	90	113	131
	CAI	31,100	156	312	467	623	779	904	62	125	187	249	312	361
	WAI	20,660	103	207	310	414	517	600	41	83	124	166	207	240
Squid	BSAI	1,275	6	13	19	26	32	37	3	5	8	10	13	15
Other spec.	BSAI	27,205	136	273	409	545	681	790	55	109	164	218	273	316
Total		2,000,000	10,000	20,000	30,000	40,000	50,000	58,000	4,000	8,000	12,000	16,000	20,000	23,200

The preceding metric tonnage impact tables were prepared using the 2004 specifications as a baseline. In 2004, pollock TAC accounted for about 75% of total TACs. In other years, pollock TACs have been smaller, and non-pollock TACs have been correspondingly larger. Since Alternatives 2.3 and 2.4 relate the AI pollock funding contributions among species in proportion to the sizes of their TACs, a change in the relative sizes of the TACs could change the allocation of funding among species.

This does not happen in funding alternatives 2.2 and 2.5, which allocate funding among species groups according to published percentages. Under 2.2, the BS pollock TAC funds 100% of the AI pollock TAC; under Alternative 2.5, BS pollock funds 80% of the AI pollock TAC, yellowfin sole funds 10% of the TAC, and rock sole funds 10% of the TAC (these ostensible percentages are effectively altered by the roll back provision built into Alternative 2.5).

Alternatives 2.3 and 2.4, however, allocate funding among species in proportion to the relative sizes of their TACs. In 2004, the pollock TAC was a larger proportion of the OY. In the past it hasn't been as large. For example, in 1999, the pollock TAC was only about 50% of the total OY. The tables that follow examine the allocation of funding among the various species using the 1999 distribution of TACs as the baseline.

Table 4.3.1-4 Funding under Alternative 2.3 using "1999 model" (equal proportions from all TACs) under different assumptions about AI pollock DPF/CDQ levels. With and without "B" season rollbacks. Metric tons.

Species	Area	TAC	Contributions to AI pollock DPF/CDQ by species group for a range of DPF/CDQ levels (all in metric tons)						Contributions to AI pollock DPF/CDQ by species group, assuming 100% roll back of "B" season ABC for a range of DFA levels (all in metric tons) (all in metric tons)					
			10,000	20,000	30,000	40,000	50,000	58,000	10,000	20,000	30,000	40,000	50,000	58,000
Pollock	BS	992,000	4,975	9,950	14,925	19,900	24,875	28,855	1,990	3,980	5,970	7,960	9,950	11,542
	AI	2,000	0	0	0	0	0	0	0	0	0	0	0	0
	Bogoslof	1,000	0	0	0	0	0	0	0	0	0	0	0	0
Pacific	BSAI	177,000	885	1,770	2,655	3,540	4,425	5,133	354	708	1,062	1,416	1,770	2,053
Yellowfin	BSAI	207,980	1,040	2,080	3,120	4,160	5,200	6,031	416	832	1,248	1,664	2,080	2,413
Greenland	BS	6030	30	60	90	121	151	175	12	24	36	48	60	70
	AI	2970	15	30	45	59	74	86	6	12	18	24	30	34
Arrowtoot	BSAI	134,354	672	1,344	2,015	2,687	3,359	3,896	269	537	806	1,075	1,344	1,559
Rock sole	BSAI	120,000	600	1,200	1,800	2,400	3,000	3,480	240	480	720	960	1,200	1,392
Flathead	BSAI	77,300	387	773	1,160	1,546	1,933	2,242	155	309	464	618	773	897
Other flat	BSAI	154,000	770	1,540	2,310	3,080	3,850	4,466	308	616	924	1,232	1,540	1,786
Sablefish	BS	1,340	7	13	20	27	34	39	3	5	8	11	13	16
	AI	1,380	7	14	21	28	35	40	3	6	8	11	14	16
POP	BS	1,400	7	14	21	28	35	41	3	6	8	11	14	16
	EAI	6,220	17	34	51	69	86	99	7	14	21	27	34	40
	CAI	3,850	19	39	58	77	96	112	8	15	23	31	39	45
	WAI	3,430	31	62	93	124	156	180	12	25	37	50	62	72
Other red	BS	267	1	3	4	5	7	8	1	1	2	2	3	3
Sharp/nort	AI	4,230	21	42	63	85	106	123	8	17	25	34	42	49
Short/roug	AI	965	5	10	14	19	24	28	2	4	6	8	10	11
Other rock	BS	369	2	4	6	7	9	11	1	1	2	3	4	4
	AI	685	3	7	10	14	17	20	1	3	4	5	7	8
Atka	EAI	17,000	85	170	255	340	425	493	34	68	102	136	170	197
	CAI	22,400	112	224	336	448	560	650	45	90	134	179	224	260
	WAI	27,000	135	270	405	540	675	783	54	108	162	216	270	313
Squid	BSAI	1,970	10	20	30	39	49	57	4	8	12	16	20	23
Other	BSAI	32,860	164	329	493	657	822	953	66	131	197	263	329	381
Total		2,000,000	10,000	20,000	30,000	40,000	50,000	58,000	4,000	8,000	12,000	16,000	20,000	23,200

Table 4.3.1-5 Funding under Alternative 2.4 using "1999 model" (equal proportions from all TACs, excluding sablefish) under different assumptions about AI pollock DPF/CDQ levels. With and without "B" season rollbacks. Metric tons.

Species	Area	TAC	Contributions to AI pollock DPF/CDQ by species group for a range of DPF/CDQ levels (all in metric tons)						Contributions to AI pollock DPF/CDQ by species group, assuming 100% roll back of "B" season ABC for a range of DFA levels (all in metric tons)					
			10,000	20,000	30,000	40,000	50,000	58,000	10,000	20,000	30,000	40,000	50,000	58,000
Pollock	BS	992,000	4,979	9,958	14,938	19,917	24,896	28,880	1,992	3,983	5,975	7,967	9,958	11,552
	AI	2,000	0	0	0	0	0	0	0	0	0	0	0	0
	Bogoslof	1,000	0	0	0	0	0	0	0	0	0	0	0	0
Pacific	BSAI	177,000	886	1,772	2,657	3,543	4,429	5,137	354	709	1,063	1,417	1,772	2,055
Yellowfin	BSAI	207,980	1,041	2,082	3,122	4,163	5,204	6,037	416	833	1,249	1,665	2,082	2,415
Greenland	BS	6030	30	60	91	121	151	175	12	24	36	48	60	70
	AI	2970	15	30	45	59	74	86	6	12	18	24	30	34
Arrowtoot	BSAI	134,354	672	1,345	2,017	2,689	3,362	3,900	269	538	807	1,076	1,345	1,560
Rock sole	BSAI	120,000	601	1,201	1,802	2,402	3,003	3,483	240	480	721	961	1,201	1,393
Flathead	BSAI	77,300	387	774	1,160	1,547	1,934	2,244	155	309	464	619	774	897
Other flat	BSAI	154,000	771	1,541	2,312	3,083	3,853	4,470	308	617	925	1,233	1,541	1,788
Sablefish	BS	1,340	3	7	10	13	17	19	1	3	4	5	7	8
	AI	1,380	2	3	5	7	9	10	1	1	2	3	3	4
POP	BS	1,400	7	14	21	28	35	41	3	6	8	11	14	16
	EAI	6,220	17	34	51	69	86	100	7	14	21	27	34	40
	CAI	3,850	19	39	58	77	96	112	8	15	23	31	39	45
	WAI	3,430	31	62	93	125	156	181	12	25	37	50	62	72
Other red	BS	267	1	3	4	5	7	8	1	1	2	2	3	3
Sharp/nort	AI	4,230	21	42	64	85	106	123	8	17	25	34	42	49
Short/roug	AI	965	5	10	14	19	24	28	2	4	6	8	10	11
Other rock	BS	369	2	4	6	7	9	11	1	1	2	3	4	4
	AI	685	3	7	10	14	17	20	1	3	4	5	7	8
Atka	EAI	17,000	85	170	255	340	425	493	34	68	102	136	170	197
	CAI	22,400	112	224	336	448	560	650	45	90	135	179	224	260
	WAI	27,000	135	270	405	540	676	784	54	108	162	216	270	313
Squid	BSAI	1,970	10	20	30	39	49	57	4	8	12	16	20	23
Other	BSAI	32,860	164	329	493	658	822	954	66	132	197	263	329	382
Total		2,000,000	10,000	20,000	30,000	40,000	50,000	58,000	4,000	8,000	12,000	16,000	20,000	23,200

Funding Alternative 2.5

In April 2004, the Council noted that in the past, when species TACs were smaller, the OY was sometimes greater than the sum of the TACs. Under these circumstances, it might be possible to provide some or all of the funding for the AI pollock fishery from the difference between the sum of the TACs and the OY. The Council indicated its intention that when this was the case, this source of funding be used before contributions were sought from species TACs.

In addition, in April the Council also requested that an additional alternative be evaluated for this decision:

2.5 If possible, the AI Directed Fishing Allowance (DFA) is to be funded from the difference between the sum of the BSAI groundfish fishery TACs and the BSAI OY cap. No allocation to the AI DFA shall be made from a groundfish fishery TAC unless the difference between the sum of the groundfish fishery TACs and the OY cap is not large enough to fund the AI DFA. If this difference is not large enough to fund the AI DFA, 10% of the allocation to the AI pollock DFA shall be taken from the BSAI rock sole ITAC, 10% from the BSAI yellowfin sole ITAC, and 80% from the Eastern Bering Sea (EBS) pollock ITAC. No later than June 10 (start of the "B" season), unused AI "A" season pollock DFA, and the entire AI "B" season DFA, shall be rolled back to the EBS pollock fishery.

Two alternatives for the allocation size decision (see previous chapter), Alternatives 1.3 and 1.4, create formulas that determine allocation sizes contingent on AI pollock ABC estimates. Alternative 1.4 was explicitly introduced by the maker of the motion to include the funding provisions described above for Alternative 2.5, as a complementary action. If the Council chooses the combination of Alternative 1.4 to establish the amount of the AI pollock allocation and Alternative 2.5 as the mechanism to fund the allocation, then only the EBS pollock, BSAI yellowfin sole, and BSAI rock sole fisheries would be affected. Also, this would provide the industry with some level of certainty regarding the likely final apportionment amount to the Aleut Corporation fishery relatively early in the specifications process (i.e. when ABC is recommended by the Plan Teams). The Council also has the option of using the formula-based alternative to set the amount of TAC going to the AI pollock fishery embodied in Alternative 1.3, and combine this with an alternative under decision element 2 for how to fund the allocation. Thus the Council has the option of choosing a variety of combinations of an alternative from each of the two decision elements (amount and funding). Given the nature of the April 2004 motion that tied Alternatives 1.4 and 2.5 together, the Council may wish to choose this combination. Another possible and similar combination, that also provides a formula-based mechanism for determining allocation amount, would be to combine Alternatives 1.3 and 2.5. Table 4.3.1-6 below shows the Alternative 2.5 funding requirements from pollock, rock sole, and yellowfin sole fisheries associated with Alternatives 1.1 through 1.3, under six assumptions about ABC levels. Alternative 1.4 is not applicable with Alternative 2.5 because Alternative 1.4 only establishes an "A" season fishery for AI pollock, making roll backs unnecessary.

Table 4.3.1-6 Funding under Alternative 2.5 for alternative AI pollock allocation size alternatives in metric tons.

Alternative 1.1: No new restriction on DPF							
ABC	Annual DPF/CDQ	Before mandatory roll back			Net impact after mandatory roll back		
		EBS Pollock	Yellowfin	Rock sole	EBS Pollock	Yellowfin	Rock sole
10,000	8,000	6,400	800	800	1,600	800	800
20,000	18,000	14,400	1,800	1,800	3,600	1,800	1,800
30,000	28,000	22,400	2,800	2,800	5,600	2,800	2,800
40,000	38,000	30,400	3,800	3,800	7,600	3,800	3,800
50,000	48,000	38,400	4,800	4,800	9,600	4,800	4,800
60,000	58,000	46,400	5,800	5,800	11,600	5,800	5,800
Alternative 1.2: DPF cannot exceed 40,000 mt (as per Sen Stevens' floor language)							
ABC	Annual DPF/CDQ	Before mandatory roll back			Net impact after mandatory roll back		
		EBS Pollock	Yellowfin	Rock sole	EBS Pollock	Yellowfin	Rock sole
10,000	8,000	6,400	800	800	1,600	800	800
20,000	18,000	14,400	1,800	1,800	3,600	1,800	1,800
30,000	28,000	22,400	2,800	2,800	5,600	2,800	2,800
40,000	38,000	30,400	3,800	3,800	7,600	3,800	3,800
50,000	40,000	32,000	4,000	4,000	8,000	4,000	4,000
60,000	40,000	32,000	4,000	4,000	8,000	4,000	4,000
Alt 1.3: TAC equals ABC, but no more than 40,000 mt							
ABC	Annual DPF/CDQ	Before mandatory roll back			Net impact after mandatory roll back		
		EBS Pollock	Yellowfin	Rock sole	EBS Pollock	Yellowfin	Rock sole
10,000	8,000	6,400	800	800	1,600	800	800
20,000	18,000	14,400	1,800	1,800	3,600	1,800	1,800
30,000	28,000	22,400	2,800	2,800	5,600	2,800	2,800
40,000	38,000	30,400	3,800	3,800	7,600	3,800	3,800
50,000	38,000	30,400	3,800	3,800	7,600	3,800	3,800
60,000	38,000	30,400	3,800	3,800	7,600	3,800	3,800

Note: The metric tonnages in this table represent maximum funding levels assuming DPF+CDQ+ ICA = TAC = ABC. However, in any given year the Council may choose to establish a TAC smaller than the ABC. The ICA is assumed to be 2,000 mt. The DPF = TAC - ICA. In this instance, funding requirements would be smaller than those reported.

Roll back Issues

Under Alternative 2.1, the "no action" alternative, the FMP would not be modified. Under these circumstances, the language of the FMP (for example, with respect to CDQ allocations) would be in conflict with the statutory language in Section 803. Therefore, this is not a viable alternative.

Alternative 2.2 funds the AI allocation from the EBS pollock TAC. Any change in the pollock TAC amount mid-way through the year would require publishing the reallocation in the Federal Register for approximately 16 allocations for the AFA coops and open access fishery. Section 206(a) of the AFA requires that 10% of the BSAI pollock TAC be allocated as a directed fishing allowance (DPF) to the CDQ program. The remainder of the EBS pollock TAC, after the subtraction of an allowance for the incidental catch of pollock by vessels participating in other directed fisheries (3.0 percent in 2004) , is allocated as follows: 50 percent to catcher vessels harvesting pollock for processing by AFA inshore processors, 40 percent to catcher/processors and catcher vessels harvesting pollock for processing by catcher/processors, and 10 percent to catcher vessels harvesting pollock for processing by AFA motherships. The inshore pollock allocation is further allocated to 7 cooperative and one "open access" allocations. The details of the allocation are described in regulations at 679.20(a)(5)(i). For this alternative reallocation would require 2 tables in the final specifications to be updated.

The least complicated way to reallocate the unused "B" season AI pollock would be in the final specifications instead of later in the year under a separate reallocation notice. The Council would recommend the AI TAC and DPF. The harvest specifications could state the "A" and "B" season amounts, and determine prior to the fishing year that the "B" season AI pollock TAC could not be fully caught and therefore that some or all of it could be reallocated back to the fisheries that funded the AI pollock TAC. For this approach to work, the Aleut Corporation would have to determine in December that it would not make use of pollock allocations after June 10 (the start of the "B" season). Aleut Corporation representatives have indicated that they may be unable to utilize "B" season pollock DPF in 2005, and possibly in subsequent years. However, they have also indicated that at some point they may want to exercise the option of a "B" season fishery.

A roll back of unused AI pollock DPF would increase the DPF for the EBS pollock fishery. Regulations at 679.20(a)((5)(i)(B)(1) require the DPF to be split 40% and 60% between the two fishing seasons. A roll back of 10,000 mt in December would increase the EBS "A" season DPF by 4,000 mt and the "B" season portion of the DPF by 6,000 mt. A roll back of 10,000 mt at the start of the "B" season on June 10 would increase the "B" season portion of the DPF by 6,000 mt, but would result in a 4,000 mt increase in the completed "A" season. This "A" season DPF could be rolled over from the pollock "A" season to the pollock "B" season (Regulations at 679.20(a)(5)((i)(B)(2) allow the Regional Administrator to add "under harvest...of a seasonal allowance for a component to the subsequent seasonal allowance for the component" through a Federal Register notice.). The net result would be a 10,000 mt increase in "B" season pollock.

Roll back of "A" season DPF within the "A" season may be difficult to do soon enough to be useful. Both the AI and EBS fisheries are targeting on roe bearing pollock in the period from late-January to early April. Both fisheries may take place simultaneously, or the AI fishery may even lag behind the BS fishery. It may be difficult to identify AI pollock that would not be used, and make arrangements for a timely roll back, in this time frame. It is possible to roll back unused "A" season pollock to the "B" season fishery.

There are several ways to determine when to initiate a roll back and to determine how much pollock to roll back. A simple approach would be to framework in regulations a requirement that all unused "A" season DPF, and all "B" season DPF, would be rolled back on June 10 (the start of the "B" season) unless the Regional Administrator had received a certified letter from the Aleut Corporation indicating its intent to use the "B" season quota.

Alternative 2.3 funds the AI allocation with equal proportional reductions in the TACs of all other BSAI groundfish fisheries. This alternative affects approximately 80 groundfish TACs and 71 groundfish sideboards. Under current specification regulations the reallocation would require that eight groundfish allocation tables in the final specifications to be updated.

Before the reallocation is effective, a DPF or TAC amount may be reached and could result in unnecessary closures and disruption within the fishing industry. Once the fishery for a species is closed to directed fishing, only maximum retainable amounts (MRAs) of that target species may be retained in other fisheries open to directed fishing. The amount of a target species that is caught could possibly move a target species to a prohibited species status which requires that all catch be discarded. Both of these cases may require mandatory discards, which may pose an economic loss to the industry and increase waste.

The fisheries that would experience the highest impact under this alternative are the IFQ sablefish, pollock, Pacific cod, and Atka mackerel. The pollock, Pacific cod, and Atka mackerel TACs are further allocated by some or all of the following categories: gear type, processing sector, seasons, critical habitat, and vessel size. The IFQ sablefish fisheries have allocations to individuals or groups.

Fisheries that are completely utilized would be vulnerable to closures because many of the DPFs or TACs would be reached before the roll back. If a fishery has been closed to directed fishing and then the reallocation to increase TACs occurs, the remaining uncaught DPF or TAC may not be large enough to support a directed fishery, and therefore, TAC may remain unharvested, representing an economic loss to the industry.

In some instances, fisheries occur in the winter and spring, but not in the summer or fall. Two examples include the rock sole fishery, and the trawl fishery for Pacific cod. In these instances, there would be no ongoing fishery that could take advantage of the roll back.

Roll back may be affected by the specifications method chosen for funding the AI pollock DPF. If AI funding were deducted from the BSAI species ABCs before TACs for different species were specified, there may technically be no specific TAC that should receive the roll back amount. No deductions would have been made from any specific TAC to fund the AI pollock fishery. The Council might address this issue in the annual specifications process by recommending a list of roll back percentages, specifying how much of any given roll back should be added to each species TAC. If a roll back of a given amount were to take place, the list would identify precisely how much each TAC should get. Alternatively, the roll back could be to the unspecified reserves, a list could be published as guidelines, and in season managers could make roll backs, as appropriate.

Alternative 2.4 is similar to 2.3, except that it exempts the sablefish fishery from the original allocation. "In season" roll back to the sablefish individual fishing quota (IFQ) fishery raises a number of problems that don't occur for other fisheries.

The hook-and-line and pot sablefish fishery in the BSAI operates under an IFQ program. This program divides the annual hook-and-line and pot sablefish share of the TAC among the individual fishermen with permits to fish for a specified quota of sablefish. The fishermen have considerable discretion about how to fish for their own quota during the course of the year. Each has a known allocation, and may fish throughout the year at their own pace. The benefits of an IFQ program flow in part from this certain knowledge about the size of the allocation. If a portion of the sablefish TAC were used to create an AI pollock allocation, with a commitment to return unused quota to the sablefish fishery at some unknown time late in the season, fishermen would lose some of their ability to plan the catch of their IFQ during the course of the year. This would reduce the benefits of the IFQ program for sablefish.

A roll back of AI pollock to the IFQ sablefish fishery would create difficult administrative problems. The hook-and-line and pot sablefish fishery is an IFQ fishery. Each year, the annual IFQ allocation and permit computation requires that the fishery be closed to harvesting/landing for a minimum of 30 days between allocation periods. This is necessary to allow landings for each permit holder to be identified, overages and underages of IFQ catch to be identified, and for transfers of quota share to be completed. The roll back of unused AI pollock DPF to the sablefish fishery would only affect a subset of the total QS holders: those who hold EBS or AI quota share. However, this would still require that all existing IFQ accounts be frozen and recomputed because many more permits are interdependent as a result of transfer activity. The required cessation of sablefish fishing in the BSAI, and of BSAI QS transfers to accommodate a roll back, is most likely to come in the period from late spring to mid-summer, when weather and logistics are most amenable to sablefish fishing in this area.

The proposal to roll back unfished AI pollock DPF to the IFQ sablefish fishery in the middle of the year poses several difficulties for enforcement. It will become very difficult to prosecute any sablefish IFQ overages before a roll back decision has been made. For example, the preparation of a case, involving the seizure of catch and property, may be rendered moot if a fisherman receives additional IFQ in a roll back (while NOAA Enforcement and General Counsel have proceeded on the assumption that subsequent events can't offset or "cure" an overage, it may be hard to convince a court of the seriousness of an offense). Given the potential problems with these prosecutions, NOAA Enforcement may reallocate resources to enforcement actions that are more likely to result in convictions. Fishermen may be tempted to exceed their limits against the hope that a roll back in the future would cover them. Finally, the action would increase the administrative burden of proving overage cases.

Such a roll back is likely to be of modest benefit to sablefish fishermen. Sablefish hook-and-line and pot fishermen in the EBS and AI do not typically catch their full allocation. In 2003 sablefish hook-and-line and pot fishermen in the EBS only caught 60% of the quota available to them. The sablefish fishermen in the AI only caught about 52% of the quota available. In some instances, fishermen will have completely caught their initial allotment of sablefish IFQ or otherwise have completed fishing operations, and will have left the fishery. These participants would not be able to take advantage of the roll back, or may only be able to do so at considerable cost. Moreover, the reallocation is likely to be administratively expensive. An increase in administrative costs would be reflected in an increase in IFQ cost recovery fees for all program participants, regardless of their area of participation.

Alternative 2.5 funds the AI pollock allocation from the pollock, yellowfin sole, and rock sole TACs. It requires the roll back of unused “A” season AI DPF, and all “B” season AI DPF by the start of the “B” season on June 10. Alternative 2.5 mandates a roll back only to the EBS pollock fishery, and in this regard it is similar to Alternative 2.2. The Alternative 2.2 roll back discussion applies to Alternative 2.5 as well.

As noted earlier, in October 2004 the Council clarified its intent that 10% of any AI pollock TAC be set aside for harvest by CDQ groups. CDQ groups which are unable to harvest their full allocation may seek a rollover of their allocation back to the EBS. CDQ groups may seek a rollover to the EBS in advance of the fishing season, if they expect that they will not harvest their allocations. Rollovers from this source may total as much as 1,900 mt, the maximum potential CDQ group allocation in the AI.

4.3.2 Effects of Funding the AI Pollock Allocation Options

In April 2004, the Council expressed its intent that all of these alternatives include a provision that the process of funding AI pollock fishery quota begin with first determining if that quota can be “found” in any “room” between the 2 million mt OY cap and the sum of all groundfish fishery quotas for that given year. That is, if in the future the sum of all TACs for all BSAI groundfish fisheries does not equal 2 million mt, the Council will give priority consideration to “funding” the AI pollock fishery from the difference between that sum and 2 million mt. In this way, no interruption or modification of existing BSAI groundfish fisheries would occur. This provision is part of all the alternatives analyzed below, so while the Council will strive to fund the AI pollock fishery in this manner, they will still choose a funding alternative from among the five alternatives described above. The impacts of this provision on all of the categories that follow below are basically the same: all fisheries would be prosecuted as they would be prosecuted under the status quo and thus funding the AI fishery in this manner would have no additional impacts on these fisheries or stocks, nor any additional or unique consequent effects on the environment or social and economic conditions. The common impact would be the initial addition of a fishery quota that has not been apportioned since 1999, but had been fished for decades prior to 1999. Thus, in a sense, funding the AI pollock fishery from unapportioned quota, while remaining under the 2 million mt OY cap in the BSAI, is much like returning to status quo. If fished under current regulations (to conform with SSL protection measures, etc.), funding the AI pollock fishery in this manner as the Council’s first priority would have the same effects regardless which alternative is chosen. Thus, this issue is not treated separately in each of the sections below but it is assumed to be a mandatory component of all alternatives and will be part of the Council’s preferred program for the AI pollock fishery, regardless which funding alternative is chosen.

Effects on Target Species

2.1 The no action alternative (Alternative 2.1) would be contrary to the legislative intent, and thus may not represent a viable alternative. The impacts of this alternative on the AI pollock stock would be considered insignificant because no fishery would occur and this stock would remain unfished, except for small amounts of bycatch in other, continuing fisheries in the area.

2.2 - 2.4 Some of the issues associated with how an AI pollock fishery might affect the pollock stocks are discussed in the previous chapter in 4.2.2. The process of "funding" the TAC apportioned to the AI pollock fishery may have different effects on other target fisheries, depending on the method of "funding". Under these alternatives, the source of "funding" TACs for an AI pollock fishery is irrelevant to the pollock stock and fishery. None of these alternatives would impact the AI pollock stock because it is the mechanism of apportionment that is being considered in this amendment, not absolute amounts of pollock removals. The impacts are thus considered to be "insignificant" for alternatives 2.2, 2.3, and 2.4

The same caveat, discussed in 4.2.2 about future AI pollock stock assessments, should be kept in mind here as well. There is the potential for the AI pollock stock to be redefined as encompassing only the geographic area east of 174 degrees West (excluding offshore basin fish also). This potential change in how the AI pollock stock is managed could have some effect on how the future AI pollock fishery is prosecuted. The intent in such a redefinition of stock boundaries is to protect what may be a weaker component of the overall BSAI pollock assemblage.

Alternatives 2.2 through 2.4 address the issues of funding an AI pollock allocation to the Aleut Corporation. This action could take several forms: by reducing TACs from the Bering Sea pollock fishery, proportionally reducing TACs from each of the various BSAI groundfish fisheries, or proportionally reducing the TACs from each of the BSAI groundfish fisheries excluding the IFQ sablefish fishery. The significance to the pollock stock in the Aleutian Islands from of any of these actions is considered to be very minor. Reductions in fishing mortality from very small TAC reductions would be small under any of these alternatives (and zero under alternative 2.1). The small TAC reductions would result in very small changes in fishing activities in the EBS pollock fishery, and even smaller changes in fishing activities if all BSAI fisheries experienced small TAC reductions (even excluding the sablefish IFQ fishery). No measurable effect on the spatial and temporal distribution of these target species would be likely. Regardless how the AI pollock TAC is funded, the EBS pollock fishery and all other BSAI groundfish fisheries would continue. None of these fisheries currently catch amounts of prey items at levels considered adverse to the pollock stock. In reality, the "funded AI pollock TAC" would represent a shift in harvest of this species from one part of the ocean to another; net biomass removal would remain unchanged. Some spatial and temporal change could occur, but the TAC changes are so small this is considered insignificant. No habitat effects on pollock stocks would be likely. The overall effect of all alternatives, then, is considered "insignificant".

Alternative 2.5 is essentially a variation of Alternatives 2.2 through 2.4, but funds the AI pollock fishery by a reduction in the EBS pollock and BSAI yellowfin and rock sole fisheries; all the "B" season AI pollock quota (60% of the annual TAC), and unharvested "A" season pollock quota, rolls back to just the EBS pollock fishery. The effects of this alternative are similar to those described above, but some pollock biomass is "returned" to the Bering Sea in the form of both unharvested AI pollock and potentially in the form of yellowfin and rock sole quota that is not returned to these two fisheries (it is used to fund the AI pollock A and "B" season combined TAC but is not part of the rollback of the unharvested A or the entire "B" season AI pollock quota). No pollock quotas would be increased unless an AI pollock fishery could not be prosecuted at all in a year; were such a scenario to occur, this would result in reduced sole fishery quotas in the BSAI and those quotas would essentially be "converted" to pollock quota and returned to the EBS pollock fishery. This is highly unlikely. The percentage reduction in yellowfin and rock sole fisheries is very small (10% of the AI pollock TAC comes from each). No impacts of this action on pollock prey items is likely given the very small amounts of pollock "moved" from one part of the BSAI to another nor to the small shifts in spatial and temporal pollock harvest patterns under this alternative. No habitat effects are thus likely. The overall impact on the BSAI pollock stock from this alternative is considered "insignificant".

Effects on Other Target Species and Fisheries

2.1 This no action alternative would be contrary to the legislative intent, and may not represent a viable alternative . Thus the impacts of this alternative to other target species and fisheries are considered insignificant.

2.2 Some of the issues associated with how an AI pollock fishery might affect other target fisheries are discussed in the previous chapter. The process of "funding" the TAC apportioned to the AI pollock fishery may have different effects on other target fisheries, depending on the method of "funding". There could be some effect on other target fisheries if TAC is reduced in these fisheries in order to provide the TAC to be apportioned to the AI pollock fishery. Under this alternative, the TAC for an AI pollock fishery would be "funded" from the eastern Bering Sea pollock fishery; in this situation, there would be no effect on the Atka mackerel, P. cod, sablefish, rockfish, or flatfish fisheries in the AI region since none of these fisheries would realize any TAC reduction to "fund" the AI TAC. However, the EBS pollock fishery would experience a small reduction in TAC and thus a slightly lower quantity of EBS pollock would be eventually harvested from the Bering Sea. Because the amount by which the BS pollock TAC is reduced is very small, in the range of a few percentage points, the impact on the fishery and on the EBS pollock stock is considered to be "insignificant".

2.3 If the TAC is "funded" from all groundfish fisheries proportionally, impacts on other target fisheries could be considered adverse. However, the amount of TAC reduction from any of the currently-prosecuted fisheries in the AI region would be very small, considering that the reduction would be spread among fisheries whose TACs sum to nearly 2 million mt. Under this alternative, the various groundfish fisheries would experience slightly lower TACs and fishing effort would thus decline in approximate proportion to the TAC reduction. Target stocks would experience a slight decrease in mortality levels. These effects, however, are very small, and only represent a reduction of a few percentage points. Given these amounts are so small, the impacts of this alternative on the various target species and fisheries are considered to be insignificant.

2.4 If the TAC is "funded" from all groundfish fisheries proportionally, but excluding the IFQ sablefish fishery, impacts on other target fisheries could be considered adverse. However, the amount of TAC reduction from any of the currently-prosecuted fisheries in the AI region would be very small, considering that the reduction would be spread among fisheries whose TACs sum to nearly 2 million mt. The sablefish exclusion would have a negligible effect on other target species or fisheries. The consequences of this alternative are nearly the same as indicated above. Thus, the impacts of this alternative on the various target species and fisheries are considered to be insignificant.

Alternatives 2.1 through 2.4 address the effects of an AI pollock allocation to the Aleut Corporation. This action could take several forms: by reducing TACs from the EBS pollock fishery, or proportionally reducing TACs from each of the various BSAI groundfish fisheries, or proportionally reducing the TACs from each of the BSAI groundfish fisheries excluding the IFQ sablefish fishery. The significance of any effect on the various groundfish stocks, and the fisheries that target these stocks, from of any of these actions is considered to be very minor. Reductions in fishing mortality from very small TAC reductions would be small under any of these alternatives (and zero under alternative 1). The small TAC reductions would result in very small changes in the geographic locations of fishing activities in the EBS pollock fishery, and even smaller changes in locations of fishing activities if all BSAI fisheries experienced small TAC reductions (even excluding the sablefish IFQ fishery). Given the very small changes in location of fishing activity, no measurable effect on the spatial and temporal distribution of the target species would be likely.

Regardless how the AI pollock TAC is funded under these four alternatives, the EBS pollock fishery and all other BSAI groundfish fisheries would continue. None of these fisheries currently catch amounts of target species prey items at levels considered adverse to the various groundfish target fish stocks. In reality, the "funded AI pollock TAC" would be merely shifted from one part of the ocean to another; net biomass removal would remain unchanged. Some spatial and temporal change could occur, but the TAC changes are so small this is considered insignificant. No habitat effects on other target fish stocks would be likely. Fishing grounds preemption could occur, as could some gear conflicts between an AI fishery and other AI target fisheries, but as discussed previously in 4.2.1, these effects are difficult to predict and likely would be very minor given the different gear types involved in the other target fisheries versus the pelagic gear used in an AI pollock fishery. Also, the AI pollock fishery likely will have some spatial and temporal activity issues associated with the small vessel component that may reduce potential conflicts with other fisheries that employ larger vessels that ply other waters for their targets. The overall effect of these four alternatives, then, is considered insignificant.

2.5 This new alternative added at the Council's April 2004 meeting would fund the AI pollock fishery from the EBS pollock and BSAI yellowfin and rock sole fishery TACs. The rollback procedure specified in this alternative would result in unharvested "A" season pollock TAC, and all "B" season AI pollock TAC, rolled back to the EBS pollock Fishery. The EBS pollock fishery would see some reduction in quota, although the reduction would be fairly small, in the "A" season. The reduction would be 80% of the TAC to be apportioned to the AI pollock fishery; if that were as high as 100,000 mt (unlikely in the foreseeable future), the EBS pollock fishery would "give up" 80,000 mt to fund the AI fishery but would receive back all the "B" season AI quota (60% of 100,000 or 60,000 mt) and thus would experience a net reduction of 20,000 mt. Using the 2004 EBS pollock specifications, this would amount to an overall reduction for the year of 1.3%. Some shift in fishing patterns would result (less quota in the EBS pollock fishery "A" season would result in less fishing activity and less removal of pollock and other species harvested incidentally).

The BSAI yellowfin sole and rock sole fisheries would also see reductions in their TACs under this alternative, and would not receive any rollback of unharvested quota. Thus these two fisheries, and the species of sole they target, would experience reduced fishing effort and reduced catch of the target species, respectively. The reductions in TAC from each of these two fisheries would be equal to 10% of the annual AI pollock quota apportioned; thus the effect on the quota reductions would be proportional to the AI pollock quota apportioned for that fishing year. The amounts could range from near zero to 10% of a number equal to the AI pollock stock ABC (Alternative 2.1) which has been as high as 100,000 mt. The pollock stock is being reevaluated and ABCs this high may not be likely in near future years. Nonetheless to use this as a bounding example, the yellowfin and rock sole fisheries each would experience a reduction of 10,000 mt, and the EBS pollock fishery a reduction of 80,000 mt. Given the 40%/60% split in the AI pollock fishery, and if all the "A" season and none of the "B" season AI pollock quota was harvested, the rollback to the EBS pollock fishery would be 60,000 mt or 75% of that fishery's contribution. The yellowfin and rock sole fisheries, in this example, would receive no rollback, and thus would experience a net reduction in fishing quota for that year of 10,000 mt each. For the fishing year 2004, where the yellowfin sole TAC was set at 86,075 mt, a 10,000 mt reduction in TAC would be a 12% reduction in quota and harvest (if all would have been harvested). Similarly, the rock sole fishery would experience a 24% reduction in quota (and harvest). The result would be lower harvests of these two target species, which could be considered positive since there would remain in the marine environment a larger number of these species for future reproduction. Economic and ecosystem effects of reductions in the BSAI sole fisheries are discussed later in this chapter. Given the magnitude of these quota reductions, and presumably harvest, the effect of this alternative on yellowfin and rock sole stocks could be considered positive (if you were a yellowfin sole or a rock sole). However, density dependent factors often come into play when a population of an organism increases, often with adverse consequences (crowding, excess competition for available food, spread of disease, etc.). This may be particularly an issue when an ecosystem has shifted to accommodate an annual removal of a segment of the population, such as in a commercial fishery; in such a case, the ecosystem, and the response of the organism to the ecosystem, is "tuned" to the continual removal process. Changing the pattern of removal conceivably could have some effect on the population of that organism (here, two sole species). Thus, leaving more yellowfin and rock sole in the marine environment might not be considered positive under certain circumstances, or at least it is largely unknown how a system, and the fish population, responds in the short and long terms. Given the opposing nature of these issues, the net effect of funding the AI pollock fishery from several BSAI fishery TACs on these fisheries and the species they target would be fairly small, and the impacts of this alternative thus are judged to be insignificant.

Effects on Incidental Catch of Other or Non-specified Species

2.1 If no funding mechanism is specified for the pollock allocation, then the effects on stocks of other species or non-specified species would not differ from status quo, and under status quo these existing fishing activities are not considered to adversely impact other species or nonspecified species. The no action alternative is contrary to the legislative intent, and thus this issue is essentially a non-issue. Thus the impacts of this alternative on the incidental catch of other species or nonspecified species are considered insignificant.

2.2 The effects of funding the allocation from the Bering Sea pollock fishery on other species or non-specified species are likely to be very small. In a directed pelagic trawl pollock fishery, it is likely that there would be very minimal bycatch of the various nonspecified species and the "other" species as well. It is expected that pelagic trawls will result in very high harvest percentages of pollock, and smaller percentages of P. cod, and with some small amounts of Atka mackerel, rockfish, flatfish, and/or sablefish. Bycatch of such species as sharks and skates, or other marine organisms such as starfish and anemones or even grenadiers or eelpouts, will likely be very small and would thus have insignificant effects on these species and the small shift in fishing activity (slightly reduced in the Bering Sea, slightly increased in the AI) would not significantly increase or decrease incidental catch of other or nonspecified species. The effects of this alternative on the incidental catch of other and nonspecified species is considered insignificant.

2.3 The effects of funding the allocation from all groundfish fisheries in the BSAI on other species or non-specified species are likely to be small. Similar to the above situation, the incidental catch of nonspecified species or other species would not differ much from the current fishing patterns. As stated above, in a directed pelagic trawl pollock fishery in the AI region, it is likely that there would be very minimal bycatch of the various nonspecified species and the other species as well. While slightly increased bycatch might occur in the AI, this would be offset by a complementary reduction in bycatch in the various fisheries of the BSAI from which the AI pollock TAC is funded. It is expected that pelagic trawls used in the AI region will result in very high harvest percentages of pollock, and smaller percentages of P. cod, and with some small amounts of Atka mackerel, rockfish, flatfish, and/or sablefish. Bycatch of such species as sharks and skates, or other marine organisms such as starfish and anemones or even grenadiers or eelpouts, will likely be very small and would thus have insignificant effects on these species ,and the small shift in fishing activity (slightly reduced in the Bering Sea, slightly increased in the AI) would not significantly increase or decrease incidental catch of other species or nonspecified species. The very small reductions in the BSAI would be across several dozen fisheries. The effects of this alternative on the incidental catch of other species and nonspecified species are considered insignificant.

2.4 The effects of funding the allocation from all groundfish fisheries in the BSAI, excluding the IFQ sablefish fishery, on other species or non-specified species are the same as discussed above. The same logic dictates that the effects of this alternative are considered insignificant.

Alternatives 2.1 through 2.4 address the incidental catch of two categories of marine organisms occasionally harvested incidental to the target fish species: other species and nonspecified species. The significance of an impact is judged based on the expected ability of the marine organisms that comprise these two species categories to maintain benchmark levels - basically to maintain their ability to reproduce and continue to flourish in the marine environment. Give the very small bycatch of these species in a pelagic trawl fishery, the AI pollock fishery is not expected to even approach a level of incidental catch of these species to come near this threshold of significance. The reductions of fishing in the BSAI (Alternatives 3 and 4) or just the Bering Sea pollock fishery (Alternative 2) would be very small, perhaps slightly to the benefit of the other or nonspecified fish harvested in these fisheries, and thus for similar reasons the impacts of these alternatives do not approach the level of concern - for the ability of these species to maintain their benchmark population levels - to be considered a significant impact.

2.5 This alternative would result in similar impacts as described above for many of the reasons discussed above. However, a reduction in yellowfin and rock sole fisheries could result in slightly different patterns of bycatch of other or non-specified species since only these fisheries would be affected, not the entire suite of fisheries in the overall BSAI. However, the net result would still likely be reduced bycatch of other or non-specified species, and likely at very low levels. The effects of this alternative are judged to be insignificant when measured against the significance criteria.

Effects on Incidental Catch of Forage Fish Species

2.1 If no funding mechanism is specified for the AI pollock allocation, then the effects on forage fish species would not differ from status quo, and under status quo the existing fishing activities are not considered to adversely impact forage fish species. The no action alternative is contrary to the legislative intent, and thus makes this issue irrelevant. Thus the impacts of this alternative on the incidental catch of forage fish are considered insignificant..

2.2 The effects of funding the allocation from the Bering Sea pollock fishery on forage fish or the incidental catch of forage fish are likely to be very small. In a directed pelagic trawl pollock fishery, it is likely that there would be very minimal bycatch of forage fish species. It is expected that pelagic trawls will result in very high harvest percentages of pollock, and very small incidental catch of species such as herring, Pacific sand lance, eulachon, or Pacific sand fish. Since these bycatch rates are expected to be low, this alternative would thus have insignificant effects on these species. The small shift in fishing activity (slightly reduced in the Bering Sea, slightly increased in the AI) would not significantly increase or decrease incidental catch of forage fish. The effects of this alternative on the incidental catch of forage fish species is considered insignificant.

2.3 The effects of funding the allocation from the combined groundfish fisheries in the BSAI, in proportion to their TACs, on forage fish species is not considered to be significant. The very small reductions in BSAI groundfish fishery TACs would not appreciably affect the incidental catch of forage fish species in the Bering Sea or Aleutian Islands. The effects of this alternative on the incidental catch of forage fish species is considered insignificant.

2.4 The effects of funding the allocation from the combined groundfish fisheries in the BSAI, in proportion to their TACs, excluding the IFQ sablefish fishery, on forage fish species is not significant for the same reasons outlined above. The very small reductions in BSAI groundfish fishery TACs, even with an exclusion of the sablefish IFQ fishery, would not appreciably affect the incidental catch of forage fish species in the Bering Sea or Aleutian Islands. The effects of this alternative on the incidental catch of forage fish species is considered insignificant.

Alternatives 2.1 through 2.4 address the incidental catch of forage fish species occasionally harvested incidental to the target fish species. The significance of an impact is judged based on the expected ability of forage fish species to maintain benchmark levels - basically to maintain their ability to reproduce and continue to flourish in the marine environment. Give the very small bycatch of these species in a pelagic trawl fishery, the AI pollock fishery is not expected to even approach a level of incidental catch of these species to come near this threshold of significance. The reductions of TACs in the BSAI fisheries overall (Alternatives 3 and 4), as well as the reduction of TAC in the Bering Sea pollock fishery alone (Alternative 2) would be relatively small, perhaps slightly to the benefit of forage fish harvested in these fisheries. Thus the impacts of these alternatives do not approach the level of concern - for the ability of these species to maintain their benchmark population levels - to be considered a significant impact.

2.5 This alternative would result in similar impacts as described above for many of the reasons discussed above. However, a reduction in yellowfin and rock sole fisheries could result in slightly different patterns of bycatch of forage species since only these fisheries would be affected, not the entire suite of fisheries in the overall BSAI (as in Alternative 2.3 and 2.4). However, the net result would still likely be reduced bycatch of forage species, and likely at very low levels, because of the reduction in TAC to these two sole fisheries. The SAFE for 2004 notes that the yellowfin sole and rock sole fisheries have forage species bycatch levels that are small relative to the forage biomass (NPFMC 2003b). The effects of this alternative are judged to be insignificant when measured against the significance criteria.

Effects on Incidental Catch of Prohibited Species

2.1 If no funding mechanism is specified for the pollock allocation, then the effects on stocks of fish and invertebrates that are considered prohibited species would not differ from status quo, and under status quo these existing fishing activities are not considered to adversely impact prohibited species, Currently, the incidental catch of prohibited species is controlled by bycatch limits set in the annual specifications process, which, when attained, close fisheries to protect populations of prohibited species. If the Council takes no action, this would be contrary to the legislative intent, and thus makes this issue irrelevant. Thus the impacts of this alternative on the incidental catch of prohibited species are considered insignificant.

2.2 If the allocation to the Aleut Corporation were funded from the Bering Sea pollock fishery, it is possible that PSC bycatch rates would decrease in the Bering Sea. Any effects on stocks of prohibited species would not likely reach the significance threshold of jeopardizing the capacity of the stocks to maintain benchmark population levels, or of changing harvest levels by 20% in directed fisheries for these species. Further discussion relevant to this alternative follows below in 2.3.

2.3 If the allocation to the Aleut pollock fishery were funded from all the groundfish fisheries in the BSAI, it is possible that PSC bycatch rates would decrease in the Bering Sea, but the absolute amounts would likely be very small. Changes could occur in the levels of incidental catch of prohibited species in the groundfish fisheries. Tables 4.3.2-1 and 4.3.2-2 present a comparison of effects on the incidental catch of prohibited species under different funding mechanisms, at different allocation levels, and using two different baseline years for comparison.

In 2004, pollock biomass is relatively high, such that the pollock TAC accounts for almost 75% of the 2 million mt optimal yield cap on the BSAI groundfish fisheries. To contrast the effects of moving TAC from this fishery, 1999 is provided as another baseline year. In 1999, EBS pollock only accounted for around 50% of the 2 million mt optimal yield cap.

The column labeled “Bycatch” is a proxy for weight or numbers of crab (should specify for which species it means weight, and which species it means numbers) caught during that year, using an average PSC rate from 1999-2002 and the total TAC for that year. In each table, the three columns represent different funding mechanisms: all of the allocation taken from EBS pollock (Alternative 2.2), all of the allocation taken from BSAI groundfish fisheries proportionately (Alternative 2.3), and all of the allocation taken from BSAI groundfish fisheries (except sablefish) proportionately (Alternative 2.4). The bycatch reduction is the number of animals (e.g. crab, salmon) or mt of catch (e.g. halibut, herring) reduced in the BSAI groundfish fisheries as a consequence of moving the allocation of pollock from the BS to the AI. Thus the reductions here are in reference to the BS, and do not account for any potential increases in incidental catch of prohibited species in the AI.

A quick inspection of the reductions shows that none of the combinations of baseline year, total allocation, or funding mechanism result in a reduction of incidental catch of prohibited species of 50%, and thus all of the alternatives are considered to have insignificant impacts. In fact, the largest changes shown here are in the order of 1% - 2%. It is interesting to note the differences in PSC reduction between funding mechanisms that include only pelagic trawl (EBS pollock) and all groundfish fisheries which include other gear types such as pots, hook and line, and non-pelagic trawl. The reductions in this second category are more evident in the king crab and tanner crab PSC data. Also, because pollock represented only 50% of the 2 million mt optimal yield cap in 1999, the reductions in bycatch from the BSAI groundfish fisheries allocations were greater and more diverse than the reductions in 2004, in which almost 75% of the 2 million mt was comprised of EBS pollock.

2.4 Alternative 4 has similar impacts to those discussed under Alternative 3 (section 2.3) above, but excludes consideration of PSC catch change if the sablefish IFQ fishery is omitted. Any effects on stocks of prohibited species would not likely reach the significance threshold of jeopardizing the capacity of the stocks to maintain benchmark population levels, or of changing harvest levels by 20% in directed fisheries for these species. Because no changes of 50% were found in the incidental catch of prohibited species in the groundfish fisheries under this alternative, the effect is insignificant.

2.5 This alternative would likely have impacts that are similar to those discussed above, and for similar reasons. However, the reductions in EBS pollock and BSAI yellowfin and rock sole fishery quotas would result in some bycatch reductions for those three fisheries only. There is a difference in the amount of PSC bycatch taken in these three fisheries; the sole fisheries are prosecuted with bottom trawls, and therefore crab and halibut bycatch is greater than in the pollock fishery that is prosecuted with pelagic trawl gear. The EBS pollock fishery would be subjected to larger TAC reductions than would the sole fisheries (80% vs 10%) but the sole fisheries have greater PSC bycatch rates of crab and halibut, perhaps outweighing the larger TAC reductions in the EBS pollock fishery. Salmon bycatch in the EBS pollock fishery would probably decline in proportion to the amount of TAC reduced from this fishery to fund the AI pollock fishery. However, much of that TAC would be rolled back to the EBS fishery, although the net change would likely be a small reduction in salmon PSC bycatch in the Bering Sea. This would likely be balanced by a small increase in salmon bycatch in the AI region.

Table 4.3.2-1 "2004 Model" reduction in bycatch of PSC species in funding fisheries, associated with different levels of AI pollock DPF/CDQ and different alternatives (in metric tons or numbers of animals, as appropriate - estimated halibut mortality rather than bycatch)

Species	Alternative	Assuming no roll back						Assuming "B" season roll back.					
		10,000	20,000	30,000	40,000	50,000	58,000	10,000	20,000	30,000	40,000	50,000	58,000
Halibut	2.2	1	3	4	5	6	7	1	1	2	2	3	3
(mt mortality)	2.3	28	57	85	113	141	164	19	37	56	75	94	109
	2.4	28	56	84	112	140	163	19	37	56	75	94	109
	2.5	23	45	68	90	113	131	23	45	68	90	113	131
Bairdi (numbers)	2.2	25	51	76	101	126	147	21	43	64	85	107	124
	2.3	5,154	10,307	15,461	20,614	25,768	29,891	2,057	4,113	6,170	8,226	10,283	11,928
	2.4	5,153	10,305	15,458	20,610	25,763	29,885	2,057	4,113	6,170	8,226	10,283	11,928
	2.5	9,737	19,473	29,210	38,946	48,683	56,472	9,737	19,473	29,210	38,946	48,683	56,472
Red king (numbers)	2.2	0	1	1	2	2	3	0	1	1	2	2	3
	2.3	555	1,109	1,664	2,218	2,773	3,216	222	444	666	889	1,111	1,288
	2.4	554	1,108	1,663	2,217	2,771	3,215	222	444	666	889	1,111	1,288
	2.5	1,689	3,377	5,066	6,754	8,443	9,794	1,689	3,377	5,066	6,754	8,443	9,794
Chinook (numbers)	2.2	178	357	535	713	891	1034	105	210	315	420	524	608
	2.3	156	312	468	624	780	905	94	188	282	375	469	544
	2.4	156	312	468	624	780	904	94	188	282	375	469	544
	2.5	66	132	198	264	330	383	66	132	198	264	330	383
Other salmon (numbers)	2.2	532	1,064	1,596	2,127	2,659	3,085	9	19	28	37	47	54
	2.3	415	829	1,244	1,659	2,073	2,045	8	16	24	32	40	47
	2.4	415	829	1,244	1,658	2,073	2,045	8	16	24	32	40	47
	2.5	5	10	15	20	24	28	5	10	15	20	24	28
Herring (metric tons)	2.2	4	7	11	15	18	21	0	1	1	2	2	2
	2.3	3	6	9	12	15	17	0	1	1	2	2	2
	2.4	3	6	9	12	15	17	0	1	1	2	2	2
	2.5	1	2	3	3	4	5	1	2	3	3	4	5
Other tanner (numbers)	2.2	70	140	210	280	351	407	46	92	138	184	230	267
	2.3	9,445	18,890	28,334	37,779	47,224	54,780	3,481	6,962	10,443	13,924	17,405	20,190
	2.4	9,371	18,743	28,114	37,486	46,857	54,354	3,481	6,962	10,443	13,924	17,405	20,190
	2.5	14,066	28,132	42,198	56,264	70,331	81,584	14,066	28,132	42,198	56,264	70,331	81,584
Other king (numbers)	2.2	3	7	10	13	17	19	1	3	4	5	7	8
	2.3	237	475	712	950	1,187	1,377	95	190	285	380	475	551
	2.4	229	457	686	915	1,144	1,327	95	190	285	380	475	551
	2.5	38	76	114	152	190	220	38	76	114	152	190	220

Table 4.3.2-2 "1999 Model" reduction in bycatch of PSC species in funding fisheries, associated with different levels of AI pollock DPF/CDQ and different alternatives (in metric tons or numbers of animals, as appropriate - estimated halibut mortality rather than bycatch)

Species	Alternative	Assuming no roll back						Assuming "B" season roll back.					
		10,000	20,000	30,000	40,000	50,000	58,000	10,000	20,000	30,000	40,000	50,000	58,000
Halibut	2.2	1	3	4	5	6	7	1	1	2	2	3	3
(mt mortality)	2.3	68	136	205	273	341	396	27	55	82	109	136	158
	2.4	68	137	205	273	341	396	27	55	82	109	137	158
	2.5	23	45	68	90	113	131	23	45	68	90	113	131
Bairdi (numbers)	2.2	25	51	76	101	126	147	21	43	64	85	107	124
	2.3	16,985	33,970	50,954	67,939	84,924	98,512	6,794	13,588	20,382	27,176	33,970	39,405
	2.4	16,998	33,997	50,995	67,993	84,991	98,590	6,799	13,599	20,398	27,197	33,997	39,436
	2.5	9,757	19,473	29,210	38,946	48,683	56,472	9,737	19,473	29,210	38,946	48,683	56,472
Red king (numbers)	2.2	0	1	1	2	2	3	0	1	1	2	2	3
	2.3	1,229	2,458	3,687	4,916	6,145	7,128	492	983	1,475	1,966	2,458	2,851
	2.4	1,230	2,460	3,690	4,920	6,150	7,134	492	984	1,476	1,968	2,460	2,854
	2.5	1,689	3,377	5,066	6,754	8,443	9,794	1,689	3,377	5,066	6,754	8,443	9,794
Chinook (numbers)	2.2	178	357	535	713	891	1,034	105	210	315	420	524	608
	2.3	168	336	504	672	840	975	67	134	202	269	336	390
	2.4	168	336	505	673	841	976	67	135	202	269	336	390
	2.5	66	132	198	264	330	383	66	132	198	264	330	383
Other salmon (numbers)	2.2	532	1,064	1,596	2,127	2,659	3,085	9	19	28	37	47	54
	2.3	292	584	876	1,168	1,460	1,694	117	234	350	467	584	677
	2.4	292	584	877	1,169	1,461	1,695	117	234	351	468	584	678
	2.5	5	10	15	20	24	28	5	10	15	20	24	28
Herring (metric tons)	2.2	4	7	11	15	18	21	0	1	1	2	2	2
	2.3	2	5	7	10	12	14	1	2	3	4	5	6
	2.4	2	5	7	10	12	14	1	2	3	4	5	6
	2.5	1	2	3	3	4	5	1	2	3	3	4	5
Other tanner (numbers)	2.2	70	140	210	280	351	407	46	92	138	184	230	267
	2.3	33,209	66,419	99,628	132,837	166,047	192,614	13,284	26,567	39,851	53,135	66,419	77,046
	2.4	33,235	66,469	99,704	132,938	166,173	192,760	13,294	26,588	39,881	53,175	66,469	77,104
	2.5	14,066	28,132	42,198	56,264	70,331	81,584	14,066	28,132	42,198	56,264	70,331	81,584
Other king (numbers)	2.2	12	25	37	50	62	72	5	10	15	20	25	29
	2.3	1,515	3,030	4,545	6,060	7,575	8,787	606	1,212	1,818	2,424	3,030	3,515
	2.4	1,483	2,967	4,450	5,934	7,417	8,604	593	1,187	1,780	2,373	2,967	3,441
	2.5	38	76	114	152	190	220	38	76	114	152	190	220

The amount of PSC bycatch reduction would depend on the Council's recommendation on the amount of TAC apportioned to the Aleut Corporation fishery. For the rock sole fishery, however, larger amounts of crab and halibut are taken as bycatch in these fisheries, and the PSC "savings" would be larger than if other fisheries were the contributors. Rock sole fishery PSC bycatch rates are shown in Table 4.3.2–3. If that fishery "funded" 10,000 mt of potential rock sole harvest quota credited toward the AI pollock fishery, this would "save" or reduce PSC bycatch by 162 mt of halibut mortality, 66,318 bairdi crab, 14,062 red king crab, 115 Chinook salmon, 57 other salmon (mostly chum), 1 mt of herring, 39,367 other Tanner crab, and 183 other king crab. However, at least in the initial years of the AI pollock fishery, 10,000 mt is a highly unlikely amount from the rock sole fishery; a more reasonable amount might be 10% of 10,000 or 15,000 mt or 1,000 to 1,500 mt from the rock sole fishery. At a 1,500 mt level, PSC reductions in the rock sole fishery would be much smaller: 24.3 mt halibut mortality, 9,947 bairdi crab, 2,109 red king crab, 17 Chinook salmon, 9 other salmon, negligible herring, 5,905 other Tanner crab, and 27 other king crab. At 1500 mt from the yellowfin sole fishery, PSC reduction in the BSAI would be 13 mt halibut mortality, 5,245 bairdi crab, 179 red king crab, 3 Chinook salmon, 6 other salmon, negligible herring, 16,365 other Tanner crab, and 26 other king crab. The EBS pollock fishery also would see some PSC reductions, but because of the use of pelagic trawls, "savings" of PSC species would be fairly small, even given the larger (80%) contribution from this fishery.

Table 4.3.2-3 shows the net PSC reductions under Alternative 2.5 with the three funding fisheries PSC bycatch amounts summed. Several different potential quotas apportioned to the Aleut Corporation fishery are shown and the PSC bycatch reductions that would accrue in each case given the 10%, 10%, and 80% contributions from the rock sole, yellowfin sole, and EBS pollock fishery TACs are provided. Thus, the amount of TAC apportioned to the Aleut Corporation fishery, when coupled with Alternative 2.5, is the deciding factor in how PSC bycatch would be affected. If 10,000 to 15,000 mt quotas are apportioned to the AI pollock fishery from yellowfin and rock sole and EBS pollock fisheries, the overall PSC bycatch "savings" would be small under this alternative, and the overall net effect of this alternative is judged to be insignificant. If larger TACs are apportioned to the AI pollock fishery, say up to 100,000 mt, then the PSC reductions from the reduced harvest of primarily the two sole fisheries (unless the "B" season roll back is not implemented) would be proportionally higher, but the significance of this would still be small unless very large TACs are involved, which seems unlikely, at least for the foreseeable future. Given the likelihood that the Council will apportion a smaller TAC (probably 10,000 to 20,000 mt) for the initial year or more of the AI pollock fishery, but also recognizing in future years it could be somewhat higher but not likely large, the effects on PSC species and bycatch is judged to be insignificant.

Table 4.3.2-3 PSC bycatch rates in yellowfin sole, rock sole, and EBS pollock fisheries (in mt or numbers, as appropriate; halibut mortality not bycatch)

Fishery	Halibut	Bairdi	Red king crab	Chinook	Other salmon	Herring	Other Tanner	Other king crab
YFS	0.0088	3.4966	0.1993	0.0022	0.0039	0.0004	10.9101	0.0172
Rock sole	0.0162	6.6318	1.4062	0.0115	0.0057	0.0001	3.9367	0.0183
EBS pollock	0.0001	0.0025	0.0000	0.0178	0.0532	0.0004	0.0070	0.0012

The significance of effect of the various alternatives is considered to be very small as discussed above. The threshold criterion (the ability of a PSC stock to maintain a viable population) is not approached under any of these alternatives, and thus all are considered to be insignificant.

Note that at their April 2004 meeting, the Council added another decision element (6.0) to this EA/RIR: whether or not to count Chinook salmon bycatch in the AI pollock fishery against the BSAI Chinook bycatch cap. Alternative 6.1 is a scenario where Chinook salmon bycatch in the AI pollock fishery counts against the BSAI Chinook salmon bycatch cap of 29,000 fish, and Alternative 6.2 is a scenario where the Chinook bycatch in the AI pollock fishery does not, and Alternative 6.3 proposes a new cap for the AI pollock fishery. Thus, Chinook salmon bycatch is discussed in more detail in section 4.7 of this Chapter.

Effects on Steller Sea Lions

2.1 The no action alternative is contrary to the intent of the legislation, and thus does not represent a viable alternative. The impacts of this alternative on Steller sea lions (SSL) are considered insignificant because no AI pollock fishery would occur, and thus Steller sea lions would not be affected in any way not considered previously under the status quo.

2.2 The likely effects on SSLs of "funding" the TAC apportioned to the AI pollock fishery from the EBS pollock fishery are as described above under 4.2.1. There likely would be negligible impacts to Steller sea lions as result of this mechanism of funding the allocation, but some subtle issues might be considered. If the TAC for an AI pollock fishery is "funded" from the EBS pollock fishery, some very small reduction in SSL impacts could be realized because of the reduced levels of fishing in the Bering Sea. Conceivably reduced pollock fishing in the Bering Sea might equate to less potential contact with foraging Steller sea lions and a slightly reduced level of prey removal from SSL foraging areas in the Bering Sea. However, it is likely that any impacts, if realized, would then occur in the AI instead of in the Bering Sea, and the net effect would not likely be measurable. Under this alternative the AI fishery would remain under the global harvest control rule, as would the Bering Sea pollock fishery. Also the slight change in fishing activities, i.e. increased in the AI region and slightly reduced in the Bering Sea, would be so small as to not affect the spatial and temporal distribution of fish species that are considered important prey items for Steller sea lions. The existing SSL protection measures would remain in place, which have been found to be sufficient to avoid jeopardizing the continued existence of Steller sea lions or adversely modifying their critical habitat. Given this, the alternative would not adversely impact the SSL through disturbance, through prey field change or through injury or mortality from direct contact with groundfish fisheries. There is some potential for gear loss from the pelagic trawl fishery in the AI region, perhaps compensated by the potential for small reduction in gear loss in the Bering Sea. Entanglement is considered a problem in some areas for some marine mammal species, but the origins of derelict fishing gear are not often known and often cannot be attributed to a specific fishery. Entanglement of Steller sea lions in fishing gear is not expected to increase under this alternative to a level considered to be of concern because of the very small change (partly a shift) in fishing activity in the regions. Thus this alternative is considered to result in an insignificant impact on Steller sea lions.

2.3 If the TAC is "funded" from all groundfish fisheries proportionally, impacts on Steller sea lions would be very similar to those discussed in 2.2. One may assert that a particular fishery in the Bering Sea might have had a more measurable effect on Steller sea lions than another, and a reduction in TAC, and therefore fishing, in this fishery could accrue some potential benefit to Steller sea lions. However, there are no data suggesting this is occurring, and thus, the net effect of this option is not measurable. The alternative would not result in adverse effects on Steller sea lions.

2.4 Excluding the IFQ sablefish fishery from the funding mechanism would likely have similar effects as described in 2.3. The effects on Steller sea lions under this alternative are considered to be insignificant.

2.5 Funding the AI pollock fishery from reductions in EBS pollock and BSAI yellowfin and rock sole fisheries would likely have net effects similar to those described above under Alternatives 2.2 and 2.3, although only the three fisheries would be involved. However, these fisheries would experience very small TAC reductions, and the small changes in fishing patterns and fish removals under this alternative would not likely have an impact on Steller sea lions. The effects on Steller sea lions under this alternative are considered to be insignificant.

The levels of fishery impact significance where an action would be considered to have adverse effects on the SSL population in the Aleutian Islands are not approached under any of these alternatives. This is principally due to the existing SSL protection measures that will remain in effect in the AI region. These measures were determined by NMFS to remove the chance of adverse modification of critical habitat and jeopardy to the continued existence of the western DPS of SSL in the AI region. These measures take into account potential impacts of groundfish fishing activities on SSL prey and direct disturbance of Steller sea lions, and the spatial and temporal concentration of fishing activity. These measures also specify that a global harvest control rule not be exceeded, which would not occur under any of these alternatives. Gear entanglement take rates would not be expected to increase given the very small increase in use of pelagic trawl gear in the AI and the likely very small reduction in fishing activity in those fisheries that might "fund" the AI pollock TAC.

Effects on Other Marine Mammals

2.1 If the Council takes no action, this would be contrary to the legislative intent, and thus is moot. Thus, the impacts of this alternative on other marine mammals would be considered insignificant because no fishery would occur and marine mammals would thus not be impacted other than under other status quo fishing activities in the AI region.

2.2 The effects on other marine mammals from "funding" the TAC apportioned to the AI pollock fishery would likely be as described above under 4.2.1. There likely would be little consequence to marine mammals from the mechanism of "funding" the TAC. Some subtle issues might be considered, however. If the TAC for an AI pollock fishery is "funded" from the eastern Bering Sea pollock fishery, some very small reduction in marine mammal impacts could be realized because of the reduced levels of fishing in the Bering Sea. Conceivably reduced pollock fishing in the Bering Sea might equate to less potential contact with foraging marine mammals and a slightly reduced level of prey removal from marine mammal foraging areas in the Bering Sea. However, it is likely that any impacts, if realized, would then occur in the AI instead of in the Bering Sea, and the net effect would not likely be measurable. Under this alternative the AI fishery would remain under the global harvest control rule, as would the Bering Sea pollock fishery. Also the slight change in fishing activities, i.e. increased in the AI region and slightly reduced in the Bering Sea, would be so small as to not affect the spatial and temporal distribution of fish species that are considered important prey items for marine mammals. There is some potential for gear loss from the pelagic trawl fishery in the AI region, perhaps compensated by the potential for small reduction in gear loss in the Bering Sea. Entanglement is considered a problem in some areas for some marine mammal species (e.g. northern fur seals that haul out on the Pribilof Islands), but the origins of derelict fishing gear are not often known and often cannot be attributed to a specific fishery. Entanglement of marine mammals in fishing gear is not expected to increase under this alternative to a level considered to be of concern because of the very small change (partly a shift) in fishing activity in the regions. Thus this alternative is considered to result in an insignificant impact on other marine mammals.

2.3 If the TAC is "funded" from all groundfish fisheries equiproportionally, impacts on marine mammals would be very similar to those discussed above in 2.2. Perhaps one could state that a particular fishery in the Bering Sea might have had a more measurable effect on marine mammals than another, and a reduction in TAC, and therefore fishing, in this fishery could accrue some potential benefit to marine mammals. But there are no data suggesting this is occurring, and thus, the net effect of this option is not measurable.

2.4 Excluding the IFQ sablefish fishery from the funding mechanism would likely have similar effects as described above under 2.3. The effects on marine mammals under this alternative are considered to be insignificant.

2.5 Funding the AI pollock fishery from reductions in EBS pollock and BSAI yellowfin and rock sole fisheries would likely have net effects similar to those described above under Alternatives 2.2 and 2.3, although only the three fisheries would be involved. However, these fisheries would experience very small TAC reductions and the small changes in fishing patterns and fish removals under this alternative would not likely have an impact on marine mammals. The effects on other marine mammals under this alternative are considered to be insignificant.

Similar to the above under Steller sea lions, the levels of fishery impact significance where an action would be considered to have adverse effects on other marine mammal populations in the Aleutian Islands are not approached under any of these alternatives. This may be partly due to the existing SSL protection measures that will remain in effect in the AI region. These measures take into account potential impacts of groundfish fishing activities on SSL prey and direct disturbance of Steller sea lions, and other marine mammals might receive some "benefit" from the SSL measures. These measures specify that a global harvest control rule not be exceeded, which would not occur under any of these alternatives. The very small shift in fishery removal of potential marine mammal prey items from Alternatives 2.2, 2.3, 2.4, and 2.5 would not likely affect feeding activities by marine mammals nor cause any increased disturbance or even take in these fisheries. Gear entanglement take rates would not be expected to increase given the very small increase in use of pelagic trawl gear in the AI and the likely very small reduction in fishing activity in those fisheries that might "fund" the AI pollock TAC.

Effects on Seabirds

2.1 If the Council takes no action, this would be contrary to the legislative intent, and thus is moot. The effects on seabirds, thus, would be insignificant.

2.2 The effects on seabirds from "funding" the TAC apportioned to the AI pollock fishery would likely be as described above under 1.1. There likely would be little consequence to seabirds from the mechanism of "funding" the TAC. Some subtle issues might be considered, however. If the TAC for an AI pollock fishery is "funded" from the eastern Bering Sea pollock fishery, some very small reduction in seabird impacts could be realized because of the reduced levels of fishing in the Bering Sea. Conceivably reduced pollock fishing in the Bering Sea might equate to less potential contact with foraging seabirds and a slightly reduced level of prey interference in the Bering Sea. However, it is likely that any impacts, if realized, would then occur in the AI instead of in the Bering Sea, and the net effect would not likely be measurable. Thus the effects of this alternative are considered to be insignificant.

2.3 If the TAC is "funded" from all groundfish fisheries equiproportionally, impacts on seabirds would be very similar to those discussed above in 2.2. Perhaps one could state that a particular fishery in the Bering Sea might have had a more measurable effect on seabirds than another, and a reduction in TAC, and therefore fishing, in this fishery could accrue some potential benefit to seabirds. But there are no data suggesting this is occurring, and thus, the net effect of this option is not measurable. The alternative would not result in adverse effects on seabirds, and thus is considered to be insignificant.

2.4 Excluding the IFQ sablefish fishery from the funding mechanism would likely have similar effects as described above under 2.3. Sablefish longline fisheries do have some potential adverse interactions with seabirds, but exempting this fishery from the funding mechanism would basically allow the fishery to be prosecuted as it is under the status quo. Given the current seabird protection measures now in place for Alaska longline fisheries, and the levels of industry participation and efforts to greatly reduce incidental take of seabirds in longline fisheries, the effects on seabirds under this alternative are considered to be insignificant.

2.5 Funding the AI pollock fishery from reductions in EBS pollock and BSAI yellowfin and rock sole fisheries would likely have net effects similar to those described above under Alternatives 2.2 and 2.3, although only the three fisheries would be involved. However, these fisheries would experience very small TAC reductions and the small changes in fishing patterns and fish removals under this alternative would not likely have an impact on seabirds. Some potential benefit might accrue to seabirds if the EBS pollock and the BSAI yellowfin and rock sole fisheries are curtailed by an amount proportional to their net TAC reductions. This could reduce the potential vessel rigging and trawl gear exposure to seabirds, possibly resulting in fewer bird strikes. In the case of the sole fisheries, particularly when larger amounts of TAC may be reduced from these fisheries, the result would be less offal production and possibly fewer bird encounters and incidental takes. But these changes are not considered to be major changes, and thus the net effects on seabirds under this alternative are considered to be insignificant.

Effects on Habitat

2.1 If the Council takes no action, this would be contrary to the legislative intent, and thus is moot. Thus, the impacts of this alternative on habitat would be considered insignificant because no fishery would occur, and no further impacts on habitat would occur other than what might be occurring under the status quo fishing activities in the AI region.

2.2 Under this alternative, the TAC for an AI pollock fishery would be funded from the TAC that would be apportioned to the Bering Sea pollock fishery. There may be effects on the level of mortality and damage to living habitat or there may be changes to benthic community structure. This could decrease fishing effort in the EBS, and therefore potentially eliminate a small amount of bottom contact in the EBS, decreasing damage to living habitat and changes to benthic community structure.

The alternative also could affect the distribution of fishing effort. If the total allocation came from the EBS pollock fishery, this could slightly decrease effort in the EBS. It is possible that this could decrease intensity of effort in highly fished areas, allowing some limited amount of recovery for benthic habitat and community structure. However, the overall effects on habitat under this alternative are considered to be sufficiently small as to be insignificant.

2.3 Under this alternative, the funding of the AI pollock fishery would come from an equiproportional reduction in TACs of all BSAI groundfish fisheries. As a consequence, there could be effects on the level of mortality and damage to living habitat and there also could be changes to benthic community structure. Under this alternative, this new allocation would reduce fishing activity in a variety of gear types in the BSAI groundfish fisheries and increase pelagic trawl fishing in the AI region. The bottom contact fisheries have been described as more damaging to the living habitat and benthic community than pelagic pollock fisheries. This shift in fishing effort could decrease total bottom contact time, potentially decreasing damage to living habitat and changes to benthic community structure. However, since the AFA pollock fleet has unusually heavy tows, their pelagic nets, when full, often contact the soft surface of the sea floor in the Eastern Bering Sea (Appendix B, Table B.2-9 of the Draft EFH EIS illustrates the Long-term [benthic habitat] Effect Indices [LEI] of groundfish fishing). In this table, pollock trawling was the most significant fishery impact on the bottom habitats of the Eastern Bering Sea. However, it must be kept in mind that this fishery is also by far the largest fishery in the North Pacific.

This alternative also may result in changes in the distribution of fishing effort. The consequences of this are largely unknown but could result in some increased fishing activity in the Aleutian Islands area where benthic habitat that may be sensitive to disturbance, even from a pelagic trawl that only occasionally contacts the ocean floor; in this situation, living benthic community structure or benthic or sessile organisms could be adversely affected. However, given the very small changes (shifts) in fishing activity under this alternative, even considering a potential beneficial effect if BSAI fisheries that use hard bottom contact gear are reduced, are considered sufficiently small that this alternative is considered to have an insignificant impact on habitat.

2.4 Since the proportion of sablefish is so small from the BSAI's two million metric ton fishery, this TAC reduction does not differ substantially from alternative 2.3. Thus this alternative is considered to have insignificant impacts on habitat.

2.5 This alternative would reduce bottom trawling in the BSAI by the yellowfin and rock sole fleets. To the extent that bottom contact would be proportionally reduced from reductions in quota for these fisheries, benthic habitat would experience reduced contact from trawl gear. Thus, this alternative could result in some positive benefit to benthic organisms and benthic habitat. The degree of benefit likely would be in proportion to the levels of reduced quota for these two sole fisheries. The overall effects on habitat are judged to be insignificant, however, since the reductions are expected to be small, at least for the foreseeable future. Effects on habitat would depend greatly on the amount of quota reductions, where those fisheries might have fished in that year, patterns of other fisheries that use bottom contact gear, and related factors. Also, the significance criteria relate to reduced fishing activity in areas that have been lightly fished; presumably the sole fisheries have occurred in similar areas from year to year and could not be considered to be lightly fished; thus a beneficial rating is not appropriate.

Concerns over groundfish fishery impacts on habitat include damage to living habitat species (corals, sponges), changes to benthic community structure, and concentration of fishing effort. None of the alternatives discussed above have potential impacts that approach a level of significant impact as judged through these significance criteria. Alternative 2.5 would merely shift pelagic pollock trawling activity from the Bering Sea to the AI region. The reduction in the Bering Sea would very slightly reduce gear contact with benthic habitat in the Bering Sea; some potential increase would be expected in the AI region. Some AI benthic habitat is considered to be particularly vulnerable to hard bottom contact with fishing gear, and if the AI pollock fishery resulted in concentration of fishing activities in such areas, this could be a concern. However, the AI pollock fishery is expected to be conducted by AFA vessels with horsepower sufficient to "fly" the pelagic net off bottom and reduce this potential for damage to sensitive benthic habitat. And small vessels likely will not fish pelagic trawl gear at great depths where bottom contact is likely. Fishing effort could concentrate if small vessels fish at the boundaries of the SSL protection zones around the rookeries inn the AI region. This effort will likely be small and not result in a significant adverse impact on benthic habitat. Under Alternative 2.5, some potential reduction in bottom trawl gear impacts on BSAI benthic habitat is possible because of the reduced quotas apportioned to the yellowfin and rock sole fisheries. However, the reduction in bottom trawl fishing effort would be fairly small (unless quite large quotas were apportioned to the Aleut Corporation fishery), and the reduced gear contact would occur in areas that already experience bottom trawling, and thus the alternative is judged to be insignificant.

Ecosystem Effects

2.1 This alternative would not change management of AI pollock from the status quo. This alternative could be considered contradictory to the intent of the statute. By taking no action, no ecosystem impacts would accrue.

2.2 This alternative would "fund" the AI pollock allocation by reducing the TAC of the Bering Sea directed pollock fishery. Given the large size of the Bering Sea TAC in recent years, the reduction necessary to "fund" an AI quota of up to 40,000 mt would be extremely small. This alternative also provides that unused TAC in the AI pollock fishery would be rolled back to the Bering Sea pollock quota where it would presumably be harvested before the end of that fishing year. This roll back feature would essentially partially reverse impacts discussed below, all of which are considered to be relatively minor.

Ecosystem considerations when determining how to fund the AI pollock fishery include addressing effects on predator-prey relationships, energy flow and balance, and biological diversity. Under predator-prey relationships, the action could affect pelagic forage availability. This action will affect the proportions of the AI allocation funded from the Bering Sea pollock fishery, and would affect harvests of pelagic species through this means. TACs for an AI pollock fishery could be zero to up to nearly 100,000 mt if past years' ABC recommendations are the guide. The following assumes an AI pollock TAC of 40,000 mt. Using the 2004 specifications as the baseline (when pollock account for about 75% of OY), the proportion taken from the Bering Sea pollock TAC would result in approximately a 2.7 % reduction in the Bering Sea TAC, and presumably harvest. Using the 1999 specifications as the baseline (when pollock accounted for about 50% of the BSAI OY), the proportion taken from the Bering Sea pollock TAC would be higher (around 4 %). Under this alternative the harvest of pollock in the Bering Sea would be constrained slightly. There would be a resultant slightly positive impact on the availability of pollock as prey for other organisms. One could argue that this also would result in more large pollock left in the ocean, providing slightly greater predation pressure on myctophids, the major forage fish prey of adult pollock in the Aleutian Islands. Overall, these effects would be very small.

The action also could affect the spatial and temporal concentration of fishery impacts on forage. As noted above, any change in Bering Sea pollock biomass would be small. This would not likely affect the spatial or temporal distribution of the pollock harvest.

Regarding removal of top predators, a reduction in the Bering Sea pollock TAC as the funding mechanism for the AI pollock allocation would only cause small changes (2-3%) in the harvest of Bering Sea pollock. This would produce small changes in fishing activity and harvest compared to changes associated with normal environmental fluctuations. This would be expected to have small impacts on incidental top level predator mortality.

The action also could result in the introduction of nonnative species. As noted above, funding the AI pollock fishery from the Bering Sea pollock quota would likely only cause small changes (2-3%) in harvest of pollock in the Bering Sea. This would imply relatively small changes in deployment of fishing boats. There is no reason to believe the changes would cause the entry of vessels from new areas.

Under the category of energy flow and balance, the proposed action could result in energy re-direction. This alternative would not likely affect the overall level of harvest in the BSAI; it would just shift removals from one subarea to another. The small changes in pollock removal distribution would not be expected to modify scavenger behavior. The alternative may affect the relative levels of pelagic gear and bottom gear activity, but by very little.

Or the action could result in energy removal. Funding the AI pollock TAC from the Bering Sea pollock quota would not likely affect the volume of biomass to be taken from the BSAI. The alternative would affect the location of removals, but only by small amounts.

Under the category of ecosystem diversity, the action could affect species diversity. This decision is concerned with how a relatively small reduction in harvest (perhaps 40,000 out of 1,490,000 mt) would affect overall diversity of species in the BSAI area. Such a very small level of removal would not likely be measurable. The alternative would not lead to increases in harvests of any FMP managed species above what they would otherwise have been.

The action also could affect functional diversity. This alternative would only affect the volume of fish taken by pelagic trawl gear. Thus there would likely be no effect on the trophic structure of the marine benthic community.

Or the action could affect genetic diversity. The alternative associated with this decision will not increase harvests of any species. No adverse effects on the genetic composition of organisms in the BSAI would likely occur. As noted in 1.1 above, the genetic stock structure of the AI pollock stock or stocks is under evaluation. New information on meristic or other characteristics of pollock in the AI region might add data that are useful in this evaluation of the AI pollock stock.

2.3 Under this alternative, the “funding” of the AI pollock TAC would be provided by reducing the TACs of all BSAI groundfish fisheries in equal proportions, presumably based on the current year’s recommended ABCs or perhaps on the Council’s recommended TACs. Ths alternative also provides for the roll back of unused AI pollock TAC back to each of the fisheries from which it was funded, again in equal proportions as discussed above. This roll back feature would essentially partially reverse impacts discussed below, all of which are considered to be relatively minor.

Under the category of predator-prey relationships, the proposed action could affect pelagic forage availability. This alternative has the potential to constrain harvests of different combinations of species below what they might otherwise have been. Thus, this action might have a positive impact on the total availability of pelagic species if harvests for pollock are the only tradeoff. Some increase in total pelagic forage removal may occur if the tradeoffs occur between AI pollock and other Bering Sea species such as flatfish. This impact would be small, however, and not significant, given other sources of pollock biomass and harvest fluctuation.

The action also could affect spatial and temporal concentration of fishery impacts on forage. As noted above, any change in Bering Sea pollock biomass would be small. Funding the AI pollock fishery equiproportionally from the individual BSAI groundfish fisheries would not likely affect the spatial or temporal distribution of the pollock harvest.

Or the action could result in the removal of top predators. A reduction in the TACs equiproportionally from all BSAI fishery TACs would only cause small changes (2-3%) in harvests of any species. These would produce small changes in fishing activity and harvest compared to changes associated with normal environmental fluctuations. This would be expected to have small impacts on incidental top level predator mortality.

The action also could result in the introduction of nonnative species. As noted above, funding the AI pollock TAC from other BSAI fisheries would only cause small changes (2-3%) in harvests of any species. This would imply relatively small changes in deployment of fishing boats. There is no reason to believe the changes would cause the entry of vessels from new areas.

Under the category of energy flow and balance, the proposed action could result in energy re-direction. This alternative would not affect the overall level of harvest of groundfish in the BSAI, but would affect the species composition of harvest. The small changes in species composition of harvest would not be expected to modify scavenger behavior. The alternative would likely affect the relative levels of pelagic gear and bottom gear activity, but by very little. Or the action could result in energy removal. This alternative likely would not affect the volume of biomass to be taken from the BSAI. The alternative would likely affect the composition of removals, but only by small amounts.

Under the category of ecosystem diversity, the proposed action could affect species diversity. This alternative is concerned with how a relatively small reduction in harvests (perhaps 40,000 mt out of 1,960,000 mt) would be divided among different FMP managed species. This decision would not likely lead to increases in harvests of any FMP managed species above what they would otherwise have been. Due to the relatively clean nature of the pollock fishery relative to other fisheries with regard to incidental catch of non FMP species, it is likely that this decision will result in lower incidental catches of many non FMP species.

The action also could affect functional diversity. This alternative may affect the volume of fish to be taken by pelagic and bottom tending trawl gear. Presumably up to 50% of the AI allocation would come from BSAI fisheries that employ bottom trawling gears. However this would be a relatively minor change in overall harvests with bottom tending gear. It is not likely that this would have a measurable effect on benthic structure or on the trophic dynamics of the near-bottom marine community.

Or the action may affect genetic diversity. This alternative would not likely increase harvests of any species. The action would only affect the allocation of AI pollock funding among different groundfish fisheries. This allocation would be small with respect to overall harvests. As noted in 1.1 above, the genetic stock structure of the AI pollock stock or stocks is under evaluation. New information on meristic or other characteristics of pollock in the AI region might add data that are useful in this evaluation of the AI pollock stock.

2.4 This alternative is a sub-alternative to 2.3, and would exempt the sablefish fishery from “funding” a portion of the TAC apportioned to an AI pollock fishery. The overall effects on the ecosystem considerations discussed above of not including the sablefish TAC in the funding mechanism would be extremely small.

2.5 This alternative would have similar effects on the ecosystem as described above in 2.3. However, the differences are that the TAC for the Aleut Corporation fishery would be funded from only three fisheries, not several dozen fisheries. And some roll back of unused TAC would go back to the EBS pollock fishery. The net effect is small changes in the yellowfin and rock sole fisheries and the EBS pollock fishery. The overall effects on the ecosystem considerations from this funding mechanism would be extremely small.

In summary, the significance criteria for judging effects of the proposed action on the ecosystem are discussed above. The alternatives will not likely adversely impact the various features of the ecosystem to result in any adverse effects findings. The effects of all alternatives was judged insignificant.

Effects on State-managed and Parallel Fisheries

2.1. Under this alternative, there would be no significant effects on these fisheries. The overall BSAI region would consider to experience fishing activities as are in effect under the status quo.

2.2 Under Alternative 2.2, the funding mechanism for the new pollock allocation is a reduction in TAC from the BS pollock fishery. The mechanism for funding the AI pollock fishery TAC would have no effect on a State fishery or a parallel fishery. This issue is addressed in the previous section (4.2.2). Thus the effects of this alternative are insignificant.

2.3 Under this alternative, the funding mechanism for the new pollock allocation is a reduction in TAC from all BSAI groundfish fisheries. As discussed immediately above, the mechanism for funding the AI pollock fishery TAC would have no effect on a State fishery or a parallel fishery. This issue is addressed in the previous section (4.2.2). Thus the effects of this alternative are insignificant.

2.4 Since the proportion of sablefish is so small from the BSAI two million metric tons fishery, this TAC reduction does not differ substantially from alternative 2.3. For the reasons discussed above, the effects of this alternative are insignificant.

2.5 Under this alternative, the funding mechanism for the new pollock allocation is a reduction in TAC from the BSAI yellowfin and rock sole and EBS pollock fisheries. As discussed above, the mechanism for funding the AI pollock fishery TAC would have no effect on a State fishery or a parallel fishery. This issue is addressed in the previous section (4.2.2). Thus the effects of this alternative are insignificant.

Socio-economic Effects

Table 4.3.2-4 summarizes the economic and socio-economic significance analysis of the alternative methods of allocation funding. For each issue analyzed, each alternative was determined to not have a significant effect.

Table 4.3.2-4 Economic and socio-economic significance analysis of allocation "funding" decision.

	This is the "funding" decision. Alternative 2.1 is no action (nothing in the FMP constraining Council funding recommendations). Alternative 2.2 funds AI from the EBS pollock TAC. Alternative 2.3 is funded in equal proportions from all BSAI TACs. Alternative 2.4 is funded by equal proportions from all BSAI TACs, except for the sablefish TAC. Alternative 2.5 is funded from pollock, yellowfin sole, and rock sole, and includes a mandatory "B" season roll back to the EBS pollock fishery.				
Issue	**Alternative 2.1**	**Alternative 2.2**	**Alternative 2.3**	**Alternative 2.4**	**Alternative 2.5**
Gross revenues Operating costs Net returns Safety and health	Allocation decision is deferred for subsequent Council specifications process. Not significant.	Pollock are to be allocated from the EBS pollock TAC on a metric ton for metric ton basis. Potential amounts are small (2% to 3%) compared to EBS pollock TACs. Not significant.	AI pollock allocation is to be funded in equal proportions deducted from all BSAI species TACs. The pollock TAC is large enough as a proportion of total BSAI OY so that at least 50% of the allocation will continue to come from EBS pollock. In general this will produce small changes in TACs for the remaining species (3-4%) Not significant.	AI pollock allocation is to be funded through equal proportions deducted from all BSAI species TACs. The pollock TAC is large enough as a proportion of total BSAI OY so that at least 50% of the allocation will continue to come from EBS pollock. In general this will produce small changes in TACs for the different species (3-4%) No deduction taken from sablefish allocation. Not significant.	For the range of potential AI pollock DPFs examined in this analysis, the impact on EBS pollock TACs net of CDQ allotments ranges from a half percent to 3.5%. This impact is not significant. For yellowfin sole, the range is up to 8%, and for rock sole the range is up to 15%. These impacts would fall within the not significant range used for this analysis. However, the rock sole impacts at the upper end approach the 20% significance level.
Related fisheries		This decision should have no substantial impact on related fisheries. Not significant.	This decision should have no substantial impact on related fisheries. Not significant.	This decision should have no substantial impact on related fisheries. Not significant.	This decision should have no substantial impact on related fisheries. Not significant.
Consumer effects		Pollock are to be allocated from the EBS pollock TAC on a metric ton for metric ton basis. Amounts are small compared to EBS pollock TAC (3% to 4%) and species is unchanged. Not significant.	AI pollock allocation is to be funded by equal proportional deductions from all BSAI species TACs. The EBS pollock TAC is large enough as a proportion of total BSAI OY that at least 50% of the AI allocation will continue to come from EBS pollock. In general this will produce small changes in TACs for the different species (about 2%) Not significant.	AI pollock allocation is to be funded by equal proportional deductions from all BSAI species TACs. The EBS pollock TAC is large enough as a proportion of total BSAI OY that at least 50% of the AI allocation will continue to come from EBS pollock. In general this will produce small changes in TACs for different species (about 2%). No deduction taken from sablefish allocation. In general this will produce small changes in TACs for the different species (about 2%) Not significant.	No significant effects on aggregate pollock production. Most sole products are exported to Asian markets. The impact of production changes on domestic consumers should be slight. Not significant.

Issue	Alternative 2.1	Alternative 2.2	Alternative 2.3	Alternative 2.4	Alternative 2.5
Management and enforcement		Rollback adds to complication - but not as much as #3 and #4. Can be handled by existing staff. Not significant.	This alternative is a relatively more complicated one. Can still be handled by existing staff. Not significant.	This alternative is a relatively more complicated one. Can still be handled by existing staff. Not significant.	The complexity of this alternative lies between that of 2.2 and that of 2.3 and 2.4. Can be handled by existing staff. Not significant.
Excess capacity		Any change would be proportionately small. Even if BSAI pollock TAC was at a low proportion of total OY (50%) this would only be about 4% of EBS pollock TAC. Would not generate significant excess capacity in EBS pollock. Not significant.	Any change would be proportionately small. Plausible high end BSAI TACs would only be about 2% of total OY. Would not generate significant excess capacity in EBS fisheries. Not significant.	Any change would be proportionately small. Plausible high end BSAI TACs would only be about 2% of total OY (even excluding sablefish). Would not generate significant excess capacity in BS fisheries. Not significant.	Pollock impact might be on the order of 3-4% of BSAI pollock TAC. Yellowfin and rock sole impacts for high AI pollock DPFs might rise to 7% and 15% of their respective TACs. These levels are higher than other fleets might experience under other scenarios, but do not appear to meet the significance criterion.
Bycatch and discards		Pollock fishery is relatively clean. Only small changes to EBS pollock harvests are contemplated. Not significant.	Only small changes to BSAI fish harvests are contemplated. Not significant.	Only small changes to BSAI fish harvests are contemplated. Not significant.	This options reduces bycatch of crab PSC somewhat more than others, with modest increases in Chinook PSC. Changes are not significant.
Subsistence		No significant known subsistence uses that would be affected by this. Not significant.	No significant known subsistence uses that would be affected by this. Not significant.	No significant known subsistence uses that would be affected by this. Not significant.	No significant known subsistence uses that would be affected by this. Not significant.
Impacts on benefits from marine ecosystems		No known non-consumptive values. Pollock are a prey fish for marine mammals. This change in TAC would not create jeopardy to or adversely modify the habitat of any ESA listed species. Not significant. No significant known ecotourism uses that would be substantially affected by this. Not significant.	No known non-consumptive values. This change in TAC would not create jeopardy to or adversely modify the habitat of any ESA listed species. Not significant. No significant known ecotourism uses that would be substantially affected by this. Not significant.	No known non-consumptive values. This change in TAC would not create jeopardy to or adversely modify the habitat of any ESA listed species. Not significant. No significant known ecotourism uses that would be substantially affected by this. Not significant.	No known non-consumptive values. This change in TAC would not create jeopardy to or adversely modify the habitat of any ESA listed species. Not significant. No significant known ecotourism uses that would be substantially affected by this. Not significant.
Community impacts		This action would not affect Adak development. Actual impact will depend on size of the allocation to Adak, which will be determined and evaluated in allocations process. Impacts on stock TACs are relatively small (2% to 4%) under reasonable assumptions about Adak funding. Not significant.			

4.3.3 Council's Preferred Alternative

The Council chose Alternative 2.2, full funding from the EBS pollock fishery, as its preferred alternative. This alternative was fully analyzed and its environmental impacts were found to be not significant.

4.4 Monitoring Vessel Activity Options

4.4.1 Introduction

Three monitoring and enforcement alternatives are considered. These are:

3.1 Status quo (this option imposes only those monitoring and enforcement requirements that would be required if there were no change in regulation).

3.2 "Increased monitoring" alternative. This alternative would have several required measures (not options). These include:

1. The Aleut Corporation must notify the NMFS Alaska Region with a list of which vessels are authorized by it to fish for pollock in the Aleutians; notification must be at least 14 days prior to the anticipated start of fishing. The NMFS RAM Division will verify each vessel's eligibility (FFP, ADF&G number, USCG fishery endorsement, length, or AFA status) and provide to the Aleut Corporation a list of qualified vessels and the date fishing may commence. These vessels must carry documentation showing they have RAM approval and Aleut Corporation permission;
2. Catcher vessels are prohibited from fishing for pollock in the Aleutian Islands if pollock harvested in the Bering Sea or GOA are on board. Also, catcher vessels are prohibited from fishing for pollock in the Bering Sea or GOA if Aleutian Islands pollock are on board;
3. AFA requirements extend to catcher-processors and motherships (this extends AFA level observer and scale requirements to CPs under 60 feet and to unlisted AFA vessels);
4. AI pollock may only be delivered to a shoreside processor or stationary processor which has an approved Catch Monitoring Control Plan;
5. The Aleut Corporation will be responsible for keeping its harvests and its agents' harvests within the AI pollock directed fishing allowance. The Aleut Corporation shall be responsible for designating a person as a quota manager for pollock catch accounting; this person shall report to NMFS Sustainable Fisheries Division with weekly pollock catch summaries.

3.3 "Observer" alternative. Option 3.3a: All the requirements of Alternative 2 would apply; in addition, all catcher vessels would be required to have 100% observer coverage while operating in the Aleutian Islands. Option 3.3b: All of the requirements of Alternative 2 would apply; in addition, all catcher vessels would be required to have 30% observer coverage while operating in the Aleutian Islands and at least one trip by each participating vessel would have to be observed.

Alternative 1: the status quo

Alternative 1, the status quo alternative, imposes no new monitoring requirements. Vessels under 60 feet in length, and AFA vessels, would only be subject to current regulatory requirements. The status quo monitoring and enforcement rules are described in detail in Section 3.6.

Alternative 2: upgraded monitoring and enforcement measures

Alternative 2 imposes five new monitoring and enforcement requirements in addition to the status quo requirements.

The first monitoring and enforcement element is a requirement that the Aleut Corporation provide NMFS with updated lists of vessels approved by it to fish on its behalf. Section 803(b) describes the vessels that are eligible to partner with the Aleut Corporation, or its authorized agents, to fish this allocation. There are two categories of vessels that are eligible: (1) Small vessels less than 60 ft LOA that have a valid fishery endorsement, and (2) Vessels that are eligible to harvest pollock under section 208 of title II of division C of Public Law 105-277. The latter vessels are commonly referred to as "AFA vessels", which are vessels authorized to harvest pollock in the BSAI under the American Fisheries Act. The AFA prescribes several requirements for such vessels. To paraphrase, such vessels are:

- Vessels that are at least 75% owned and controlled by citizens of the U.S. (applies to all vessels fishing in the Alaska EEZ),
- Vessels that have specific pollock harvest and delivery-to-processor sector histories,
- Specific vessels named in the Act, and
- Other vessels that meet the harvest and landing criteria described in the Act.

Section 803(b) does not define the meaning of the word "endorsement." Senator Stevens' floor language does not elaborate on the meaning. Thus, it appears the Council may have the scope to, and may want to, clarify the meaning in the administrative record for this action. The term endorsement may have several meanings:

- The term "fishery endorsement" may refer to an endorsement provided by the U.S. Maritime Administration to a vessel documented by the U.S. Coast Guard. The endorsement is a function of its documentation and allows that vessel to be deployed in any U.S. fishery. In testimony before the Council in February, members of the public familiar with the legislative process indicated that it was their understanding that this had been the Congressional intent.

- The term might refer to a vessel with a Federal Fisheries Permit (FFP) for groundfish for which pollock species is indicated on the application.[35] FFP Atka mackerel, Pacific cod, and pollock endorsements are made freely available to vessel owners on request.
- The term "endorsement" is also used in the groundfish License Limitation Program (LLP).[36] The term could be interpreted to mean a vessel with an LLP with endorsements to fish with trawl gear in the Aleutian Islands area. However, no vessels less than or equal to 60 feet LOA possess LLPs with these endorsements. Thus, this interpretation appears to defeat the intent of Congress.

NMFS recommends that the vessels should have the U. S. Maritime Administration endorsement and the FFP pollock endorsement to be eligible for the Aleut Corporation pollock fishery. The pollock endorsement on the FFP is necessary to implement the Steller sea lion protection measures required of all pollock vessels (i.e., vessel monitoring systems). Both endorsements are readily available. The Consolidated appropriations rider did not exempt participants in the Aleutian Island pollock fishery from the Steller sea lion protection measures.

Although the Aleut Corporation will nominate the vessels who will actually harvest their allocation, the list provided to the agency by the Corp. will have to be approved by NMFS. In approving the list, NMFS can then certify that the vessels involved meet the statutory requirements. If the Aleut Corporation wishes to nominate other vessels during the season, those nominations will also have to be approved by NMFS. The vessels involved will not be able to fish until NMFS approves their participation in the fishery. Vessels fishing for the Aleut Corporation's directed fishing allocation will be required to carry a letter from the Aleut Corporation showing the approval of their vessel to participate in the Aleut Corporation pollock fishery and showing NMFS's approval of their vessel to participate. NMFS's approval/disapproval of vessels to harvest the Aleut Corporation's allocation will be an "adjudication" to which a procedural due process right to an agency appeal will apply. Therefore, time must be provided in which to allow any appeal prior to the beginning of the season. As a practical matter, a vessel's eligibility should be fairly easily ascertained, and there shouldn't be many appeals. Regardless, allowances must be made for the process. The Aleut Corporation will provide the list of approved vessels before the fishing year for NMFS approval.

It will be the vessel owner/operator's and the Aleut Corporation's responsibility to ensure the vessel is approved to participate in the Aleut Corporation pollock fishery before commencing fishing. NMFS will maintain a website of approved vessels that will be updated daily when additions to the list are received and approved. The Aleut Corporation will not be able to remove vessels from the NMFS approved list during the fishing year once approved. Fishing activities for the Aleut Corporation will be controlled through contracts between the Aleut Corporation and participating vessels. These contractual agreements cannot be enforced by NMFS. Therefore, once a vessel is approved for participation, it will remain approved by NMFS for the remainder of the fishing year, as long as it complies with the eligibility requirements.

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[35] Provided for in 679.4(b)

[36] 679.4(k)

The second monitoring and enforcement element prohibits catcher vessels from fishing for pollock in the Aleutian Islands if pollock harvested in the Bering Sea or GOA are on board. Also, catcher vessels are prohibited from fishing for pollock in the Bering Sea or GOA if Aleutian Islands pollock are on board. As described in statute, the Aleut Corporation may choose to contract with AFA vessels to harvest part of their allocation. By definition, these vessels would also be able to harvest pollock in the Bering Sea. Catcher vessels that participate in these fisheries may mix multiple hauls in recirculating salt water tanks for transport back to the plant where the fish are processed. Under these circumstances, if a catcher vessel chose to fish in both the Bering Sea and the Aleutian Islands on the same trip, it would be very difficult for managers to deduct fish from the proper quota. Furthermore, vessel operators may have incentives to misreport the portion of fish harvested in each area, and these circumstances may be difficult to track and enforce. For these reasons, a catcher vessel may not fish for pollock in the Aleutian Islands if pollock harvested in the Bering Sea or GOA are on board. Because all catch is 100 percent observed and weighed at-sea, AFA catcher processors and motherships would be allowed to harvest Bering Sea and Aleutian Islands quota on the same trip. Compliance with this requirement should not present a significant operational or economic burden to participating catcher vessels, and is a reasonable requirement on the part of the Agency to assure attainment of conservation and management objectives.

The third element would extend the scale, sampling station, and observer coverage requirements to all catcher processors. Observer and catch weighing requirements for AFA-listed catcher processors apply, whenever the vessel is fishing for groundfish off Alaska. However, catcher processors less than 60 feet, and the Ocean Peace (the only unlisted AFA vessel catcher processor) are not required to meet these requirements when fishing for non-AFA pollock. However, at this time, there are no trawl vessels under 60' capable of processing at-sea and endorsed to do so. Thus, NMFS does not anticipate that these regulations will have any additional impact, except to the extent that the Ocean Peace voluntarily chooses to participate in this fishery.

The fourth element would require all fish harvested in the Aleutian Islands to be delivered to a shoreside processor or stationary floating processor, which is operating under an approved catch monitoring and control plan (CMCP). All shoreside or stationary floating processors which process AFA pollock are required to operate under an approved CMCP (see 50 CFR 679.28) when accepting deliveries of AFA pollock. This element extends this requirement to any shoreside or stationary floating processor that processes pollock harvested in the Aleutian Islands. Each CMCP would be required to address the following performance standards:

- NMFS must be able to verify that all catch is sorted, weighed, and reported by species.
- All scales used to weigh groundfish must be approved by the State of Alaska, meet minimum standards for accuracy, and must produce paper printouts of scale weights that would be retained by the plant for use by observers and for auditing and verification by other NMFS personnel.
- Each plant must develop scale testing and calibration procedures, and scales must be tested upon request by NMFS-authorized personnel.
- An observer work station must be provided that contains: A platform scale with at least 50 kg capacity, a work table of at least 2 square meters, at least 4.5 square meters of floor space,

is free of safety hazards, has adequate lighting, and has a secure cabinet for the observer's use.

- Each plant must have an observation area where an observer can see the entire flow of fish, or otherwise ensure that no unobserved removals of catch can occur, between the catcher vessel and the location where all sorting has taken place and each species has been weighed.
- Catch monitoring plans must be reviewed by NMFS. Plans that meet the standards are approved. After plan approval, the plant must make any required alterations to the factory and purchase all necessary scales, printers, test weights and other equipment. The plant must then be inspected to ensure that the design meets the performance standards.
- Each scale used to weigh catch must be approved annually by the State of Alaska, Division of Measurement Standards. Additionally, the plant is required to submit a scale testing plan that lists the procedures the plant uses to test each scale used to weigh catch.
- The plant must designate a plant liaison who must be available whenever pollock is offloaded or processed to assist the plant and catcher vessel observers

The plan must:

- Describe the procedure for testing the accuracy of each scale throughout its range of use;
- List the test weights and equipment needed to test each scale;
- Describe where the test weights and equipment will be stored;
- List the plant personnel responsible for conducting the test;
- Be posted in a prominent location in the scale house or observer sampling station.

With no less than 20 minutes notice, NMFS staff, or NMFS-authorized personnel, may demand that any scale used to weigh catch be tested by plant personnel at any time, provided that scale had not been tested and found to be accurate within the last 24 hours. Scales found to be inaccurate may not be used until repaired, recalibrated, or re-approved by the State of Alaska, Division of Measurement Standards. Finally, each plant is required to maintain a printed record of the total weight of each species.

NMFS anticipates that this alternative would extend these requirements to one additional facility.

Under this alternative, catcher vessels would not be required to have every haul observed, would not carry certified flow scales, and would not have an observer sampling station. However, current IR/IU regulations would require the retention of all pollock harvested within the Aleutian Islands and weighed by an approved scale at a shoreside or stationary floating processor.

The amount of the Aleut Corporation's allocation that can be harvested by the 60 feet or less category of eligible vessels is statutorily limited - e.g., initially limited to no more than 25% of the allocation. The obligation to enforce this harvest limitation rests with the Secretary and cannot be delegated to the Corp. It may be appropriate to include the constraints on the allocations to the two vessel classes (along with season restrictions associated with the SSL 40%/60% "A"/"B" split) in the annual specifications which establish the allocation itself.

The fifth element is the placing of the responsibility for staying within the Aleutian Islands pollock directed fishing allowance on the Aleut Corporation itself. The Aleut Corporation should be responsible for the actions of its agents. This element would require the Aleut Corporation to monitor the in-season harvests of its agents, to begin to limit their activity if necessary as the directed fishery allowance is approached, and to stop fishing when the limit has been reached. The Aleut Corporation and its agents are in a good position to monitor these harvests. Presumably the directed fishing allowance will be suballocated among the fishing vessels with which the Corp. contracts to take the allocation. The Corp. or its agent will be well informed about catcher vessel catches prior to delivery, and will know delivery sizes immediately. The Agency will monitor catch and delivery through its normal processes, and will be in a position to audit Aleut Corporation catches in relation to the directed fishery allowance. The Aleut Corporation would be subject to monetary penalties if directed fishing allowances are exceeded.

Alternative 3: additional observer coverage

Under Alternative 3, catcher vessels would be required to carry 100% observer coverage. The benefit of the observer coverage requirement is the improvement in the monitoring of fishing vessel harvests at sea. Under the status quo, and Alternative 2, the only catch data for unobserved catcher vessels will be the landings records prepared when the catcher vessel delivers to the processor. A catcher vessel delivering to a mothership or a catcher-processor may only deliver unsorted codends. These records may differ from actual catches by the amounts of discards, or unreported events (e.g., gear loss, bird or marine mammal strikes). By placing an observer on these vessels, fisheries managers may verify at-sea discards as reporting on the fish ticket, obtain additional biological sampling, and monitor marine mammal and seabird interactions.

There may not be a large potential benefit from additional observers in this fishery. Pollock fishing is a “clean” fishery with relatively small amounts of incidental catch. Pollock fishermen tend not to routinely discard fish at sea (historically, <2% of total catch), although intermittent discards undoubtedly take place. These vessels will, in addition, operate under all prevailing regulations, including IR/IU, which “prohibits” discarding of pollock (and Pacific cod).

As described in Section 7.9 of the RIR, an extension of the observer requirement may impose significant additional costs on catcher vessels. NMFS commonly uses an estimated daily contract rate of $355/observer to estimate private observer costs. This cost estimate includes $30 per day towards travel expenses, but doesn’t include an estimated $15/day for food provided by the vessel. In addition, these fishing operations incur economic and operational impacts that are not directly reflected in the money they must spend on observer coverage. For example, fishing vessel operators may have to alter their sailing plans and schedules to pick up or drop off observers; the observers take up limited (and valuable) space on vessels which (especially in the class of vessels under 60 feet) may be at a premium. There are important reasons to believe that the costs for vessels under 60 feet in length would be proportionately greater than for larger vessels. Cost issues are discussed at greater length in the RIR.

A further consideration is that the Council has never before required observer coverage on vessels less than 60 feet in length. This action would establish a precedent, and impose observer coverage requirements (and costs) on the AI pollock fleet that are not imposed on other vessels under 60 feet fishing elsewhere in the GOA and BSAI.

An option to this alternative would require catcher vessels to have 30% observer coverage while operating in the Aleutian Islands and at least one trip by each participating vessel would have to be observed. This option would make it possible to obtain a limited amount of observer data at less cost to the fishing industry. This option also eliminates the prospect of catcher vessels under 60 feet facing heavier observer coverage requirements than the larger catcher vessels between 60 and 125 feet. The latter only face the 30% observer requirement proposed under this option; they are not subject to the 100% requirement.

The high costs associated with observer coverage may be mitigated through the use of remote monitoring technologies. These may include video or digital imaging of activity on the deck, combined with one or more other technologies, such as GPS to record the vessels position, course and speed, or a hydraulic pressure transducer to record variations in the activity of the vessel's hydraulics as it sets, fishes and retrieves its trawl nets. Linked together, the various technologies could provide a relatively comprehensive record of vessel activity. Similar technologies have been used successfully in fisheries off of British Columbia where issues associated with preventing tampering with the equipment, and cost-effective review of monitoring data have been dealt with successfully. The cost of these technologies is much lower than the cost of observer coverage would be. (Gilroy, et al., pages 24 to 28). It is not clear to what extent these technologies could be substituted for observers in an Aleutian Islands pollock fishery. They are likely to provide an imperfect substitute for the range of information that might be supplied by an observer.

4.4.2 Effects of Monitoring Options

The status quo action extends existing only the existing monitoring and enforcement actions currently in force in the BSAI to the new AI pollock fishery. It will not have significant effects. Alternatives 2 and 3 (both options) increase the level of monitoring received by fishing and processing operations. None of these will have significant environmental impacts. Rather, these actions provide benefits, by helping facilitate more accurate quota accounting and improving data collection, thereby improving overall fishery management, the realized impacts will likely be fairly small and not rise to the level of being significantly beneficial. In some cases, there are some unknowns and are rated as such in the sections below.

Effects on Target Species

3.1 Currently, under this alternative a newly reopened AI pollock fishery would occur under status quo monitoring, including no observer coverage for small vessels under 60 feet, observer requirements on AFA vessels depending on their size and catcher vessel - catcher-processor status,, required use of VMS, status quo reporting requirements, etc. This relatively remote pollock fishery would take place with fewer monitoring controls than currently exist in the EBS pollock fishery. Moreover, there would be no obligation for the Aleut Corporation to notify NMFS of eligible vessels, and no ability to monitor the EBS or AI composition of fish on catcher processors. While the action may not be "reasonably expected to jeopardize the capacity of the stock to yield fishable biomass on a continuing basis," (which would create a "significant adverse" rating (see Table 4.1-1), it may reduce the accuracy of NMFS estimates of pollock harvest and the fishing mortality rate. For this reason, this Alternative is considered to have "unknown" significance.

3.2 Under this alternative, a heightened monitoring effort would result in better data collection and improved catch accounting. The plants would be required to operate under a CMCP, which would provide minimum standards and ensure managers that all catch is being properly accounted for. Increased monitoring could improve the level of information available to assess stock conditions. This would provide greater certainty about stock status and management (including quota recommendations). While this action may be significantly positive on some of the relevant criteria (the criteria are described in Table 4.1-1), it is not expected to allow the stock to return to its unfished biomass, and is therefore rated "insignificant."

3.3a This alternative is similar, in terms of its effects on other target fisheries, as discussed in 3.2. This alternative would further increase observer coverage on catcher vessels, including vessels less than 60 feet, to 100%, resulting in additional observer data. Increased observer data would presumably improve the level of information available to assess stock conditions. This would provide greater certainty about stock status and management (including quota recommendations) would benefit from having reduced uncertainty. This alternative has been rated "insignificant" for the reasons discussed under Alternative 3.2 above.

3.3b This option reduces observer coverage. It still has similar effects as described above for 3.3a, and thus is rated insignificant.

Effects on Other Target Species and Fisheries

As noted in Section 4.2, a pollock fishery in the Aleutian Islands is expected to have an "insignificant" impact on other fisheries with respect to fishing mortality, spatial or temporal distribution of harvests, change in prey availability, habitat impacts on stock, and gear interactions.

3.1 Under this alternative an AI pollock fishery would occur under status quo monitoring, including no observer coverage for small catcher vessels under 60 feet, observer requirements on AFA catcher vessels (depending on their size) and catcher-processors, required use of VMS, status quo reporting requirements, etc. While this alternative may not have a significant effect on other target fisheries, because of the potential monitoring problems described above, under "Effects on Target Species," the significance of this alternative is rated "unknown."

3.2 Under this alternative, a heightened monitoring effort would result in better data collection and improved catch accounting. This may improve our understanding of the impact of the fishery on other stocks. The environmental impact of this knowledge would be indirect, and probably small, since the impact on these stocks is expected to be small. While this action may be significantly positive on some of the relevant criteria (the criteria are described in Table 4.1-2), it is not expected to allow the stock to return to its unfished biomass, and is therefore rated "insignificant."

3.3a This alternative is similar, in terms of its effects on other target fisheries, as discussed in 3.2. This alternative would further increase observer coverage on catcher vessels, including vessels less than 60 feet, resulting in some additional observer data that might improve fishery management to the benefit of other target fisheries in this region. This alternative has been rated "insignificant" for the reasons discussed under Alternative 3.2 above.

3.3b This option reduces observer coverage to 30%. It still has similar effects as described above for 3.3a, and thus is rated insignificant.

Effects on Incidental Catch of Other or Non-specified Species

3.1 While this alternative may not have a significant effect on incidental catch of other or non-specified species, because of the potential monitoring problems described above, under "Effects on Target Species," the significance of this alternative is rated "unknown."

3.2 It is possible that with a heightened level of monitoring, more information could become available on other or non-specified species catch that could be used to manage the fisheries in a way that would reduce the incidental catch of other or non-specified species in the future. The effects would be indirect and insignificant.

3.3a It is possible that by extending observer coverage requirements to all vessels, more information could become available on other or non-specified species catch that could be used to manage the fisheries in a way that would reduce the incidental catch of these species in the future. The effects would be indirect and insignificant.

3.3b This option reduces observer coverage to 30%. It still has similar effects as described above for 3.3a, and thus is rated insignificant.

Effects on Incidental Catch of Forage Fish Species

3.1 While this alternative may not have a significant effect on incidental catch of forage fish species, because of the potential monitoring problems described above, under "Effects on Target Species," the significance of this alternative is rated "unknown."

3.2 It is possible that with a heightened level of monitoring, more information could become available on forage species catch that could be used to manage the fisheries in a way that would reduce incidental catch of forage fish in the future. The effects would be indirect and insignificant.

3.3a It is possible that by extending observer coverage requirements to all vessels, more information could become available on forage species catch that could be used to manage the fisheries in a way that would reduce incidental catch of forage fish in the future. The effects would be indirect and insignificant.

3.3b This option reduces observer coverage to 30%. It still has similar effects as described above for 3.3a, and thus is rated insignificant.

Effects on Incidental Catch of Prohibited Species

3.1 While this alternative may not have a significant effect on incidental catch of prohibited species, because of the potential monitoring problems described above, under "Effects on Target Species," the significance of this alternative is rated "unknown."

3.2 It is possible that with a heightened level of monitoring, more information could become available on prohibited species catches and on ways the fisheries could be managed to reduce PSC rates in the future. This would be a distinct benefit from this action given the great concern for PSC catches in pollock fisheries. The criteria for PSC impacts are described in Tables 4.1-6 to 4.1-8. While this alternative is not expected to have adverse impacts with respect to the criteria, it is not expected to lead to a substantial increase in harvest levels in directed fisheries targeting PSC, or to a substantial decrease in PSC catches in directed fisheries targeting groundfish. Therefore, it has been rated "insignificant."

3.3a It is possible that by extending observer coverage requirements to all vessels, more information could become available on prohibited species catch that could be used to manage the fisheries in a way that would reduce PSC rates in the future. For the reasons discussed above, however, this alternative has been rated "insignificant."

3.3b This option reduces observer coverage to 30%. It still has similar effects as described above for 3.3a, and thus is rated insignificant.

Effects on Steller Sea Lions

3.1 Effects of alternative monitoring strategies likely would not be different from one another in terms of impact on Steller sea lions. Various monitoring schemes would not measurably change the manner in which the AI pollock fishery would be prosecuted so as to have a different effect on Steller sea lions other than described in 1.1. This alternative is rated "insignificant."

3.2 Conceivably, a heightened monitoring effort could improve the data base on fishery interactions with Steller sea lions. Improved data could lead to improved measures to reduce fishery interactions with Steller sea lions. Perhaps heightened observer effort on vessels that would otherwise go unobserved might alter crew behavior resulting in fewer interactions with Steller sea lions. The criteria for this impact are described in Table 4.1-9. While this action is not expected to have an adverse impact, it is not expected to affect temporal and spatial concentration of the fishery, or disturbance to Steller sea lions. Therefore, this alternative is rated "insignificant."

3.3a This alternative would have essentially the same effect as 3.2, but with an extension of observer coverage to additional AFA vessels and to previously uncovered portions of the fleet. An improved data base could enhance knowledge of fishery interactions with Steller sea lions, leading to possibly improved fishery management that could benefit Steller sea lions through reduced fishery interactions. For the reasons given under Alternative 3.2, this alternative is rated "insignificant."

3.3b This option reduces observer coverage to 30%. It still has similar effects as described above for 3.3a, and thus is rated insignificant.

Effects on Other Marine Mammals

3.1 Effects of alternative monitoring strategies likely would not be different from one another in terms of impact on marine mammals. Various monitoring schemes would not measurably change the manner in which the AI pollock fishery would be prosecuted as to have a different effect on marine mammals other than described in 1.1. This alternative is rated "insignificant."

3.2 See discussion under 3.1. Conceivably, a heightened monitoring effort could improve the data base on fishery interactions with marine mammals. Improved data could lead to improved measures to reduce fishery interactions with marine mammals. Perhaps heightened observer effort on vessels that would otherwise go unobserved might alter crew behavior resulting in fewer interactions with marine mammals. The criteria for this impact are described in Table 4.1-10. While this action is not expected to have an adverse impact, it is not expected to affect temporal and spatial concentration of the fishery, or disturbance to marine mammals. Therefore, this alternative is rated "insignificant."

3.3a This alternative would have essentially the same effect as 3.2, but with an extension of observer coverage to additional AFA vessels and to previously uncovered portions of the fleet. An improved data base could enhance knowledge of fishery interactions with marine mammals, leading to possibly improved fishery management that could benefit marine mammals through reduced fishery interactions. For the reasons given under Alternative 3.2, this alternative is rated "insignificant."

3.3b This option reduces observer coverage to 30%. It still has similar effects as described above for 3.3a, and thus is rated insignificant.

Effects on Seabirds

3.1 Effects of alternative monitoring strategies likely would not be different from one another in terms of impact on seabirds. Various monitoring schemes would not measurably change the manner in which the AI pollock fishery would be prosecuted as to have a different effect on seabirds other than described in 1.1. The effects on seabirds from this alternative are considered to be insignificant.

3.2 See discussion under 3.1. A heightened monitoring effort could improve the data base on fishery interactions with seabirds, particularly since relatively low interaction rates between trawlers and seabirds make estimates of mortality less precise. An additional consideration would be increased effort to identify all carcasses, which may mean salvaging all unidentified specimens. Improved data could lead to improved measures to reduce fishery interactions with seabirds. Perhaps heightened observer effort on vessels that would otherwise go unobserved might alter crew behavior resulting in fewer interactions with seabirds. While there are some positive features of this alternative in terms of impact on seabirds, the net effect of a procedural element, increasing monitoring, would likely be insignificant.

3.3a The impacts of an even greater level of monitoring would be similar to 3.2 immediately above. The effects on seabirds are considered to be insignificant as discussed above.

3.3b This option reduces observer coverage to 30%. It still has similar effects as described above for 3.3a, and thus is rated insignificant.

Effects on Habitat

3.1 Current levels of observer coverage and catch sampling provide some data on bottom contact with pelagic trawls. In past years, the Council has addressed some habitat impact concerns with requirements that minimize disturbance or destruction of some habitat areas, particularly coral and sponge aggregations in the benthic environment. There are a variety of known coral and sponge areas in the Aleutian Islands, and some are proposed as Habitat Areas of Particular Concern. The Council may choose to take further action to prescribe additional restrictions on fishing activity in such areas. As noted in Section 4.2, because pelagic trawl gear is only estimated to be in contact with the Aleutian Islands seafloor a very small amount of the time, and because only about 35% of the Aleutian Islands shelf will be open to pollock fishing, habitat impacts are likely to be insignificant. This monitoring alternative is therefore rated “insignificant” with respect to this criterion.

3.2 Increased monitoring could lead to an improved data base on benthic habitat structure, or serve to provide incentives for fishers to ensure pelagic gear does not contact bottom habitat. In short, heightened monitoring should equate to heightened alertness and thus reduced impacts on sensitive habitat. There may be effects on the level of mortality and damage to living habitat and there could be changes to benthic community structure. However, given the relatively insignificant impacts expected from the AI pollock fishery, discussed above, this impact has been rated “insignificant.”

3.3a Observer coverage provides detailed species information including species identification, presence/absence; relative abundance; seasonality; life history information; association with fish assemblages, bycatch rates, and some habitat association. If only a percentage of the fleet is observed, then non-observed vessels may remove sensitive habitat structure without documentation. This removal overtime could be significant or adverse to localized areas. Unobserved catch of sensitive epibenthic structure, such as corals and sponge, remove potential to identify any management conservation measures from fishing activities. Without at-sea monitoring, the ability to observe and collect information on where fishing occurs, catch composition, and any bycatch is lost. There also could be changes in the distribution of fishing effort. It is possible that a fully observed fishery would try harder to minimize bycatch. This could have indirect benefits to benthic habitat. However, given the relatively insignificant impacts expected from the AI pollock fishery, discussed above, this impact has been rated "insignificant."

3.3b This option reduces observer coverage to 30%. It still has similar effects as described above for 3.3a, and thus is rated insignificant.

Ecosystem Effects

3.1 This alternative would make no changes to existing monitoring regulations. Thus there would not be ecosystem impacts that are not already occurring. It has therefore been rated "insignificant."

3.2 This alternative requires a suite of monitoring measures that would heighten the level of fishery oversight. The net effect of these measures would be the collection of data that would improve NMFS' ability to enforce regulations established for the AI pollock fishery and the quality of its catch accounting system.

When evaluating monitoring and enforcement considerations ecosystem considerations include addressing effects on predator-prey relationships, energy flow and balance, and biological diversity. Under predator-prey relationships, the proposed action could affect pelagic forage availability. This alternative would likely affect the quality of information about catches through increased levels of scrutiny of fishing vessel operations, and thus better information on catches. However, the fishery of concern is a pelagic pollock trawl fishery. Bycatch and discards are generally believed to be small in these fisheries. Thus, while the measures may improve the accuracy and precision of information on catches, this improvement is not expected to be large, or to have a significant impact on these indicators. Increased levels of scrutiny may also affect NMFS' ability to enforce harvest limits, and prevent harvests from exceeding TACs. This appears to have been a problem in the earlier years of the domestic fishery, but not in the later years. Moreover, the rationalization of this fishery creates new opportunities for monitoring.

Changes in the level of scrutiny could have an indirect effect, by providing better information on levels of harvest and take. Any direct effect would depend on subsequent decision making. The minimal level of scrutiny proposed under this alternative is similar to that currently required, and considered acceptable for other groundfish fishing operations in this area.

The action also could affect the spatial and temporal concentration of fishery impacts on forage. VMS would be required in this fishery, and thus make it possible to track spatial and temporal patterns of vessel activity. This would provide new information on target and incidentally-harvested species. The proposed changes in levels of scrutiny under this alternative would likely have a small effect on NMFS' ability to monitor this fishery.

Or the action could result in the removal of top predators. Changes in the level of monitoring could have an indirect effect by providing better information on levels of harvest and take, including sharks or other top predators. Any direct effect would depend on subsequent decision making on actual levels of allowable harvest. The minimal level of scrutiny proposed under this alternative is similar to that currently required, and considered acceptable for other groundfish fishing operations in this area.

The action also could result in the introduction of nonnative species. Changes in the level of monitoring, however, would likely have no impact on this issue.

Under the category of energy flow and balance, the proposed action could result in energy re-direction. Changes in the level of scrutiny under this alternative could have an indirect effect by providing better information on levels of harvest and take. These data would enhance future analysis of biomass removal effects on target and non-target species. Any direct effect would depend on subsequent decisions on levels of allowable harvest. The minimal level of scrutiny proposed under this alternative is similar to that currently required, and considered acceptable for other groundfish fishing operations in this area.

The action could result in energy removal. Changes in the level of scrutiny could have an indirect effect by providing better information on levels of harvest and take. These data would enhance future analysis of biomass removal effects on target and non-target species. Any direct effect would depend on subsequent decisions on levels of allowable harvest. The minimal level of scrutiny proposed under this alternative is similar to that currently required, and considered acceptable for other groundfish fishing operations in this area.

Under the category of ecosystem diversity, the proposed action could affect species diversity. As discussed above, changes in the level of scrutiny under this alternative could have an indirect effect by providing better information on levels of harvest and take. These data would enhance future analysis of biomass removal effects on target and non-target species. Any direct effect would depend on subsequent decisions on levels of allowable harvest. The minimal level of scrutiny proposed under this alternative is similar to that currently required, and considered acceptable for other groundfish fishing operations in this area.

The alternative could affect the functional diversity of the ecosystem. As discussed above, changes in the level of scrutiny could have an indirect effect by providing better information on levels of harvest and take. These data would enhance future analysis of biomass removal effects on target and non-target species. Any direct effect would depend on subsequent decisions on levels of allowable harvest. The minimal level of scrutiny proposed is similar to that currently required, and considered acceptable for other groundfish fishing operations in this area.

The alternative could affect genetic diversity. Changes in the level of scrutiny could have an indirect effect by providing better information on levels of harvest and take. These data would enhance future analysis of biomass removal effects on target and non-target species. Any direct effect would depend on subsequent decisions on levels of allowable harvest. The minimal level of scrutiny proposed under this alternative is similar to that currently required, and considered acceptable for other groundfish fishing operations in this area. As noted in 1.1 above, the genetic stock structure of the AI pollock stock or stocks is under evaluation. Enhanced monitoring would generate new information on meristic or other characteristics of pollock in the AI region and might add data that are useful in this evaluation of the AI pollock stock. Overall, while increased monitoring could benefit the collection of data and understanding of the ecosystem, the impact on the ecosystem is considered insignificant.

3.3 This alternative would provide an additional level of observer coverage on top of the suite of monitoring measures that would heighten the level of fishery oversight as analyzed above in 3.2. The net effect of these measures would be the collection of data that would improve NMFS' ability to enforce regulations established for the AI pollock fishery. The effects on the ecosystem would be essentially the same as those described immediately above in 3.2.

3.3b This option reduces observer coverage to 30%. It still has similar effects as described above for 3.3a, and thus is rated insignificant.

Effects on State-managed and Parallel Fisheries

3.1 If no additional vessel monitoring actions were to occur, there would be insignificant impacts on state-managed and parallel groundfish fisheries.

3.2 It is possible that, with a heightened level of monitoring through observers, more information could become available on parallel groundfish fisheries inside state waters, which could improve management of these fisheries. These effects of increased monitoring on the federal pollock fishery were found to be insignificant, therefore, the impacts on the state fisheries are expected to be insignificant based on the criteria in Table 4.1-14.

3.3a It is possible that with an even further heightened level of monitoring through mandatory observer coverage on small vessels, more information could become available on parallel groundfish fisheries inside state waters, which could improve management of these fisheries. These effects of increased monitoring on the federal pollock fishery were found to be insignificant, therefore, the impacts on the state fisheries are expected to be insignificant based on the criteria in Table 4.1-14.

3.3b This option reduces observer coverage to 30%. It still has similar effects as described above for 3.3a, and thus is rated insignificant.

Table 4.4.1-1 Economic and socio-economic significance analysis of monitoring decisions.

	A decision must be made about the level of monitoring that would be appropriate. Alternative 3.1 is no change - status quo monitoring levels would continue under the new program; Alternative 3.2 increases the level of monitoring in certain ways to provide a higher level of scrutiny; Alternative 3.3 builds on Alternative 3.2, by requiring all catcher vessels to carry observers.		
Issue	**Alternative 3.1**	**Alternative 3.2**	**Alternative 3.3**
Gross revenues	This is the de facto status quo elsewhere in the BSAI. Not significant.	This is expected to be associated with increased reporting accuracy. Target species discussion indicated it would not have a significant effect on pollock mortality. Not significant.	This is expected to be associated with increased reporting accuracy. Target species discussion indicated it would not have a significant effect on pollock mortality. Not significant.
Operating costs		This alternative increases operational costs, primarily for the processor in Adak, which would have to adopt and update a catch monitoring and control plan. Only small impacts are expected for fishing operations. Total additional fishing cost and processing costs are not expected to increase by 20% and are expected to be small compared to potential additional revenues. Not significant.	This alternative includes the costs associated with Alternative 2. In addition, the observer requirement in this alternative would also increase operating costs. The cost increases would fall relatively harder on small entities, which may find it difficult to accommodate observers. This would be a controversial action since observers are not required, nor employed on small vessels elsewhere in the EEZ off Alaska. Unknown
Net returns		Reduce net returns due to increased fixed (and, perhaps, variable) cost of allocation. Not significant.	Reduced net returns due to observers. Unknown.
Safety and health		No relationship between these. Not significant.	Vessels must have inspection to carry observers, improving safety. Observer on board may increase persons at risk. Unknown.
Related fisheries			No relationship between these. Not significant.
Consumer effects			
Management and enforcement		Improves information about size and composition of deliveries. Given use of relatively clean pelagic gear and relatively uncommon discard behavior, the impact will probably not be environmentally significant. Not significant.	Improves information about size and composition of deliveries. Given use of relatively clean pelagic gear and relatively uncommon discard behavior the impact will probably not be environmentally significant. Not significant.
Excess capacity		No relationship between these. Not significant.	No relationship between these. Not significant.
Bycatch and discards		This is a relatively clean fishery and discarding is believed to be uncommon. Better monitoring may help keep track of this, but no environmental significance. Not significant.	This is a relatively clean fishery and discarding is believed to be uncommon. Better monitoring may help keep track of this, but no environmental significance. Not significant.

Issue	Alternative 3.1	Alternative 3.2	Alternative 3.3
Subsistence		No relationship between these. Not significant.	No relationship between these. Not significant.
Impacts on benefits from marine ecosystems			
Community impacts			

4.4.3 Council's Preferred Alternative

The Council's preferred alternative is Alternative 3.2, with additional provisions that enhance opportunities for monitoring. These additional provisions require that catcher vessels that do not deliver to a shoreside processor or stationary processor may only deliver to an AFA qualified vessel, and that vessels under 60 feet shall take a cadre observer if provided by NMFS. Alternative 3.2 was analyzed in this section, and its environmental impacts were determined to be insignificant. These additional provisions improve information about fishing activity by clarifying that a certain class of deliveries may only be made to catcher-processors meeting the heightened AFA pollock monitoring measures, and that the Alt 3.2 measures may be supplemented by Cadre observer monitoring. These modifications therefore tend to strengthen, rather than attenuate the environmental protections. The Council's preferred alternative is therefore determined to have insignificant environmental impacts.

4.5 Small Vessel Options

4.5.1 Introduction

The Council's February 2004 motion asked for the evaluation of the possibility of mandating a delay on the ability of the Aleut Corporation to contract with vessels under 60 feet in length. The two alternatives for this decision are:

- Alternative 4.1. No action. Take no steps to delay the ability of Aleut Corporation to introduce vessels under 60 feet LOA.

- Alternative 4.2. Defer small vessel participation until a later date, 2 (2006) or 5 (2009) years from 2004, to allow for development of a management program.

The proposed amendments to the BSAI FMP and regulations are meant to provide a framework within which an allocation of AI pollock may be given to the Aleut Corporation. It may be that elements of the framework can be put in place faster for AFA catcher-processors and motherships than for catcher vessels under 60 feet. For example, under monitoring and enforcement Alternative 2, shoreside plants accepting pollock deliveries must have a catch monitoring and control plan in place. Given the short time frame for this action, it may not be possible to accomplish that by January 2005.

The Aleut Corporation is planning to provide fishing opportunities in 2005, to catcher vessels under 60 feet LOA, if the fishery is opened that year. The boats that would fish are most likely vessels that are currently fishing for Pacific cod in the area. Currently, Aleut Corporation planning is in its early stages, and in the absence of an FMP and regulatory framework for the fishery, or of an allocation in specifications, must proceed under considerable uncertainty. In separate communications at different times, representatives of the Aleut Corporation, and of Icicle Seafoods, its likely onshore processing affiliate in Adak[37], have suggested that between three and eight vessels under 60 feet might enter the fishery, in 2005. The number may well depend on the size of the allocation. Thus, a provision in the FMP that explicitly delays the entry of small vessels for from two to five years, until monitoring and management issues unique to this class of vessels are resolved, may prevent the Aleut Corporation and those small vessels from taking actions they would otherwise prefer to take.

The provisions that may prevent small vessels from fishing are those in Alternatives 2 and 3 under the decision on monitoring. However, small vessel entry would be effectively precluded by the absence of the regulatory prerequisite for their entry (for example, the CMCP). There is no need for a special regulation precluding small vessel activity for this reason. If a plant with a catch monitoring or control plan is required, but not available, small vessels would not be able to make landings. They would be prevented from making these landings whether or not the FMP contained language that prevented them from entering the fishery.

In some respects, because the allocation is provided to the Aleut Corporation, to be used as it sees fit, providing access to a plant with the necessary monitoring and control plan would be solely up to the Aleut Corporation. If it wished small boats to harvest a portion of its AI pollock allotment, it would have to provide the means to achieve that end. If it failed to do so, or chose not to take the required actions to allow for small boat participation, it could not be said that the "regulatory requirements" were the reason small boats were not able to participate. With the award of the AI pollock allocation, the Aleut Corporation assumes substantial responsibility for the rate and pattern of development of this fishery.

Concerns have been raised about the safety of small vessel fishing operations fishing for pollock in the Aleutian Islands. The most lucrative pollock fishery will be a winter fishery, and because of SSL protection measures, there aren't many pollock fishing areas available within 20 miles of shore. Moreover, under monitoring and enforcement Alternatives 3.1 and 3.2, these small vessels will not be observed. It may be desirable to concentrate fishing on larger vessels, which are more likely to carry observer coverage, during the first years of the program. Thus the program would generate better information on catches and incidental catches. For these reasons, it may be desirable to defer entry of vessels under 60 feet for the first few years of the program.

[37] Icicle was affiliated with the operation in the spring of 2004, but ended its relationship with Adak Fisheries and the Aleut Corporation in the summer of 2004.

4.5.2 Effects of the Small Vessels Options

Effects on Target Species

4.1 Some of the issues associated with how an AI pollock fishery might affect the pollock stocks are discussed above in 4.2.2. The allocation issues related to vessel size are anticipated to have only minor effects on the pollock stock. In cases where a fishery allocation resulted in a shift to a younger or older component of the stock than is the norm, then there might be some impact. However, as this information becomes available for the stock assessment analysis, a modification to the ABC level would self-correct this effect and the conclusion that catches less than ABC are sustainable and reasonably expected to provide adequate spawning biomass levels on a continuing basis would be valid.

4.2 This option would provide for a later date of first entry of small vessels into the AI fishery. Impacts on the pollock stock and fishery would likely be similar to those described in 4.1, but delayed two or five years. During the period of delay, fishery managers would have some time to evaluate size or age specific data by area of operations to determine if shifts in target age structure could be anticipated (assuming smaller vessels would operate under different areas, typically closer to delivery points). This could be evaluated as assessment analyses for this stock are developed further.

The significance criteria relate primarily to the effect of a particular level of TAC on the AI pollock stock. If or when small vessels enter an AI fishery would have little effect on the amount of TAC harvested. Thus this alternative would not significantly affect mortality of pollock, the spatial and temporal distribution of pollock, the amount of prey available to pollock, or pollock habitat used for spawning, movement, or rearing.

Effects on Other Target Species and Fisheries

4.1 Under this option small vessels could enter the AI pollock fishery as soon as it is approved. This could encourage entry of small vessels into the AI region, and this fishing effort would occur outside the SSL protection measures closed areas. Thus fishing would occur outside 20 n mi in many areas, and where pollock catch rates are satisfactory, might concentrate in some areas along the 20 n mi closure line and in areas near existing ports. Some small vessel fishing activity also may occur near coastal locations where small vessels can find refuge from severe weather. While small vessels may potentially fish in such areas, this concentrated activity would not likely adversely affect other target fisheries for the reasons discussed above in 1.1.

4.2 This option would provide for a later date of first entry of small vessels into the AI fishery. Impacts of small vessel operations on other target fisheries would likely be similar to those described in 4.1, but delayed two or five years. During the period of delay, fishery managers would have some time to "gear up" and gain experience managing this fishery and anticipate any potential concerns with a small vessel fishery in the area. This additional period could allow for time for managers to gain experience and to make adjustments in regulations to reduce any realized gear conflicts.

Assuming the pollock TAC is harvested each year, just not by small vessels in these early years of the fishery, bycatch of non-target species would still occur, just not by the small vessel component of the AI pollock fishery fleet.

These alternatives would have little effect on other target species or fisheries. As discussed above for the pollock stock, the significance criteria relate primarily to the effect of a particular level of TAC on the AI stocks of Atka mackerel, sablefish, Pacific cod, rockfish, or flatfish. If or when small vessels enter an AI fishery have little effect on the amount of TAC harvested. Thus this alternative would not significantly affect mortality of other target species, the spatial and temporal distribution of these species, the amount of prey available to these species, or the habitat used by these species for spawning, movement, or rearing.

Effects on Incidental Catch of Other or Non-specified Species

4.1 If no delays to the introductions of small vessels were to occur, there would be insignificant impacts on stocks of other species or nonspecified species, or to levels of incidental catch of these species in the groundfish fisheries.

4.2 If small vessel participation were deferred for either 2 or 5 years, there would be a delay in, but ultimately an increase in, the gathering of information on the new fisheries which could lead to a better monitoring program for small vessels, perhaps reducing bycatch rates and any effects to stocks of other or nonspecified species, and to levels of incidental catch of these species in the new fishery. However, the net effect of a slight increase in information gathering that might benefit fishery management and reduce bycatch, balanced with the potentially slightly increased levels of bycatch from a group of new vessels in the fishery, are considered to be insignificant. Assuming the pollock TAC is harvested each year, just not by small vessels in these early years of the fishery, bycatch of other or nonspecified species would still occur, just not by the small vessel component of the AI pollock fishery fleet.

The issue of if/when small vessels participate in an AI pollock fishery has little to do with the potential impacts on other or nonspecified species. Those potential impacts might be realized only after decisions on the amount of TAC apportioned to the area are made. Thus the significance criteria for judging the effects of the proposed action on other or nonspecified species, which are concerned with the continued productivity of stocks of these marine organisms, are not of concern in these alternatives.

Effects on Incidental Catch of Forage Fish Species

4.1 If no delays to the introductions of small vessels were to occur, there would be insignificant impacts on stocks of forage fish species, or to levels of incidental catch of these species in the groundfish fisheries.

4.2 If small vessel participation were deferred for either 2 or 5 years, there would be a delay in, but ultimately an increase in, the gathering of information on the new fisheries which could lead to a better monitoring program for small vessels, perhaps reducing bycatch rates and any effects to stocks of forage fish species, and to levels of incidental catch of these species in the new fishery. However, the net effect of a slight increase in information gathering that might benefit fishery management and reduce bycatch, balanced with the potentially slightly increased levels of bycatch from a group of new vessels in the fishery, are considered to be insignificant. Assuming the pollock TAC is harvested each year, just not by small vessels in these early years of the fishery, bycatch of forage fish species would still occur, just not by the small vessel component of the AI pollock fishery fleet.

The issue of if/when small vessels participate in an AI pollock fishery has little to do with the potential impacts on forage fish. Those potential impacts might be realized only after decisions on the amount of TAC apportioned to the area are made. Thus the significance criteria for judging the effects of the proposed action on forage fish species, which are concerned with the continued productivity of stocks of these species, are not of concern in these alternatives.

Effects on Incidental Catch of Prohibited Species

4.1 If no delays to the introductions of small vessels were to occur, there would be insignificant impacts on stocks of prohibited species, to directed fisheries for these species, or to levels of incidental catch of these species in the groundfish fisheries. PSC species would be required to be discarded.

4.2 If small vessels participation were deferred for either 2 or 5 years, there would be a delay in, but ultimately an increase in, the gathering of information on the new fisheries which could lead to a better monitoring program for small vessels, perhaps reducing PSC rates and any effects to stocks of prohibited species, to directed fisheries for these species, and to levels of incidental catch of these species in the new fishery. However, the net effect of a slight increase in information gathering that might benefit fishery management and reduce bycatch, balanced with the potentially slightly increased levels of bycatch from a group of new vessels in the fishery, are considered to be insignificant. Assuming the pollock TAC is harvested each year, just not by small vessels in these early years of the fishery, bycatch of PSC species would still occur, just not by the small vessel component of the AI pollock fishery fleet.

These alternatives would have little effect on the incidental catch of PSC. The significance criteria relate primarily to the effect of a particular level of TAC on the bycatch of PSC and in turn the effect on the long term productivity of PSC stocks. If or when small vessels enter an AI fishery has little effect on the amount of TAC harvested. Thus this alternative would not significantly affect the mortality of prohibited species, and thus would not have significant effects on the ability of PSC to maintain benchmark levels (long-term population viability).

Effects on Steller Sea Lions

4.1 Under this option small vessels could enter the AI pollock fishery as soon as it is approved. This could encourage entry of small vessels into the AI region, but for the most part, this activity would not likely appreciably increase adverse impacts on Steller sea lions.

There could be some concentration of fishing activity in areas outside the 20 n mi Steller sea lion closed areas because small vessels might seek to fish where closest to port or to coastal areas of refuge from storms. This conceivably could result in some prey depletion in areas where small vessels would concentrate, but the levels of prey removal likely would be very small, and at relatively low rates of removal, and thus effects on Steller sea lions would not likely be appreciably adverse.

Early entry of small vessels could occur almost immediately after the AI pollock fishery were approved and opened, if fishers chose to utilize small vessels right away. This could increase vessel traffic in coastal areas as vessels transit from port to fishing grounds. This might increase opportunities for vessel contact with Steller sea lions, or contaminant spills or gear loss. However, the 3 mile no transit zones around most rookeries and haulouts in the AI region would remain in effect, diminishing the potential for vessel interactions with Steller sea lions along the coast.

4.2 This option would provide for a later date of first entry of small vessels into the AI fishery. Impacts on Steller sea lions would likely be similar to those described in 4.1, but delayed two or five years. During the period of delay, fishery managers would have some time to “gear up” and gain experience managing this fishery and anticipate any potential concerns with a small vessel fishery in the area. This additional period could allow time for managers to gain experience and to determine if the fishery, as being prosecuted, warranted consultation regarding potential concerns with Steller sea lions.

As discussed above, Steller sea lions are protected in the AI region by specific protection measures designed to remove the potential for jeopardy to the SSL population or adverse modification of SSL critical habitat. If/when small vessels enter the proposed AI pollock fishery will have little effect on the spatial or temporal concentration of fishing, SSL prey removals, or disturbance to Steller sea lions. Entanglement in fishing gear would not be affected by the date of entry of small vessels, although it could be argued that postponing entry of small vessels might, in turn, “postpone” any potential but likely very small increase in loss of fishing gear that might entangle Steller sea lions. No change in SSL protection measures would accompany the entry of small vessels into this fishery.

Effects on Other Marine Mammals

4.1 Under this option small vessels could enter the AI pollock fishery as soon as it is approved. This could encourage entry of small vessels into the AI region, but for the most part, this activity would not likely appreciably increase adverse impacts on marine mammals.

There could be some concentration of fishing activity in areas outside the 20 n mi Steller sea lion closed areas because small vessels might seek to fish where closest to port or to coastal areas of refuge from storms. This conceivably could result in some prey depletion in areas where small vessels would concentrate, but the levels of prey removal likely would be very small, and at relatively low rates of removal, and thus effects on marine mammals would not likely be appreciable.

Early entry of small vessels could increase concern over sea otters (as discussed in 1.1). Small vessel activity could occur almost immediately after the AI pollock fishery were approved and opened, if fishers chose to utilize small vessels right away. This could increase vessel traffic in coastal areas as vessels transit from port to fishing grounds. This might increase opportunities for vessel contact with otters, or contaminant spills or gear loss.

4.2 This option would provide for a later date of first entry of small vessels into the AI fishery. Impacts on marine mammals would likely be similar to those described in 4.1, but delayed two or five years. During the period of delay, fishery managers would have some time to “gear up” and gain experience managing this fishery and anticipate any potential concerns with a small vessel fishery in the area. This additional period could allow for time for managers to gain experience and to make adjustments in regulations to afford more protection for marine mammals.

If/when small vessels enter the proposed AI pollock fishery will have little effect on the spatial or temporal concentration of fishing, marine mammal prey removals, or disturbance to marine mammals. Entanglement in fishing gear would not be affected by the date of entry of small vessels, although it could be argued that postponing entry of small vessels might, in turn, “postpone” any potential but likely very small increase in loss of fishing gear that might entangle marine mammals.

Effects on Seabirds

4.1 Under this option small vessels could enter the AI pollock fishery as soon as it is approved. This could encourage entry of small vessels into the AI region, but for the most part, this activity would not likely appreciably increase adverse impacts on seabirds.

There could be some concentration of fishing activity in areas outside the 20 n mi closed areas because small vessels might seek to fish where closest to port or to coastal areas of refuge from storms. This conceivably could result in some prey depletion in areas where small vessels would concentrate, but the levels of prey removal likely would be very small, and at relatively low rates of removal, and thus effects on seabirds would not be significant.

Early entry of small vessels could occur almost immediately after the AI pollock fishery were approved and opened, if fishers chose to utilize small vessels right away. This could increase vessel traffic in coastal areas as vessels transit from port to fishing grounds. This might increase opportunities for vessel contact with seabirds, or contaminant spills or gear loss. However, the 3 mile no transit zones around most rookeries and haulouts in the AI region would remain in effect, diminishing the potential for vessel interactions with seabirds along the coast.

4.2 This option would provide for a later date of first entry of small vessels into the AI fishery. Impacts on seabirds would likely be similar to those described in 4.1, but delayed two or five years. During the period of delay, fishery managers would have some time to “gear up” and gain experience managing this fishery and anticipate any potential concerns with a small vessel fishery in the area. This additional period could allow for time for managers to gain experience and to determine if the fishery, as being prosecuted, warranted consultation regarding potential concerns with ESA listed seabirds. Overall, the effects of this alternative are judged to be not significant.

Effects on Habitat

4.1 The proposed alternative would not likely affect the level of mortality and damage to living habitat, benthic community structure, or the distribution of fishing effort because this issue addresses the time of entry of small vessels into the AI pollock fishery, not the specific levels of fishing by these vessels. Such issues as contact by pelagic trawl gear on the sea floor could arise earlier under this alternative if the fishing patterns used by small vessels result in more frequent contact with benthic habitat. Smaller vessels would likely be fishing closer to shore, perhaps concentrated in a few small areas outside of SSL closed areas. These vessels could be fishing without measures that offer conservation in areas known to have sensitive habitats such as coral or sponge aggregations. Pollock trawl gear is large and lightweight and prone to damage if it touches rough and rocky bottoms, and thus fishers will likely avoid bottom contact to the extent practicable. Given these considerations, the effects of this alternative on benthic habitat are judged to be insignificant.

4.2 The proposed alternative provides for a later date of entry of small vessels into the AI pollock fishery. The same potential impacts on benthic habitat, as discussed immediately above, are likely under this alternative. Overall the impacts are considered to be insignificant.

The significance criteria used to judge effects of the alternatives on habitat include concerns over increases in mortality to living habitat species, increase in damage to benthic community structure, and concentration of fishing effort in areas where these activities could adversely impact habitat. The issue of if/when small vessels enter the AI pollock fishery is essentially not of concern to marine habitat. But arguably the earlier the entry of small vessels, the earlier potential impacts on habitat could be realized. However, the expected nature of the small vessel component of this fishery is such that the effects of either alternative are insignificant.

Ecosystem Effects

4.1 This alternative would not delay the entry of small vessels into the AI pollock fishery. Thus the fishery could be prosecuted by both vessels < 60 feet or larger AFA vessels. This alternative is essentially an issue about what vessels participate in the fishery; this is largely a procedural issue and would have no effect on ecosystem considerations.

4.2 This alternative would delay the entry of small vessels < 60 feet into the AI pollock fishery either 2 or 5 years from now. This alternative is essentially an issue about what vessels participate in the fishery; this is largely a procedural issue and would have no effect on ecosystem considerations.

As discussed above, this issue does not result in an analysis that would invoke the significance criteria established for judging the impacts of the alternatives on the ecosystem.

Effects on State-managed and Parallel Fisheries

4.1 For the current parallel Pacific cod and rockfish groundfish fisheries, the BOF has established vessel size and gear restriction zones around Adak. Additionally, the season is only open from May 1 until September 15. It is possible that similar restrictions would be imposed on a parallel pollock fishery in this area (Wayne Donaldson, personal communication). Assuming that the ADF&G Commissioner would issue an Emergency Order that allowed such a parallel fishery, and conditioned the fishery such that it could occur only outside SSL closed areas (and followed other relevant Federal regulations), then this alternative could have some effect on the parallel fishery. A very small portion of fishable State waters is available in the Aleutian Islands (see more discussion in Chapter 3 of this document). Under this alternative, small vessels could immediately target pollock IF the EO were issued that permitted the fishery. The net effect might be considered positive, but countering this possible conclusion is the fact that little pollock fishing effort has occurred in such areas in the past (perhaps because pollock CPUE was very low), leading to a conclusion of insignificant effect.

4.2 If the entry of small vessels is delayed 2 or 5 years, the issues discussed above would still be germane, but delayed. Coordination would be required with the ADF&G and BOF to ensure that a parallel fishery for pollock could occur with larger vessels inside state waters. If the EO allowing a parallel fishery were conditioned as discussed above, then the effects of this alternative would be considered to be insignificant.

The criteria for this issue specify an effect (decrease or increase in harvest of pollock in State waters under a parallel fishery) at a level of 50 percent for a significant rating. On the one hand, any pollock fishery in State waters (a parallel fishery) where there were no fishery previously could be considered a 100 percent increase, and thus could be judged to be significantly beneficial (excluding other potential impacts discussed in previous sections). On the other hand, there is very little fishable water in the AI region in which a parallel fishery could be prosecuted, and there is a likelihood that the amount of fishing by small vessels will be small, at least initially; thus the effect might be considered to be small - or insignificant. A longer delay in entry of small vessels will delay the realization of any impact be it positive or insignificant. For the purposes of this analysis, the effect of either alternative is considered to be insignificant because of the likely very small level of small vessel activity regardless when small vessels are permitted to participate. This does not negate the reality that, in the future, small vessels will comprise a large proportion (50 percent) of the AI pollock fishing activity, and at that time (which according to the Statute will be no later than the year 2013), small vessels will be harvesting 50 percent of the pollock, which would then be considered significantly beneficial.

Socio-economic Effects

Table 4.5.1-1 Socio-economic impacts of delaying small vessel entry

	The Council must decide whether or not to add language to the FMP delaying entry of small vessels for two or five years. Alternative 4.1 includes no language addressing this issue, Alternative 4.2, Option 1, imposes a two year delay, Alternative 4.2, Option 2 imposes a five-year delay.		
Issue	**Alternative 4.1**	**Alternative 4.2**	
		Option 1	**Option 2**
Gross revenues	Overall gross revenues from the allocation unaffected. Not significant.	Overall gross revenues from the allocation unaffected. Mandates reliance on AFA capacity for at least two years. Not significant.	Overall gross revenues from the allocation unaffected. Mandates reliance on AFA capacity for at least two years. Not significant.
Operating costs	Operating costs are not affected by this choice. Not significant.	May be some modest improvement in operating costs if TAC is taken by more efficient catcher-processors. But operating costs are not, per se, a major concern. Not significant.	May be some modest improvement in operating costs if TAC is taken by more efficient catcher-processors. But operating costs are not, per se, a major concern. Not significant.
Net returns	Net returns are not affected by this choice. Not significant.	Net revenues may be higher if operating costs are lower. But not a key issue. Not significant.	Net revenues may be higher if operating costs are lower. But not a key issue. Not significant.
Safety and health	Entry of small vessels may raise safety concerns. Not significant.	Delay in entry of small vessels temporarily mitigates safety concerns. Not significant.	Extended delay in entry of small vessels temporarily mitigates safety concerns. Not significant
Related fisheries	No effect. Not significant.	Small numbers of small vessels may be kept in other fisheries. Not significant.	Small numbers of small vessels may be kept in other fisheries. Not significant.
Consumer effects		No substantial effect. Some reported product quality and recovery rate advantages with use of C/Ps over CV and onshore processing. Not significant	No substantial effect. Some product quality and recovery rate advantages with use of C/Ps over CV and onshore processing. Not significant
Management and enforcement		No effect. Not significant.	No effect. Not significant.
Excess capacity		Some small vessels may remain underutilized during two year prohibition. Not significant.	Some small vessels may remain underutilized during five year prohibition. Not significant.
Bycatch and discards		No effect. Not significant	No effect. Not significant
Subsistence use			
Impacts on benefits from marine ecosystems			
Community impacts		Aleut Corp. plans to have some small vessels operating as early as 2005. This measure could therefore impose a slight delay on the entry of small vessels - an Aleut Corp. development objective. However, the delay is short, should not affect many vessels, and only affects one component of Adak development activities. Not significant.	Aleut Corp. plans to have some small vessels operating as early as 2005. This measure could therefore impose a slight delay on the entry of small vessels - an Aleut Corp. development objective. However, the delay is short, should not affect many vessels, and only affects one component of Adak development activities. Not significant.

4.5.3 Council's Preferred Alternative

The Council's preferred alternative is Alternative 4.1. This was analyzed, and its environmental impacts were found to be insignificant. Therefore the Council's preferred alternative has an insignificant impact.

4.6 Economic Development Mandate Options

4.6.1 Introduction

The options discussed in this section address whether the Aleut Corporation should be required to report about its use of the AI pollock allocations for economic development in Adak.[38] Section 803(d) states that "the North Pacific Fishery Management Council shall recommend and the secretary shall approve an allocation under subsection (a) to the Aleut Corporation for the purposes of economic development in Adak, Alaska pursuant to the requirements of the Magnuson-Stevens Fishery Conservation and Management Act."

At its February 2004 meeting, the Council requested analysis of an alternative to require the Aleut Corporation to provide an annual report to the Council about how it used the AI pollock for economic development in Adak. In addition, the Council suggested that "staff take a look at components of the annual report that the State requires of the CDQ Program." These recommendations are structured into the first three alternatives below. At its April 2004 meeting, after review of the initial draft analysis, the Council requested that an additional Alternative 5.4 be added to the analysis. Alternatives 5.2 and 5.3 would require annual reports. Alternative 5.4 would require a one-time report. Alternative 5.4 could be combined with either Alternative 5.2 or 5.3.

5.1 No action: do not require the Aleut Corporation to submit a report to the Council or NMFS.

5.2 Require the Aleut Corporation to submit an annual report to the Council.

5.3 Require the Aleut Corporation to submit an annual report to NMFS or the State of Alaska comparable to the annual reports submitted by the CDQ groups.

5.4 Require the Aleut Corporation to submit a report to the Council prior to its June 2006 meeting. At the June 2006 meeting, the Council shall review the AI pollock fishery's performance, including information on harvest success, development of a small vessel fleet, and progress toward completion of pollock processing capacity to determine if further adjustments to the AI pollock TAC may be appropriate, in light of Section 803 of the 2004 Consolidated Appropriations Act and Senator Stevens' floor language.

[38]This section does not address reporting and information requirements associated with the harvest of the AI pollock allocation. Catch accounting and monitoring requirements, including identification of which vessels will be harvesting pollock on behalf of the Aleut Corporation, are discussed in Section 4.4.

While the statute provides that the AI pollock allocation shall be approved for the purposes of economic development in Adak, the statute does not require that the Aleut Corporation report on its activities or that the Council or the Secretary of Commerce monitor the activities of the Aleut Corporation to verify that it is using the allocations consistent with the stated purpose. The decision about whether to require reports from the Aleut Corporation is a policy choice by the Council and the Secretary of Commerce. The Council may recommend Alternative 5.1, which would not require the Aleut Corporation to report about its economic development activities. The Council also may recommend Alternative 5.2, Alternative 5.3, or Alternative 5.4 which would require some level of reporting by the Aleut Corporation about its use of the AI pollock allocation for economic development in Adak. Each option is permissible under the statute.

Alternative 5.1. No action: do not require the Aleut Corporation to submit a report to the Council or NMFS

Alternative 5.1 would not require the Aleut Corporation to submit reports demonstrating that it used the AI pollock allocation consistent with the purpose stated in the statute. The Aleut Corporation would not be required to provide information about the revenues or non-monetary benefits it received from the allocations or the economic development projects in Adak that it funded with the proceeds from the allocations. The statute does not specifically require such a report, nor does it explicitly require any government oversight of the economic development aspects of this allocation.

The Aleut Corporation provides a copy of its annual report on its website (www.aleutcorp.com). The annual report provides the consolidated financial statements of the corporation that were, for 2003, independently audited by KPMG, LLP. However, this information is provided for the combination of the corporation and its subsidiaries. In its present form, it would not provide a sufficient level of detail about the sources and uses of revenue to be used as a means of monitoring whether the Aleut Corporation was using the proceeds from its AI pollock CDQ allocation specifically for economic development in Adak.

As discussed in Section 3.3, the Aleut Corporation has made a significant commitment and investment in the economic development of Adak. Its subsidiary, the Aleut Enterprise Corporation, was formed to manage the corporation's business development projects in Adak. According to the corporation's 2003 annual report, "the acquisition and privatization of Adak has been the largest business development effort by the Company for the last eight years. To date, the Company has invested in excess of three million dollars towards this effort." (The Aleut Corporation, 2003).

The statute states that the purpose of the allocation is for economic development in Adak. This purpose is very broad and could encompass a wide range of activities funded or undertaken by the Aleut Corporation in or for Adak. It would include activities that produced jobs or income for residents of Adak; education, training, or scholarship programs; support or services for businesses in Adak; construction of infrastructure; and administrative costs associated with these economic development activities. Based on the information about Adak provided in Section 3.3 of this document and in the corporation's annual report, there appears to be sufficient need for funding of economic development projects in Adak and plans to pursue such projects. The Aleut Corporation is likely to have the capacity to fully use the proceeds from the AI pollock allocation for the stated purpose of these allocations.

Alternative 5.1 would be the least costly alternative to the Aleut Corporation, its partners, and the government, because it imposes no requirement to report about the use of the allocation for economic development in Adak. The Aleut Corporation would not have to prepare and submit an annual report and the Council and NMFS would not have additional administrative or monitoring costs. However, Alternative 5.1 provides no required means of monitoring or verifying that the Aleut Corporation uses the proceeds from the pollock allocation consistent with the purpose stated in the statute. All other fishery development programs recommended by the Council such as the CDQ Program, the Gulf of Alaska community IFQ purchase program (GOA FMP Amendment 66), and the allocation of crab to Adak under the crab rationalization program, have imposed some oversight and reporting requirements on the entity representing the communities receiving fishery or purchasing fishery allocations.

Alternative 5.2: Require the Aleut Corporation to submit an annual report to the Council

The Council requested analysis of an alternative requiring the Aleut Corporation submit an annual report to the Council documenting its use of the AI pollock allocations for economic development in Adak. The Council's motion mentioned only that the report would be submitted to the Council. All reporting requirements currently included in NMFS regulations require that such information be submitted to NMFS. Sometimes the information also is required to be submitted to the Council or the State of Alaska (State). However, there does not appear to be any prohibition against NMFS requiring that a report be submitted only to the Council, and such a report would meet the objective of monitoring whether the Aleut Corporation was using its allocation consistent with the objectives of the statute.

Reports to the Council generally are provided in writing and orally during a Council meeting. This means that all information provided in the report to the Council is available to the public. Under the MSA confidentiality requirements, NMFS cannot require any regulated entity to provide confidential financial information to the public. In addition, it would not be appropriate to release confidential financial information to the non-governmental members of the Council as they are not authorized to review confidential information submitted under the MSA. Therefore, any report required to be submitted by the Aleut Corporation to the Council could not be required to contain any confidential information.

Regulations implementing Alternative 5.2 would have to specify the deadline for the Aleut Corporation to submit is annual report to the Council. Without additional direction from the Council, NMFS likely would draft the regulations to require that the annual report be submitted by the Aleut Corporation to the Council by January 31 of each year and cover the activities of the previous calendar year. The Council could review this report at its February meeting each year.

The objective of an annual report submitted under Alternative 5.2 would be to provide information explaining how the Aleut Corporation is using the proceeds from the AI pollock allocation consistent with the purpose intended by Congress - for economic development in Adak. Alternative 5.2 would require the Aleut Corporation to provide a general, descriptive report to the Council. Such a report could provide a general description of how the corporation conducted the AI pollock fisheries, how much of the quota was harvested by vessels under 60', how much was harvested by local residents, and how much was contracted to larger vessels for royalties. It could summarize the types of monetary and non-monetary benefits it received from the allocations and it could provide a written description of the economic development projects that were funded or supported by the AI pollock allocation. This report would provide a general description of the use of the AI pollock allocations for economic development in Adak. It also would provide the Council the opportunity to ask questions of the Aleut Corporation representative in a public forum, follow-up on any concerns by asking for further information from the Aleut Corporation, or initiate further analysis by staff. Finally, members of the public would be allowed to testify to the Council about any concerns they had about how the Aleut Corporation was using its allocation.

This annual report would provide the Council and the public information bearing on the Aleut Corporation's use of the allocation for the purposes of economic development in Adak. However, Alternative 5.2 would not require submission of confidential financial information to verify that the Aleut Corporation was using all of the proceeds from the AI pollock allocation for economic development in Adak.

This level of reporting may provide a satisfactory balance between accountability and cost to both the Aleut Corporation and the government in providing oversight of this allocation, particularly since the allocation is mandated by Congress, the purpose of the allocation broadly encompasses a wide range of activities the Aleut Corporation could fund in Adak, and because the corporation has committed to the long term economic development of this community. It probably would take relatively little effort and cost for the Aleut Corporation to provide a general description of how it was using the pollock allocation for economic development in Adak. Alternative 5.2 would cost less than Alternative 5.3 for both the Aleut Corporation and the government agencies. A general report to the Council would not add to the administrative cost for NMFS or the State because they would not have oversight responsibilities for the economic development aspects of the allocation to the Aleut Corporation. The Council would incur the costs associated with receiving, photocopying, and allocating time during a Council meeting to address the annual report.

On the other hand, the general, descriptive report under Alternative 5.2 would not provide the level of oversight currently required for the CDQ groups to demonstrate that they are using CDQ allocations consistent with the goals for the CDQ Program. As discussed in Section 3.4 and the next section describing Alternative 5.3, there are a number of significant differences between the CDQ Program and the AI pollock allocation, namely the process through which quota is allocated. However, both of these programs are allocations of federal fishery resource for purposes of economic development. Alternative 5.2 would not provide specific direction to government agency staff to monitor the economic development activities funded by this allocation, to review detailed financial reports, to discuss areas of concern with the Aleut Corporation, or to provide an independent evaluation of program activities to the Council.

Alternative 5.3: Require the Aleut Corporation to submit an annual report to the NMFS or the State of Alaska comparable to the annual reports submitted by the CDQ groups

Alternative 5.3 would require the Aleut Corporation to submit an annual report with information similar to the annual reports that are submitted by the CDQ groups. The purpose of this report would be to document how the Aleut Corporation was using the proceeds from the AI pollock allocation for economic development in Adak, consistent with the requirements of the statute. This report would have elements similar to the reports provided by the CDQ groups to the State and NMFS, therefore, it would contain confidential financial information. Due to the confidential information submitted, this report could not be provided to the Council or released to the public.

The Council's motion for analysis specified that analysts look at "components of the annual report that the State requires of the CDQ Program" for purposes of developing Alternative 5.3. The CDQ annual reports are required to be submitted to both the State and NMFS because the program was designed to give the State a significant role in oversight and administration of the economic development aspects of the CDQ Program. This section describing Alternative 5.3 assumes that the annual reports from the Aleut Corporation would be submitted to NMFS. However, the Council also could specify that the reports be submitted to the State of Alaska. Staff recommends that the Council should not specify that the annual reports be submitted to and evaluated by both NMFS and the State. Requiring the reports to be evaluated by both government agencies would increase costs and frustration for the Aleut Corporation as it would have to respond to inquiries from both NMFS and State staff and satisfy both agencies independently if concerns were identified.

The reporting requirements for the CDQ Program are extensive and based primarily on two elements of the CDQ Program that do not exist in the allocation of AI pollock to the Aleut Corporation: (1) a periodic, competitive allocation process, and (2) the requirement for CDQ groups to get prior approval for economic development projects before they undertake the project. The CDQ groups are required to submit a CDP to the State and NMFS, and have this plan approved at the time CDQ allocations are made to the group. The CDP is both an application for percentage allocations of the CDQ reserves and, after allocations are approved, the working business plan for the CDQ group. Both State and NMFS regulations require that the CDQ groups keep the CDP up to date by amending it when significant elements of the plan change.

The CDP is required to contain detailed information about the organizational structure of the CDQ group (which is considered the managing organization for the eligible communities), information about the board of directors, the communities represented by the CDP, detailed budgets, independently audited financial statements, contracts with all business partners and people providing professional services, royalty agreements providing information about benefits the CDQ group received from leasing its allocations, descriptions of how allocations will be harvested, and other information about the group, its communities, and its plans for use of the CDQ allocations. The CDPs generally are contained within two to four large binders of information for each CDQ group. Through the requirement to get a CDP approved as a condition of allocations and the requirement to get prior approval for significant changes to the CDP, including new investments and changes in budgets, the CDQ groups are required to get prior approval from the government for nearly all of their activities. A requirement for prior approval of economic development projects is not part of the proposal for the AI pollock allocation to the Aleut Corporation, therefore, many of the reporting requirements of the CDQ Program would not be relevant for this allocation.

The CDQ groups also are required to submit quarterly reports to the State and annual reports to both the State and NMFS. 50 CFR 679.30 requires that the CDPs contain the "most recent audited income statement, balance sheet, cash flow statement, management letter, and agreed upon procedures report."

State regulations at 6 AAC 93.050(d) require an annual independent audit for the CDQ group and its consolidated subsidiaries performed by a reputable accounting firm. The annual audit or "annual report," must include the following information:

1. a report that indicates whether the CDQ group is meeting the milestones and objectives of the CDP as set out in its CDP;

2. consolidated financial statements, reported according to generally accepted accounting principles (the State also may require supplemental schedules reporting the financial position and results of operations for each of the CDQ group's consolidated for-profit subsidiaries);

3. a note to the financial statements in which the auditor details how financial results were determined and any other relevant information;

4. a supplemental schedule detailing the CDQ group's general and administrative expenses;

5. except for fund and cash management CDQ projects, a budget reconciliation between all CDQ projects and administrative budgets, and actual expenditures; and

6. a management report or letter.

The CDQ groups' annual audit must be submitted to the State by May 31 of the year following the calendar year covered by the audit. The State submits the annual audits to NMFS as part of its annual report to NMFS on the CDQ Program. The CDQ groups report paying between $30,000 and $75,000 (average $49,000) annually for the annual independent audit and preparation of the annual report required by the State and NMFS.

One of the primary differences between the CDQ groups and the Aleut Corporation is that the CDQ groups were formed specifically to manage CDQ allocations and they did not exist as corporate entities prior to implementation of the CDQ Program in 1992. The Aleut Corporation is an existing corporate entity and the allocation of AI pollock will be just one source of revenue and expenses among many for the corporation. Therefore, many elements of the annual audited financial statements of the Aleut Corporation and its consolidated subsidiaries would not be appropriate for providing the necessary detail to determine if the Aleut Corporation was using the AI pollock allocation for economic development in Adak. However, information prepared as part of the annual audited financial statements could provide a level of reporting and accountability that would provide some basis to monitor the use of funds from this allocation and to determine whether it was consistent with the purpose of the allocation.

Alternative 5.3 would require the Aleut Corporation to provide NMFS a report prepared by independent auditors in conjunction with the annual audited financial statements. The report would be prepared on the basis of information provided to the auditors by the Aleut Corporation. The objective of the report would be for the Aleut Corporation to provide information about how it used the proceeds from its allocation of AI pollock to support economic development in Adak.

A report that could provide this information could include the following information:

1. total amount of revenue received by the Aleut Corporation from the allocations, including royalties, donations, contributions, or any other form of payment from a fishing partner in exchange for the authorization by the Aleut Corporation to harvest its AI pollock allocation (broken down by revenue source);

2. a description of the vessels used to harvest pollock, the number of vessels, total catch, and total value by vessel category;

3. for residents of Adak who are harvesting AI pollock, the number and size of the vessels, number of residents of Adak employed as crew, total catch, and estimated ex-vessel value of catch;

4. copies of all contracts or royalty agreements with fish harvesting or process partners demonstrating the financial arrangements with the Aleut Corporation for harvesting and processing of the AI pollock allocation;

5. total amount of non-cash or in-kind benefits received from contracted fishing partners, such as employment, training, or internship opportunities;

6. administrative expenses associated with management of the AI pollock allocation and associated economic development projects;

7. a detailed description of each economic development project or category of economic development project funded by or made possible by the AI pollock allocation explaining how the project supported economic development in Adak;

8. the amount of money spent each year on each economic development project or category of economic development project;

9. the amount of money reserved or saved from the AI pollock allocation each year;

10. minutes from board meetings in which the Aleut Corporation discussed the AI pollock allocation or any economic development projects funded or associated with it;

11. a non-confidential summary of economic development activities that could be provided to the Council or the public.

The report required under Alternative 5.3 would be submitted to NMFS by May 31 of each year, for the activities of the previous calendar year. More time is required to prepare this report than the annual report under Alternative 5.2, because Alternative 5.3 would require preparation of at least some of the report by independent auditors. The first report would be submitted on May 31, 2006, for January 1 through December 31, 2005.

The non-confidential summary provided by the Aleut Corporation in its annual report would be provided to the Council. In addition, NMFS or State staff would review the report and prepare a statement of evaluation of the report for the Council. For example, staff could report that he or she reviewed the report submitted by the Aleut Corporation and to their knowledge the report demonstrates that the Aleut Corporation received monetary and non-monetary benefits from the CDQ allocations that appear to have been used for economic development in Adak. This is a fairly high level of responsibility and probably would require the persons charged with the responsibility for review and evaluation of the annual report to familiarize themselves with the operations of the Aleut Corporation, the details of the financial statements, and of the specific economic development projects. This task likely would require periodic travel to Anchorage to meet with the Aleut Corporation, may require travel to Adak, discussion with auditors, and contracting for expertise to evaluate the reports submitted by the Aleut Corporation. This level of scrutiny and evaluation could be viewed as intrusive by the Aleut Corporation, particularly since this is an existing corporation operating under a very different mandate than the CDQ groups. While oversight of the AI pollock allocation to the Aleut Corporation may not require a full time staff person to accomplish, it would require a portion of one NMFS or State staff person's time each year. More staff time would be required in the first few years of the program to explain new requirements and to ensure compliance. If the reports are required to be submitted to NMFS, the resources to staff oversight of the Aleut Corporation would require hiring new staff or realigning priorities and projects for existing staff.

Alternative 5.3 would provide the highest level of monitoring of whether the Aleut Corporation was using the AI pollock allocation consistent with the purposes of the allocation. However, it also would be the most costly alternative to the Aleut Corporation, its business partners, and NMFS or the State. It would require the Aleut Corporation to alter its recordkeeping to maintain financial and administrative records in a manner that would provide the information for the annual report. It would expand the task of the annual auditors and increase the costs of that audit for the Aleut Corporation. In addition, NMFS or the State would have to assign staff to review and evaluation of the annual report. Finally, because the report would contain confidential information, it could not be released to the Council or the public, except in a summarized format.

Fraud Detection Through Financial Audits

[*The information in this section was provided to the Council by KPMG, Inc. as part of a contract for analysis of BSAI FMP Amendment 71 in May 2002. The analysis is focused on the CDQ Program and CDQ groups, but much the information is relevant to government oversight the Aleut Corporation under Alternative 5.3.*]

Having audited financial statements for a CDQ group is not a guarantee that fraudulent activity in an organization would be discovered and disclosed. Financial audits are designed to assess the risk of fraud that results in a material misstatement of the financial statements. As written in the professional standards for auditors, "The auditor has a responsibility to plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether caused by error or fraud."

In the audit process, auditors look for risk factors for fraud as they gain an understanding of the internal controls in an organization. The types of fraud they would specifically look for would be fraud that would cause material misstatement of the financial statements. Those types of fraud would be fraudulent financial reporting and misappropriation (theft or embezzlement) of material assets. It should be noted that financial audits are not the primary way fraud is usually discovered in an organization (the main reasons fraud is discovered are listed in the section "KPMG Fraud Survey").[39]

Examples of these risk factors considered are:

- The motivation for management to engage in fraudulent financial reporting.

  The motivation for management to engage in fraudulent financial reporting can come from pressure to achieve unrealistic financial results when management compensation is based on those results.

- A failure by management to display and communicate an appropriate attitude regarding internal control and the financial reporting process.

  Does management have an ineffective means of communicating and supporting the entity's values or ethics, or communication of inappropriate vales or ethics?

- Adverse consequences on significant pending transactions, such as a business combination or contract award, if poor financial results are reported.

[39] In a later section in its analysis for BSAI Amendment 71, KPMG reported the following. "The top reason for the discovery of the fraud was notification by an employee. Second was the presence of internal controls, and third was an internal auditor review. Thirty seven percent of the time the discovery of fraud was by accident."

- Risks related to misappropriation of assets.

  An example of this risk is not having adequate record keeping for assets subject to misappropriation. Or not having segregation of duties or independent checks for employees handling cash or investments that are subject to misappropriation

Auditors look for conditions that may signal the risk of fraud such as missing documents, inventory, or physical assets of significant magnitude. The identification of risk factors may cause the auditor to perform more testing during the audit. The actual discovery of material fraud must be reported if discovered in an audit. If the risk factors are so great that the auditor cannot offer an opinion on the financial statements due to fraudulent financial reporting or misappropriation of assets, they would need to withdraw from the engagement and communicate the problems to management.

Some reasons that fraud may not be discovered during an audit could be:

- Document falsification, if theft of cash is concealed through forging signatures on checks it may not be detected. Auditors are not trained or expected to be experts in forgery.

- Collusion among management, employees, and third parties. An auditor may go to a third party for confirmation of a transaction. If the third party is in collusion with the employee or manager engaged in fraud, they can present false evidence that a transaction took place.

Putting controls in place in a non-profit organization to reduce the risk of fraud requires a different type of diligence than what exists in a for-profit corporation. In a for-profit organization the owners or shareholders are motivated to maximize profits and will engage in fraud prevention steps to ensure their share of profits are protected.

In a non-profit organization if fraud occurs and there is a loss to the organization it will impact the ability of the organization to deliver services. The people receiving those services have the most at stake in any fraud prevention program but usually are not involved in its design or oversight.

[*End of excerpt from KPMG analysis in BSAI Amendment 71 analysis*.]

<u>Alternative 5.4: Require the Aleut Corporation to submit a report to the Council prior to its June 2006 meeting</u>

At its April 2004 meeting, the Council requested the addition of the following alternative:

> The Council shall conduct a one time review of the AI pollock fishery performance at its June 2006 meeting. At its June 2006 meeting, the Council shall review the AI pollock fishery performance, including information on harvest success, development of a small vessel fleet, and progress toward completion of pollock processing capacity to determine if

> further adjustments to the AI pollock TAC may be appropriate, in light of Section 803 and Senator Stevens' floor language.

If selected, Alternative 5.4 would mean that the Council would conduct a review of the AI pollock fishery performance at its June 2006 meeting. A report would be needed as a basis for this review, so an additional element was added to the Council's motion that would specifically require the Aleut Corporation to submit a report to the Council prior to the June 2006 meeting.

The June 2006 Council meeting will occur the week of June 3, 2006. The report from the Aleut Corporation should be required to be submitted to the Council by May 1, 2006, so that there would be enough time for Council review of the report prior to the June meeting.

The requirement for a report to the Council by the Aleut Corporation, the content of the report, and the submission date would be included in NMFS regulations governing the AI pollock allocation. NMFS regulations would specify that the Aleut Corporation must provide the Council a report about "the AI pollock fishery performance, including information on harvest success, development of a small vessel fleet, and progress toward completion of pollock processing capacity." If the Council selected Alternative 5.4 as part of its preferred alternative, it would mean that the Council intended, at this time, to review the AI pollock allocation at its June 2006 meeting. However, NMFS regulations would not require the Council to conduct such a review at a specific meeting. In addition, the Council's motion describing Alternative 5.4 specified that the Council would "determine if further adjustments to the AI pollock TAC may be appropriate, in light of Section 803 and Senator Stevens' floor language." If Alternative 5.4 were selected, it would indicate the Council's intent at this time about the nature of its review of the AI pollock allocation at the June 2006 meeting. However, this intent would not be codified in NMFS regulations and the Council would decide at the time it conducted its review of the scope and nature of that review. The Council could, at that time, or any other meeting, decide to initiate analysis of FMP amendments or regulatory amendments to revise aspects of the AI pollock allocation consistent with the Federal statute.

<u>Summary of the Alternatives and Discussion of Combining Alternatives</u>

Table 4.6.1-1 provides a summary of some of the primary elements of Alternatives 1 through 4 for reporting and oversight of the use of the AI pollock allocation for economic development in Adak.

Table 4.6.1-1 Comparison of Alternatives 5.1 through 5.4 for a report from the Aleut Corporation about its economic development activities.

Element	Alternative 5.1	Alternative 5.2	Alternative 5.3	Alternative 5.4
Aleut Corp. must submit a report	No	Yes	Yes	Yes
The report would be submitted to	na	Council	NMFS or State of Alaska	Council
Would the report contain confidential information?	na	No	Yes	No
When must the report be submitted?	na	by January 31 of each year, starting in 2006	by May 31 of each year, starting in 2006.	One time report submitted by May 1, 2006 in time for review at the June 2006 Council meeting.

na = not applicable.

Alternative 5.1 does not require a report. Alternatives 5.2, 5.3, and 5.4 would require the Aleut Corporation to submit a report about its use of the AI pollock allocation for economic development in Adak. Under Alternatives 5.2 and Alternative 5.4, the report would be submitted to the Council and it would not be required to contain confidential information. These reports would be general, descriptive reports summarizing how the Aleut Corporation was using the AI pollock for economic development in Adak. Under Alternative 5.3, a report similar in scope with the annual audited financial statements submitted by the CDQ groups would be submitted to NMFS or the State. This report would be required to contain confidential information, so it could be not released to the Council or the public. NMFS or State staff and the Aleut Corporation could provide a general overview of this report to the Council. The annual report to the Council under alternative 5.2 would be required to be submitted by January 31 for the activities of the previous calendar year. The first report would be submitted by January 31, 2006. The annual report to NMFS or the State under Alternative 5.3 would be submitted by May 31 of each year, covering the activities of the previous calendar year. The first annual report would be submitted by May 31, 2006. Alternative 5.4 would require a one-time report to the Council by the Aleut Corporation by May 1, 2006, so that the Council could review the AI pollock allocation at its June 2006 meetings.

Combining Alternative 5.2 and Alternative 5.4

Selection of Alternative 5.2 and Alternative 5.4 together would require an annual report to the Council from the Aleut Corporation on a continuing basis, but with some modifications just for 2006. Alternative 5.2 would require the Aleut Corporation to submit an annual report to the Council by January 31 of each year. The Council could review these reports at its February meeting. Alternative 5.4 would require the Aleut Corporation to submit a report just prior to the June 2006 Council meeting for the Council to use as a basis of its review of the AI pollock allocations.

If the Council recommended both an annual report and an initial evaluation of the AI pollock allocation at its June meeting, it could select both Alternative 5.2 and Alternative 5.4 with a modification to the report submission and review dates for 2005 and 2006. It may make sense to require the Aleut Corporation to submit a report by May 31, 2006 covering all activities from January 1, 2005 through May 31, 2006. This report would allow the Aleut Corporation to have fisheries in both the 2005 and 2006 A-seasons before reporting back to the Council. This first report would be used for the Council's initial review of the AI pollock allocation at its June 2006 meeting. Annual reports from the Aleut Corporation to the Council under Alternative 5.2 could then be required starting on January 31, 2007 (for 2006) and continuing into the future.

Combining Alternative 5.3 and Alternative 5.4

Selection of Alternative 5.3 and Alternative 5.4 together would require the Aleut Corporation to submit a confidential annual report to NMFS or the State similar to the annual audited financial statements and associated reports submitted by the CDQ groups. Under Alternative 5.3, these annual reports would be required to be submitted to NMFS by May 31 of each year for the previous calendar year, starting on May 31, 2006 (for 2005). This report would contain confidential information, so it could not directly be used by the Council as basis for its June 2006 review under Alternative 5.4. Alternative 5.3 would not require a separate, non-confidential annual report to the Council by the Aleut Corporation. Therefore, if the Council selected both Alternative 5.3 and Alternative 5.4, it would mean that the Aleut Corporation would be required to submit its annual report to NMFS or the State under Alternative 5.3 on an on-going basis, and submit a separate, one-time report to the Council for its review in June 2006. If the Council selected Alternative 5.3 and Alternative 5.4, and if the Council wanted NMFS or the State to provide an evaluation of the annual report for the June 2006 meeting, NMFS would have to require the Aleut Corporation to submit its annual report to NMFS or the State by May 1, 2006, for that year only. If the annual reports were submitted to NMFS or the State on May 31, 2006, as specified under Alternative 5.3, staff would not have time between that date and June 3, 2006, to review and evaluate the confidential annual report submitted to NMFS.

4.6.2 Effects of the Economic Development Mandate Alternatives

Effects on Target Species

5.1 Economic reporting requirements are unlikely to impact the AI pollock stock or fishery.

5.2 Heightened Council oversight through a required economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands. This could lead to identification of future activities that might affect the pollock fishery and in turn the pollock stock. Data gathered from an appropriately-constructed data report could conceivably improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. The mere act of requiring a report would not affect the pollock stock, however. The effect of this alternative is judged to be insignificant.

5.3 A more detailed reporting requirement would result in even further heightened Council oversight and affect fishery development as detailed in 5.2. The mere act of requiring a report, however, would not affect the pollock stock. The effect of this alternative is judged to be insignificant.

5.4 Required submission of a report in June 2006 may help guide Council in appropriate future allocation policy (in 2007 and subsequent years) for the AI pollock fishery. Changes in allocations would be subject to analysis at the time. Impacts would likely be very similar to those described above for 5.2. The effect of this alternative is not significant.

Effects on Other Target Species and Fisheries

5.1 No impacts on other target fisheries are likely from this alternative (no economic report required).

5.2 Heightened Council oversight through a required economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could identify potential future activities that might have some effect on other target fisheries. Data gathered from an appropriately-constructed data report could conceivable improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. However, the mere act of requiring a report would not affect other target species or the fisheries that harvest these species. Thus, the effects of this alternative are judged to be insignificant.

5.3 A more detailed reporting requirement would result in even further heightened Council oversight. Arguably a more detailed report might provide additional insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could identify potential future activities that might have some effect on other target fisheries. As described above in 5.2, data gathered from an appropriately-constructed data report could conceivable improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. However, the mere act of requiring a report would not affect other target species or the fisheries that harvest these species. Thus, the effects of this alternative are judged to be insignificant.

5.4 The report may lead the Council to change allocation policy for the AI pollock fishery, and this could affect other target species and fisheries. However, changes would be subject to analysis at the time. Impacts would likely be very similar to those described above for 5.2. The effect of this alternative is not significant.

Effects on Incidental Catch of Other or Non-specified Species

5.1 No significant impacts on stocks of other or non-specified species or to levels of incidental catch of these species in the groundfish fisheries would occur as a result of this alternative.

5.2 Heightened Council oversight through a required economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could conceivably improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. As a consequence, fishery management improvement may help reduce bycatch in the AI pollock fishery. However, the mere act of requiring a report would not affect the incidental catch of other or nonspecified species. Thus, thus the effects of this alternative are judged to be insignificant.

5.3 Heightened Council oversight through a required more detailed economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could conceivably improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. As a consequence, fishery management improvement may help reduce bycatch in the AI pollock fishery. However, the mere act of requiring a report would not affect the incidental catch of other or nonspecified species. Thus, the effects of this alternative are judged to be insignificant.

5.4 The report may lead the Council to change allocation policy for the AI pollock fishery, and this could affect other or non-specified species. However, changes would be subject to analysis at the time. Impacts would likely be very similar to those described above for 5.2. The effect of this alternative is not significant.

Effects on Incidental Catch of Forage Fish Species

5.1 No significant impacts on stocks of forage species, or to levels of incidental catch of these species in the groundfish fisheries, would occur as a result of this alternative.

5.2 Heightened Council oversight through a required economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could conceivably improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. As a consequence, fishery management improvement may help reduce bycatch in the AI pollock fishery. However, the mere act of requiring a report would not affect the incidental catch of forage fish species. Thus, the effects of this alternative are judged to be insignificant.

5.3 Heightened Council oversight through a required more detailed economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could conceivably improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. As a consequence, fishery management improvement may help reduce bycatch in the AI pollock fishery. However, the mere act of requiring a report would not affect the incidental catch of forage fish species. Thus, the effects of this alternative are judged to be insignificant.

5.4 The report may lead the Council to change allocation policy for the AI pollock fishery, and this could affect forage species. However, changes would be subject to analysis at the time. Impacts would likely be very similar to those described above for 5.2. The effect of this alternative is not significant.

Effects on Incidental Catch of Prohibited Species

5.1 No significant impacts on stocks of prohibited species, or to levels of incidental catch of these species in the groundfish fisheries, would occur as a result of this alternative.

5.2 Heightened Council oversight through a required economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could conceivably improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. As a consequence, fishery management improvement may help reduce bycatch in the AI pollock fishery. However, the mere act of requiring a report would not affect the incidental catch of PSC. Thus, the effects of this alternative are judged to be insignificant.

5.3 Heightened Council oversight through a required more detailed economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could conceivably improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. As a consequence, fishery management improvement may help reduce bycatch in the AI pollock fishery. However, the mere act of requiring a report would not affect the incidental catch of PSC. Thus, the effects of this alternative are judged to be insignificant.

5.4 The report may lead the Council to change allocation policy for the AI pollock fishery, and this could affect PSC species. However, changes would be subject to analysis at the time. Impacts would likely be very similar to those described above for 5.2. The effect of this alternative is not significant.

Effects on Steller Sea Lions

5.1 No impacts on Steller sea lions are likely from this alternative.

5.2 Heightened Council oversight through a required economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could adversely impact Steller sea lions. Data gathered from an appropriately-constructed data report could conceivable improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. However, the mere act of requiring a report would not affect Steller sea lions. The effect of this alternative is judged to be insignificant.

5.3 Under this alternative, an even more extensive economic development report would further heightened Council oversight. Arguably such a more detailed and expanded report could provide further insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could adversely impact Steller sea lions. Data gathered from an appropriately-constructed data report could conceivable improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. However, the mere act of requiring a report would not affect Steller sea lions. The effect of this alternative is judged to be insignificant.

5.4 The report may lead the Council to change allocation policy for the AI pollock fishery, and this could affect Steller sea lions. However, changes would be subject to analysis at the time. Impacts would likely be very similar to those described above for 5.2. The effect of this alternative is not significant

Effects on Other Marine Mammals

5.1 No impacts on marine mammals are likely from this alternative.

5.2 Heightened Council oversight through a required economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could adversely impact marine mammals. Data gathered from an appropriately-constructed data report could conceivable improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. However, the mere act of requiring a report would not affect other marine mammals. The effect of this alternative is judged to be insignificant.

5.3 Under this alternative, an even more extensive economic development report would further heightened Council oversight. Arguably such a more detailed and expanded report could provide further insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could adversely impact marine mammals. Data gathered from an appropriately-constructed data report could conceivable improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. However, the mere act of requiring a report would not affect other marine mammals. The effect of this alternative is judged to be insignificant.

5.4 The report may lead the Council to change allocation policy for the AI pollock fishery, and this could affect Steller sea lions. However, changes would be subject to analysis at the time. Impacts would likely be very similar to those described above for 5.2. The effect of this alternative is not significant

Effects on Seabirds

5.1 Increased development and vessel activity in the main ports has potential to impact eiders, which utilize some protected harbors of the Aleutians and may migrate through certain areas. Vessel strikes could increase with additional vessel activity in winter months, and possibilities of small spills and contamination exist with increase in the fishery. Having no requirement of an annual report to the Council on the economic development mandate could reduce oversight of these issues. Observer and other monitoring would continue, however, so the overall effects of not requiring an annual report are judged to be not significant.

5.2 Council oversight through a required economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could adversely impact seabirds and seaducks. Data gathered from an appropriately-constructed data report could conceivable improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. While some potential benefit could accrue to the overall process of fishery management, no particularly adverse or positive impacts to seabirds are likely, and therefore this alternative would have no significant impact. The mere act of requiring a report would not affect seabirds.

5.3 A heightened level of Council oversight of the AI pollock fishery might have some benefits to fishery management as discussed immediately above, but in terms of specific impacts to seabirds the alternative would not be significant.

5.4 The report may lead the Council to change allocation policy for the AI pollock fishery, and this could affect Steller sea lions. However, changes would be subject to analysis at the time. Impacts would likely be very similar to those described above for 5.2. The effect of this alternative is not significant

Effects on Habitat

5.1 This alternative addresses reporting; no report would be required under this alternative. There would be no significant effect on habitat from this alternative.

5.2 Council oversight through a required economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could adversely impact benthic habitat. Data gathered from an appropriately-constructed data report could conceivable improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. While some potential benefit could accrue to the overall process of fishery management, no particularly adverse or positive impacts to habitat are likely, and therefore this alternative would have no significant impact. The mere act of requiring a report would not affect habitat in the Aleutian Islands area.

5.3 Council oversight through a required more enhanced economic development report might provide insights and early indications of future economic development in the Adak area and surrounding Aleutian Islands that could adversely impact benthic habitat. Data gathered from an appropriately-constructed data report could conceivable improve the Council's ability to anticipate, and mitigate, potential impacts before they materialize. While some potential benefit could accrue to the overall process of fishery management, no particularly adverse or positive impacts to habitat are likely, and therefore this alternative would have no significant impact. The mere act of requiring a report would not affect habitat in the Aleutian Islands area.

5.4 The report may lead the Council to change allocation policy for the AI pollock fishery, and this could affect habitat. However, changes would be subject to analysis at the time. Impacts would likely be very similar to those described above for 5.2. The effect of this alternative is not significant

Ecosystem Effects

5.1 This alternative would not require the Aleut Corporation to provide a report to the Council on how the pollock apportionment to the Corporation in the AI helped develop Adak economically. This alternative is a procedural issue and would not have an effect on ecosystem considerations.

5.2 This alternative would require a minimal annual report to the Council. While a heightened awareness of potential future economic activities in the AI region might provide data that could be helpful to fishery managers, particularly by providing data that might allow the Council to anticipate, and mitigate, potential impacts before they materialize, this alternative is a procedural issue and would not have an effect on ecosystem considerations.

5.3 This alternative would require a more detailed annual report to the Council, along the lines of what CDQ groups are required to file. While a heightened awareness of potential future economic activities in the AI region might provide data that could be helpful to fishery managers, particularly by providing data that might allow the Council to anticipate, and mitigate, potential impacts before they materialize, this alternative is a procedural issue and would not have an effect on ecosystem considerations.

5.4 The report may lead the Council to change allocation policy for the AI pollock fishery, and this could have ecosystem effects. However, changes would be subject to analysis at the time. Impacts would likely be very similar to those described above for 5.2. The effect of this alternative is not significant

Effects on State-managed and Parallel Fisheries

5.1 This alternative would not require the Aleut Corporation to provide a report to the Council on how the pollock apportionment to the Corporation in the AI helped develop Adak economically. The impact of this alternative would not be significant.

5.2 Under this alternative, a requirement for a report on economic development in Adak from the AI pollock fishery, fishery management might benefit if information in the report provides insights into how to better manage the fisheries in the AI region. Conceivably then, if the State authorizes a parallel pollock fishery, conditioned to follow Federal regulations, a report might have some, albeit likely small, beneficial effects. Overall, however, the effects would likely be insignificant given the 50 percent increase in parallel fishery harvest significance criterion.

5.3 Under this alternative, a requirement for a more detailed report on economic development in Adak from the AI pollock fishery, fishery management might benefit if information in the report provides insights into how to better manage the fisheries in the AI region. Conceivably then, if the State authorizes a parallel pollock fishery, conditioned to follow Federal regulations, a report might have some, albeit likely small, beneficial effects. Overall, however, the effects would likely be insignificant given the 50 percent increase in parallel fishery harvest significance criterion.

5.4 The report may lead the Council to change allocation policy for the AI pollock fishery, and this could affect state managed fisheries. However, changes would be subject to analysis at the time. Impacts would likely be very similar to those described above for 5.2. The effect of this alternative is not significant

Table 4.6.2-1 Economic and socio-economic significance analysis of reporting requirements

Issue	The Council must decide whether or not to require a report from the Aleut Corporation on the ways in which it has used its AI pollock allocation to promote economic development in Adak. The alternatives are: (1) do not require a report, (2) require a simple report, and (3) require a report similar to those required from the CDQ groups.			
	Alternative 5.1	**Alternative 5.2**	**Alternative 5.3**	**Alternative 5.4**
Gross revenues Operating costs Net returns Safety and health Related fisheries Consumer effects Management and enforcement Excess capacity Bycatch and discards Subsistence Impacts on benefits from marine ecosystems Community impacts	No direct effect on this issue. Not significant.	No direct effect on this issue. Not significant.	No direct effect on this issue. Not significant.	No direct effect on this issue. Not significant.
Note: This action has no direct or indirect impact on these issues. This action may have a modest impact on the ways in which the Aleut Corporation uses the resources it obtains through the AI pollock allocation. To the extent that it promotes the development of Adak, it may have cumulative effects. Cumulative impacts are discussed in Chapter 5.				

4.6.3 Council's Preferred Alternative

As noted in Section 2.3, the Council chose to adopt Alternatives 5.2 and 5.3, and added some additional language requesting inclusion of information on incidental catches. Both 5.2 and 5.3 were analyzed in this section, and the environmental impacts of these alternatives were determined to be insignificant. The request for additional information should not be difficult for the Aleut Corporation to meet, and has no tendency to increase the environmental impacts of this decision element. The environmental impacts of the Council's preferred alternative are therefore determined to be insignificant.

4.7 BSAI Chinook PSC Cap Options

4.7.1 Introduction

The non-CDQ directed pollock fishery in the BSAI is subject to a 26,825 Chinook salmon cap. If the cap is exceeded, certain areas of the BSAI will be closed to fishing for pollock. While this will not close the pollock fishery, this will increase the cost of fishing for pollock.

Under the status quo, the Chinook bycatch in an AI pollock fishery would count against this cap. Concerns have been raised that higher bycatch rates in the AI than in the Bering Sea, or funding the AI pollock DPF from non-pollock fisheries, would lead to higher cumulative Chinook harvests, and increase the likelihood that the cap will be reached and the closures triggered, or lead to earlier closures than would otherwise occur.

Alternatives

The Council's April 2004 motion asked for an evaluation of the possibility of not counting AI pollock Chinook PSC against the BSAI Chinook salmon cap. The three alternatives for this decision are:

6.1 No action. Chinook salmon bycatch in the AI pollock fishery would count against the BSAI Chinook salmon bycatch cap.

6.2 Chinook salmon bycatch in the AI pollock fishery would not count toward the Chinook salmon bycatch cap in the BSAI.

6.3 A new 360 Chinook salmon bycatch cap is set for the AI pollock fishery which, when attained, results in closure of the AI Chinook Salmon Savings Area only.[40]

The BSAI Chinook PSC Cap Regulations

[40] Note that, under this alternative, the AI CHSSA may also be closed by fishing activity in the BSAI. If the non-CDQ BSAI fishery reaches its cap, the AI CHSSA would be closed.

Catch limits have been implemented for prohibited species in many groundfish fisheries. These include all species of salmon, steelhead, crabs, Pacific halibut and Pacific herring. Prohibited species cannot be retained, and must be returned to the sea as soon as possible after they are caught (except for salmon and halibut retained and donated to food bank programs). Reaching a prohibited species catch (PSC) limit may result in closures of a target fishery, area, or season. Because of these closures, prohibited species catch can have significant economic implications for the groundfish fisheries. Regulations at 679.21(e) address PSC limits for the BSAI pollock fishery.

Any amount of Chinook that is incidentally taken in the BSAI midwater pollock fishery will be counted against the Chinook PSC limits specified for the pelagic trawl fishery. If a Chinook PSC limit is reached, then restrictions (detailed below) are imposed on pollock fishing in the BSAI chinook salmon savings area (CHSSA). The area covered by the CHSSA is shown in Figure 4.7.1-1.

Regulations at 679.21(e)(vii) set the Chinook PSC cap:

The trawl closures identified in paragraph (e)(7)(viii) of this section will take effect when the Regional Administrator determines that the PSC limit of Chinook salmon caught while harvesting pollock in the BSAI between January 1 and December 31 is attained according to the following amounts identified for each year:

Year	Chinook salmon limit
2001	41,000
2002	37,000
2003	33,000
2004 and after	29,000

Regulations at (E)(7)(viii) describe the closures that result when the cap is reached:

> *If, during the fishing year, the Regional Administrator determines that catch of Chinook salmon, by vessels using trawl gear while directed fishing for pollock in the BSAI, will reach the annual limit, as identified in paragraph (e)(1)(vii) of this section, NMFS, by notification in the* ***Federal Register*** *will close the Chinook Salmon Savings Area, as defined in Figure 8 to this part, to directed salmon fishing for pollock with trawl gear consistent with the following dates:*
>
> *(A) From the effective date of the closure until April 15, and from September 1 through December 31, if the Regional Administrator determines that the annual limit of Chinook salon will be attained before April 15.*

(B) From September 1 through December 31, if the Regional Administrator determines that the annual limit of Chinook salmon will be attained after April 15.

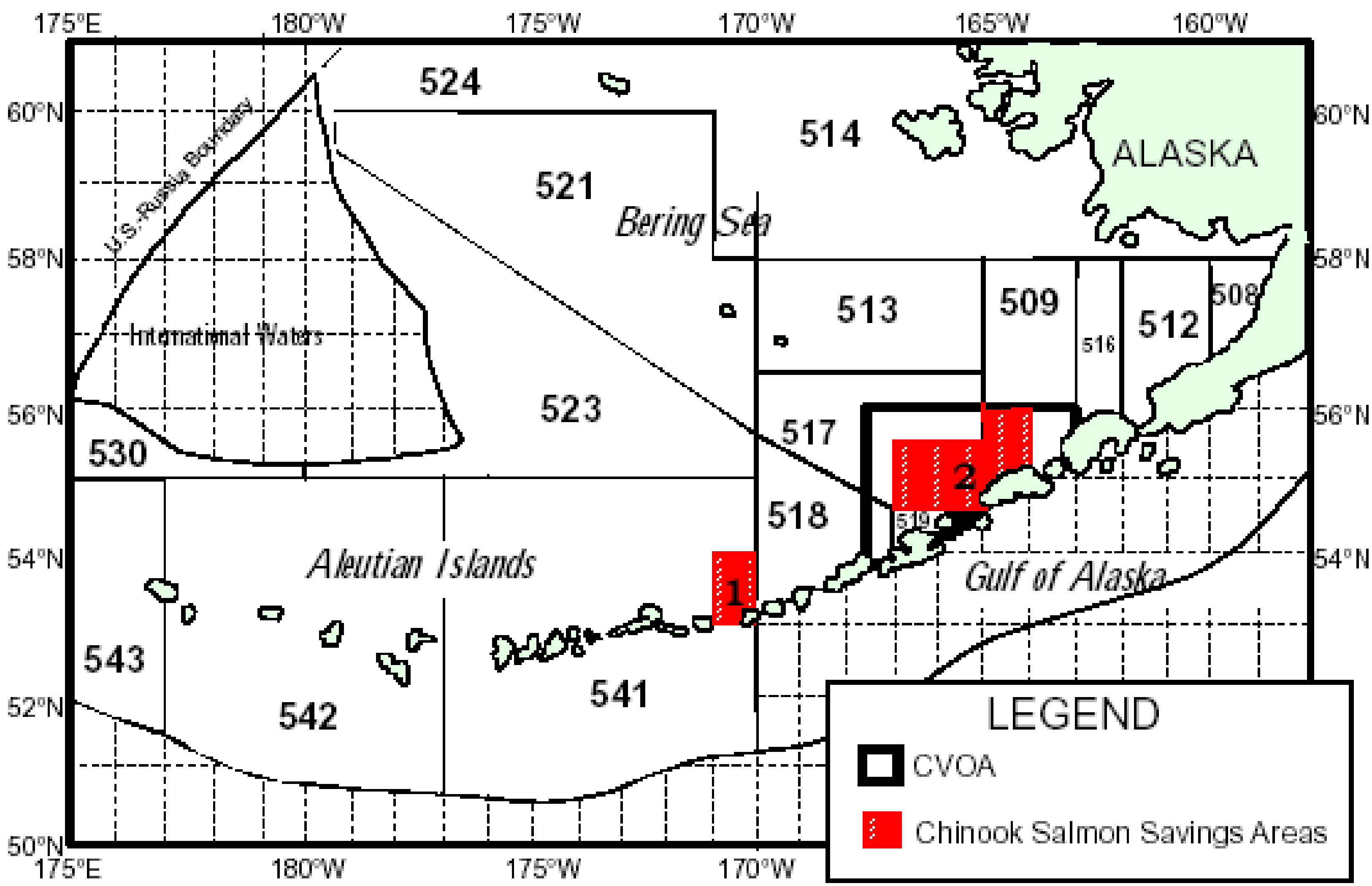
Regulations at 679.21(e)(1)(i) allocate 7.5%, or 2,175 Chinook salmon in 2004 and after, as the prohibited species quota (PSQ) for the CDQ program and the remaining 26,825 Chinook salmon to the BSAI non-CDQ fisheries.

Figure 8 from the regulations, showing the Chinook salmon savings areas, is shown in Figure 4.7.1-1.

In summary, each year the non-CDQ BSAI directed pollock fisheries will be subject to a Chinook "cap" of 26,825 Chinook. If this cap is reached before April 15, the Chinook salmon savings areas (CHSSA) shown in Figure 4.7.1-1 will be closed until April 15, and then again from September 1 to December 31. If the cap is reached after April 15 and prior to September 1, the CHSSA will be closed from September 1 to December 31. If the cap is not reached until after September 1, then the CHSSA remains open until the cap is reached, and at that time it closes until December 31.

Additional background information on BSAI groundfish fishery PSC management and bycatch rates is provided in Chapter 3 of this EA/RIR.

Figure 4.7.1-1 **Chinook salmon savings areas in the BSAI**



Chinook PSC Catches and CHSSA Closures in Recent Years

Figure 4.7.1-2 summarizes data on cumulative Chinook bycatches in the EBS non-CDQ pollock fisheries for the years 1999 to 2004. Data for 2004 are included through early May. The period chosen excludes earlier years in which the AI pollock fishery was open, and includes the period during which the AFA was in force.

Annual patterns of bycatch are similar. Cumulative bycatch rises rapidly from the opening of the fishery in late January through about mid to late March. There is then little or no change in cumulative harvest until the fall season begins in August. Cumulative harvests then rise steeply, before leveling off again later in the fall.

In 1999 and 2000, Chinook bycatch rates and cumulative Chinook harvests were low.

In 2001, the actual non-CDQ cap was 37,925 Chinook[41], and the pollock fleet harvested a total of about 31,000 Chinook in the BSAI. The fleet exceeded the 2004 non-CDQ cap of 26,825 Chinook during the statistical week ending on October 27. The cap would have stopped fishing in the CHSSA during the following week (ending November 3). However, no catcher vessels reported harvests after the week of October 27, and catcher processors would not have been affected by the closure of the CHSSA at that season. A large part of the CHSSA lies within the catcher vessel operational area (CVOA) from which catcher processors are excluded by regulation from June 10 through November 1 (679.22(a)(5) and 679.23(e)(2)) (NOAA Fisheries, Alaska Region).

In 2002, the actual non-CDQ cap was 34,225 Chinook, and the pollock fleet harvested a total of about 34,000 Chinook in the BSAI. The fleet exceeded the 2004 non-CDQ cap of 26,825 Chinook during the statistical week ending on September 28. Under the regulatory provisions in place in 2004, pollock directed fishing would have been closed in the CHSSA when the salmon PSC limit had been taken. This would only have affected catcher vessels, because the catcher/processors would not have been permitted to fish in this area in the fall. During the remaining five weeks that catcher vessels were active in 2003, they caught about 57,000 mt of pollock, or about 7% of the 2003 catcher vessel harvest (NOAA Fisheries, Alaska Region). The savings area closure would have forced the catcher vessels to fish elsewhere, as noted earlier, at higher cost and for potentially lower delivered prices.

In 2003, the actual non-CDQ cap was 30,525 Chinook, and the pollock fleet harvested a total of about 44,700 Chinook in the BSAI. The fleet exceeded the 2004 non-CDQ cap of 26,825 Chinook during the statistical week ending on March 15. In 2003, however, the actual limit was 33,000 Chinook. This limit was reached on the week ending August 30, and the Chinook salmon savings area was closed on September 1. The fishery continued outside of the CHSSA, however, with the total Chinook harvest for the year as noted above. If the 2004 measures had been in place this year, and operations had not altered fishing activity so as to effectively reduce bycatch rates, the CHSSA

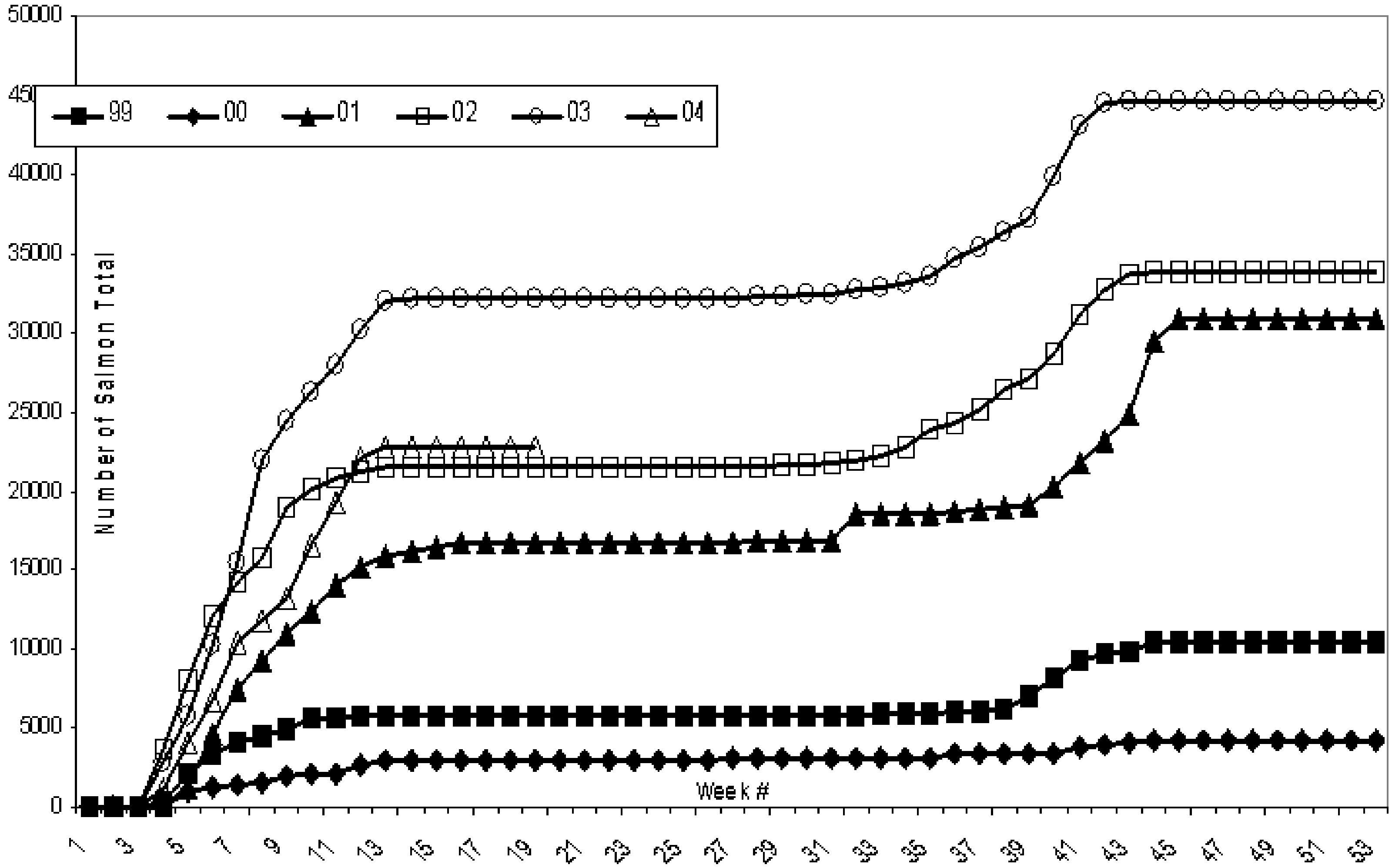
[41]The CDQ and non-CDQ caps are shown in the table cited from regulations earlier in this section. The table shows that the caps were being decreased from 2001 to 2004. Regulations indicate that the 2004 level will cover subsequent years. The CDQ portion of the total cap is 7.5%, so the non-CDQ portion is 92.5%.

would have closed between March 15 and April 15 to both catcher vessels and catcher/processors. It would also have been closed between September 1 and December 31, but this closure would only have affected catcher vessels. A March closure would have come towards the end of the roe fishery; in 2003 the catcher vessels only caught 13% of their winter harvest in the remaining three weeks of their season, while the catcher/processors caught about 21% of theirs.

The conclusions from this analysis: (1) The pollock fleet is operating in ranges where it could reach the Chinook salmon PSC cap in a year and trigger the closure of the savings areas. Given the 2004 cap, a closure would have been triggered in each of the last three years. (2) Closures are likely to be triggered late during the "A" season roe fishery, or during the second half of the year. (3) The closures are most likely to have the largest effect on the catcher vessel component of the pollock fleet, since the Bering Sea savings area lies predominately in the CVOA, and catcher/processor vessels are kept out of this area by regulation during the second half of the year.

The impacts of the cap and savings area closure program were analyzed for BSAI FMP Amendment 21b (ADF&G 1994) and in a subsequent analysis of regulatory measures (ADF&G 1998).

Figure 4.7.1-2 Cumulative annual Chinook bycatch in BSAI non-CDQ pollock fisheries, 1999-2004 (to date)



Costs Associated with CHSSA Closures

If an AI pollock fishery contributes to an earlier closure of the Bering Sea CHSSA, the costs for vessels that would otherwise have fished in this area could be increased. These vessels will be forced to move out of it and fish in waters beyond its boundaries. This would increase the vessel operating costs. Fuel expenses and wear and tear on the vessel from increased time at sea would both be important. Moreover, the move may be associated with increased operating costs due to lower catch per unit of effort as vessels are pushed from more desirable fishing grounds. These costs are likely to be more of a burden for catcher vessels, which must travel back and forth to port to deliver their catches. Moreover, a closure in the fall would only affect catcher vessels, since catcher/processors are not permitted to fish within the Catcher Vessel Operating Area (CVOA), within which the CHSSA is located, during this period. Only catcher vessels would be affected by a closure.

Loss of "continuity" may be one factor contributing to reduced catcher vessel CPUE. A company may "sequence" the activity of the vessels in a fleet of catcher vessels. For example, while one vessel is fishing, another may be returning to port, and a third may be traveling to the location of the vessel that is fishing. When the outbound vessel reaches the location of the vessel fishing, it can take the place of that vessel without losing contact with the productive fish. If the fleet must fish further from port, the increased transit times, coupled with the limited amount of time a catcher vessel can hold fish before delivery, may interrupt this continuity. This could be associated with a loss of contact with the school, an increased need for exploratory fishing, and lower CPUE. In port, the increased transit time from the grounds may be associated with the interruption of the smooth flow of pollock deliveries, and the need for more frequent shut down - start up of the processing plant.[42]

Increased running time to and from the grounds may also be associated with a decline in the quality of delivered product by catcher vessels, with consequent price effects. Catcher vessels want to offload the oldest fish aboard after about 25 hours. In March, when the pollock are school for spawning, it may take 12 to 18 hours to fill a vessel on the grounds in the CHSSA, and the trip back to Dutch Harbor could take 10 hours. Fishing and travel time together produce a time frame on the order of 15 hours before delivery of the oldest product.[43] A CHSSA closure may affect these times in two ways; fishermen operating in new grounds may face lower CPUE and take longer to fill the vessel, and the return time to Dutch Harbor is lengthened by hours.[44] Processors producing fillets prefer larger pollock than processors producing surimi. A vessel fishing for a processor with a size preference may be forced off of desirable sized pollock and forced to fish for unsuitably sized pollock by an area closure.[45]

Chinook salmon bycatch reduction

[42]Alden, Marcus. President of Westward Fishing Co. 1111 3rd Avenue, Suite 2360, Seattle, WA 98101. Personal communication. May 10, 2004.

[43]These estimates are meant to be plausible and approximate and are meant to illustrate the issue.

[44]Alden, ibid.

[45]Gruver, John. Intercoop Manager, United Catcher Boats. Fisherman's Terminal, 4005 20th Ave. W - Suite 110, Seattle, WA 98199. Personal communication, May 29, 2003.

The benefit of the cap and closure program is that Chinook salmon bycatch will be reduced. The potential for closures provide and incentive for fishermen to address bycatch issues. Closures of high the savings areas may move fishermen from areas with high bycatch. Chinook salmon caught by the pollock fleet will not return to their natal waters and will not become available to the fisheries exploiting those waters. Returning salmon are used in subsistence, commercial, and recreational fisheries and for escapement and investment in future stocks. Changes in trawl technology that reduce by-catch rates and that increase the possibility that the pollock trawl fleet will not take the full PSC cap will increase the numbers of salmon returning to these uses.

Reductions in salmon PSC in the pollock fishery will not translate directly into one-to-one increases in salmon available for U.S. inshore uses for two reasons: the increased return to U.S. fisheries will be less than the reduction in trawl PSC harvest since many of the fish originate in Canada or Asian waters, and because many of the salmon may die from natural causes between the time they escape the trawl and the time they would otherwise have returned to those waters. Little current information is available on the stock of origin for Chinook salmon. One older study suggests that over half (60%) may come from Western Alaska. The study found that significant amounts also came from Southcentral Alaska (17%), Asia (14%) and Southeast Alaska and Canada (9%). (Witherell, *et al.*, 2002, pages 59-60). Witherell *et al.* (2002) found that Chinook salmon were one to two years away from returning to spawn when taken as bycatch; they assumed Chinook natural mortality rates of 10% to 20% a year (Witherell, *et al*. 2000, page 61).[46]

Stocks of Chinook salmon in western Alaska have declined over the past years. However, some improvement in Chinook run strength has occurred recently, although harvests have remained below the long term average. In the Kuskokwim Area, the 2003 Chinook harvest was nearly 50% below the 10-year average (1993-2002), and some escapement goals were not attained. In the Yukon Area, the 2003 Chinook harvest was the highest since 1997 but was still 52% below the 10-year average. The Yukon Chinook run was stronger than anticipated in 2003, however, and ADF&G estimated there was a surplus of up to 40,000 chinook salmon unharvested; escapement was adequate to most drainages in this area. Chinook harvests in 2003 for the Norton Sound Area were very poor. The preliminary Arctic-Yukon-Kuskokwim Region Chinook harvest for 2003 was 57,000 fish (excluding confidential Norton Sound data); projections for 2004 are 69,000 Chinook salmon. These data were obtained from Plotnick and Eggers (2004).

Potential Impact of Opening the AI Pollock Fishery on BSAI Chinook Bycatch

Table 4.7.1-1 shows historical Chinook salmon bycatch rates in the AI pollock fishery during the 1990s, by year, statistical area, and "A" or "B" season. The average rate over the period from 1991 to 1998 (weighted to take account of varying harvest levels between years) is 0.024.

[46]Age specific information was not as good for chum salmon.

Table 4.7.1-1 Chinook salmon bycatch rates in the pelagic AI pollock fishery during the 1990s

Year	AI rate	541		542		543	
		A	B	A	B	A	B
1991	.019	Not available by area during this period. "AI rates" reported to the left are probably primarily 541 harvests.					
1992	.043						
1993	0.034	.034	.007				
1994	0.022	.024	.008		.000		
1995	0.025	.055	.000	.001	.000		
1996	.005	.007	.110	.001			
1997	.023	.064		.004		.000	
1998	.004	.011		.019	.050	.001	
Notes: Source is HALX data base.							

It is not clear if these rates would be a good guide to Chinook bycatch rates in a pollock fishery that might open in 2005. It is not clear that the rates in Table 4.7.1-1 would have been representative of rates in a pollock roe fishery during that period. The fishery is reported to have originally begun in the early 1990s as a pollock fishery. It was only gradually, during the 1990s, that the industry developed a separate pricing scheme for roe pollock. First a differentiation was made between "A" and "B"season pollock prices and then, in the last years of the fishery, explicit arrangements were introduced to price the pollock roe.[47]

Moreover, there have been many changes since the fishery closed in 1998, and it is not clear what the net effect of these would be on Chinook bycatch. Some of the important uncertainties:

- Most pollock production from the fishery in the 1990s came from within waters in which pollock fishing is now prohibited by SSL protection measures. The historical Chinook harvest rates are relevant to those waters.
- The pollock fishery in the 1990s was a competitive derby fishery. A new fishery will be a highly rationalized fishery. Pollock rationalization elsewhere in the BSAI has been associated with improvements in the ability of fishermen to address bycatch problems.
- Section 803 contemplates the introduction, by the Aleut Corporation, of a new class of small, 60 foot and under, pollock mid-water trawlers. This class of vessel has little operational experience in this area fishing for pollock. There are considerable uncertainties about whether or not this class of vessel will be economically viable, and if viable, where they will fish and what their bycatch rates will be. Under some of the alternatives evaluated in this EA, this fleet would be unobserved, compromising the ability to monitor Chinook bycatch.
- New pollock fishing techniques that may reduce Chinook bycatch rates are being investigated. It is not clear if AI pollock operations would use these, and how effective they may be. Successful development and introduction of a salmon excluder device for pelagic trawls may reduce Chinook bycatch rates. Data on fish behavior being collected in connection with the excluder experiments may provide insights into fishing tactics that might reduce salmon PSC.[48]

[47]Gruver, pers. comm. 5-6-04.
[48] Gruver, op. cit.

- Since fishermen will not be fishing on familiar grounds (because many may be new since 1998, and since the main older fishing grounds will be unavailable) they may conduct exploratory fishing involving more tows through the water, with lower average pollock catch per tow. If Chinook harvests per hour of tow were unaffected, Chinook bycatch rates and harvests would be higher.
- To the extent that Chinook bycatch rates are affected by environmental factors, and to the extent that these environmental factors change over time, historical bycatch rates may not be a good guide to future rates.

Since 1998, the pollock fleet has developed its own private-sector arrangements to monitor vessel PSC bycatch rates and feed the information back to the fishing vessels while they are at sea. In this program, observer data and other reports are transmitted to analysts associated with the private firm, Sea State, Inc. Some of these reports are transmitted from sea in almost real time; some are transmitted at the time catcher vessels make their shoreside deliveries. Sea State processes the data, identifying locations with high salmon PSC bycatch rates, and provides the information to the fishing vessels. Vessels are then able to change their trawling operations to avoid areas with high salmon PSC bycatch rates. Irrespective of Sea State reports, vessel operators will often conduct "test fishing" on entering new areas. Test fishing involves taking short tows to see if salmon PSC bycatch is high. Test fishing adds to the cost of fishing activity. Fishermen vary greatly in the extent to which they participate in voluntary avoidance.[49]

The pollock cooperatives formed under the American Fisheries Act (AFA) have also entered into a formal contractual arrangement to avoid areas of high Chinook PSC. Sea State analysts monitor salmon PSC bycatch. Sea State, in cooperation with the Intercooperative manager of United Catcher Boats, is authorized by the agreement to restrict fishing operations in high PSC areas if salmon PSC exceeds a threshold level (there are limits on the total area that may be restricted in a week) . Fishing operations are required, by the terms of their contract in the intercooperative agreement, to limit their fishing activity in an area that is closed. The limitations differ among the cooperatives; cooperatives whose skippers have been fishing with little salmon PSC are limited less than those that have had higher PSC. Cooperatives with high salmon PSC may be prohibited from fishing in the restricted areas for a full week.[50] These agreements are contracts imposing binding obligations on the cooperatives.[51]

There may be no conceptual reason why this agreement could not extend to cover AFA fishing operations that contract to harvest AI pollock with the Aleut Corporation. However, it is unclear whether or not industry representatives would pursue it. Separate "A" season and "B" season agreements are negotiated each year by the cooperatives. The "A" season agreement is normally negotiated in December and early January for an "A" season beginning on January 20. A decision by the cooperatives for the 2005 "A" season fishery would not be available until that time.[52]

[49]Haflinger, Karl. Sea State, Inc. Vashon Island, WA. Personal communication, May 21, 2003; Gruver, op. cit.

[50]The Chinook closures kick in after Chinook PSC reaches a threshold level. The Chinook agreement treats the Bering Sea as a whole and can lead to two weekly closures of 500 to 1,000 square miles. Gruver, op. cit.

[51]Haflinger, op. cit.; Gruver, op. cit.

[52] Gruver, op. cit.

Table 4.7.1-2, which follows, uses the information on Chinook bycatch rates in the AI pollock fishery from 1991 to 1998, and in the Bering Sea pollock fishery from 1999 to 2003, to project possible changes in BSAI pollock Chinook bycatches under different assumptions about: (a) the appropriate AI Chinook bycatch rate, (b) alternative AI pollock DPF levels, and (c) alternative funding alternatives (Alternatives 2.2, 2.3, 2.4, and 2.5). This table is designed to show how reduced Chinook bycatch in the BS, associated with the funding of the AI pollock DPF, and increased Chinook bycatch in the AI, associated with the fishery, might affect overall BSAI Chinook bycatch. The table does this for historically based low, medium and high AI Chinook bycatch rate assumptions.

The table is divided into five blocks. The top block shows estimated AI Chinook bycatches for different AI pollock DPF levels, under a selection of observed historical Chinook bycatch rates. Rates for every year from 1991 to 1998 are used, as well as averages of rates over different period (the averages are weighted averages, taking account of different pollock harvest levels in different years.

The second block shows the reductions in Bering Sea Chinook harvests associated with different funding alternatives and different AI pollock DPF levels. The funding alternatives refer to the different ways under consideration for making AI pollock DPF available under the BSAI OY cap. Alternative 2.2 funds the AI fishery from the AFA pollock quotas, Alternatives 2.3 and 2.4 fund it from assessments on all fishery quotas (2.4 exempts the sablefish IFQ fishery), and 2.5 funds it from pollock AFA, yellowfin sole, and rockfish sole quotas. The pollock fishery has relatively high Chinook bycatch rates, so alternatives that derive more of their funding from the pollock fishery are associated with larger reductions in Chinook bycatch.

The bottom three blocks estimate the net impacts on BSAI Chinook bycatch in groundfish fisheries under different funding alternatives, and different assumptions about AI pollock DPF levels. Three impact levels are estimated. The top block is associated with a "mid-point" estimate; these estimates are calculated assuming the AI Chinook bycatch rate is equal to the average over the period 1991-1998. The second block is a low estimate; these estimates are calculated assuming the AI Chinook bycatch rate is low. The rate for 1998, the year with the lowest bycatch rate was used for these calculations. Note that the values are all negative, indicating that there would be a net decrease in BSAI Chinook bycatch in the groundfish fisheries if the assumptions underlying this alternative were correct. The third and final block is a "high" impact block. The rate for 1992, the year with the highest bycatch rate was used for these calculations. All three blocks show the net BSAI impacts; that is, they show the difference between increased Chinook bycatch in an AI pollock fishery and reduced Chinook bycatch in other BSAI fisheries.

The estimates in the table are based on estimates of annual AI Chinook harvests that have variances that are not known to the authors. If these were known, the estimates would be expressed as ranges. Because of this, the low and high ends should be interpreted as the midpoints of low and high ranges with unknown confidence intervals. If the ranges were expressed as 90% confidence intervals, the ranges would be wider than suggested by the low and high point estimates.

Table 4.7.1-2 Potential net impact on Chinook catches in the BSAI non-CDQ directed pollock fisheries from opening an AI pollock fishery DPF (numbers of Chinook)

AI Chinook catch (under different assumptions about AI Chinook PSC bycatch rates and AI DPF levels)													
Year	**Annual**	**Annual DPF to Aleut Corporation**						**Aleut Corporation “A” season DPF assuming “B” season roll back**					
	AI rates	**10,000**	**20,000**	**30,000**	**40,000**	**50,000**	**58,000**	**4,000**	**8,000**	**12,000**	**16,000**	**20,000**	**23,200**
1991	.0189	189	378	567	756	945	1,097	76	151	227	303	378	454
1992	.0433	433	865	1,298	1,731	2,163	2,509	227	455	682	910	1,137	1,365
1993	.0340	340	680	1,021	1,361	1,701	1,973	152	303	455	607	758	910
1994	.0215	215	430	645	860	1,075	1,247	97	194	292	389	486	583
1995	.0245	245	490	735	980	1,226	1,422	98	196	294	392	490	588
1996	.0053	53	106	158	211	264	306	11	23	34	45	56	68
1997	.0226	226	453	679	905	1,131	1,312	91	181	272	362	453	543
1998	.0036	36	73	109	146	182	211	14	28	42	56	70	84
Average (91-98)	.0239	239	478	717	956	1,195	1,386	100	201	301	402	502	602
Decrease in BS AI non-CDQ directed pollock Chinook catch (assuming 1999-2003 Chinook bycatch rates)													
		Annual DPF to Aleut Corporation						**Aleut Corporation “A” season DPF assuming “B” season roll back**					
Alternative		**10,000**	**20,000**	**30,000**	**40,000**	**50,000**	**58,000**	**4,000**	**8,000**	**12,000**	**16,000**	**20,000**	**23,200**
2.2		178	357	535	713	891	1,034	105	210	315	420	524	608
2.3		156	312	468	624	780	905	94	188	282	375	469	544
2.4		156	312	468	624	780	904	94	188	282	375	469	544
2.5		66	132	198	264	330	383	66	132	198	264	330	383
Impact assuming medium AI Chinook bycatch (assuming a 1991-1998 Chinook bycatch rate in the AI of .0239 for annual rate and .0251 for “A” season rate)													
		Annual DPF to Aleut Corporation						**Aleut Corporation “A” season DPF assuming “B” season roll back**					
Alternative		**10,000**	**20,000**	**30,000**	**40,000**	**50,000**	**58,000**	**4,000**	**8,000**	**12,000**	**16,000**	**20,000**	**23,200**
2.2		61	121	182	243	304	352	-5	-9	-14	-18	-22	-6
2.3		83	166	249	332	415	481	6	13	19	27	33	58
2.4		83	166	249	332	415	482	6	13	19	27	33	58
2.5		173	346	519	692	865	1,003	34	69	69	138	172	219

Table 4.7.1-3 Potential net impact on Chinook catches in the BSAI non-CDQ directed pollock fisheries from opening an AI pollock fishery DPF. (numbers of Chinook)

Impact assuming low AI pollock Chinook bycatch (assuming a "low" Chinook bycatch rate in the AI of .0036 as in 1998)												
	Annual DPF to Aleut Corporation						Aleut Corporation "A" season DPF assuming "B" season roll back					
Alternative	10,000	20,000	30,000	40,000	50,000	58,000	4,000	8,000	12,000	16,000	20,000	23,200
2.2	-142	-284	-426	-567	-709	-823	-91	-182	-273	-364	-454	-524
2.3	-120	-239	-359	-478	-598	-694	-80	-160	-240	-319	-399	-460
2.4	-120	-239	-359	-478	-598	-693	-80	-160	-240	-319	-399	-460
.25	-30	-59	-89	-118	-148	-172	-52	-104	-156	-208	-260	-299
Impact assuming high AI pollok Chinook bycatch (assuming a 1991-1998 Chinook bycatch rate in the AI of .0433 in 1992)												
	Annual DPF to Aleut Corporation						Aleut Corporation "A" season DPF assuming "B" season roll back					
Alternative	10,000	20,000	30,000	40,000	50,000	58,000	4,000	8,000	12,000	16,000	20,000	23,200
2.2	255	508	763	1,018	1,272	1,475	122	245	367	490	613	757
2.3	277	553	830	1,107	1,383	1,604	133	267	400	535	668	821
2.4	277	553	830	1,107	1,383	1,605	133	267	400	535	668	821
2.5	367	733	1,100	1,467	1,833	2,126	161	323	484	646	807	982

Notes: Changes in Chinook harvest in top segment of table were calculated by multiplying the hypothetical DPFs by the AI bycatch rates. The decrease in BS pollock Chinook harvests in the second block were calculated by multiplying the hypothetical DPF funding levels by a 1999-2003 BS Chinook bycatch rate. An annual bycatch rate was used for the annual data on the left hand side of the table, an "A" season rate was used for the "A" season data on the right side of the table. The net changes calculated in the bottom three blocks were estimated by subtracting the decrease in the BS pollock harvest from an appropriate row in the top block. For the mid-point case, the BS reductions were subtracted from the AI 1991-98 average in the bottom row of the top block (so) for Alternative 2.2 and the 10,000 mt DPF case, the net change in Chinook bycatch is estimated to be 61 salmon (239-178). The low AI bycatch case was determined by using the 1998 row of the top block, and the high bycatch case was determined by subtracting the 1992 row of the top block.

4.7.2 Effects of the BSAI Chinook PSC Cap Options

One concern in estimating possible Chinook salmon bycatch in a future AI fishery is relying on historic Chinook bycatch rates in the AI pollock fishery when it was open prior to 1999. The fishery in the AI in the future may occur in areas that weren't necessarily fished in some of the historic years, or Chinook salmon distribution may have shifted, resulting in different bycatch rates than experienced in the past. Also, the AI pollock fishery will be constrained by Steller sea lion protection measures that close much of the nearshore areas and thus will displace future fishing effort to grounds outside SSL closed areas. This fishery also will be prosecuted, in part, with smaller vessels; the trawl nets used, the horsepower of participating vessels, and fishing strategies used all may be quite different than prior to 1998. Given these caveats, however, the available Chinook bycatch data, which are based on past fishery performance, are used in the following analyses. It is recognized that the following analyses are based on historic bycatch rates, but these analyses should be viewed with the caveat in mind that future rates aren't necessarily going to be the same as historic rates. Extrapolating or inferring bycatch rates and patterns in the AI pollock fishery is problematic. Somewhat like the caution given to financial investors, i.e. past performance is not necessarily a reliable indicator of future performance, for the AI pollock fishery past AI Chinook bycatch rates and patterns are not necessarily going to be the same as or similar to future bycatch rates and patterns.

Effects on Target Species

6.1 Under this alternative, Chinook salmon taken as bycatch in the Aleut Corporation AI pollock fishery would accrue to the overall BSAI Chinook salmon bycatch cap of 29,000 fish (26,825 for non-CDQ Bering Sea pollock fisheries) in the BSAI. Thus, it is possible that the BSAI pollock fishery cap, that affects both CDQ and non-CDQ pollock fisheries, might be reached earlier in the year than in the past years because of the Chinook bycatch in the AI fishery. If the AI Chinook bycatch rate is high, the BSAI cap would be reached more quickly than if it were low. Table 4.7.1-2 above shows that, at an AI pollock quota of 10,000 mt, the expected Chinook bycatch would be about 240 fish (using the average rate of 0.024). Against an EBS pollock fishery Chinook bycatch cap of over 26,000 fish, this is less than a percent. Effects on the EBS cap would likely be proportional to the Chinook bycatch rate in the AI fishery, and in turn , effects on location and time of pollock removals from the EBS area would also be proportional. If the pollock quota in the AI is high, say 40,000 mt, then using the rate above (0.024), this could result in over 950 Chinook taken as bycatch, which is just over 3.5 percent of the EBS quota, thus having a proportionally higher effect on the EBS pollock fishery than, say, bycatch, from a 10,000 mt pollock quota in the AI.

Although it will depend on how high the Chinook bycatch rate is, AI pollock fishery Chinook bycatch will likely have a fairly small effect on EBS pollock catch. And thus the impacts on the pollock stock likely would be small or insignificant. Pollock harvests will still be taken under approved catch limits, which are set to avoid adverse impact on the pollock stock. Some reduced pollock catch might occur in the Bering Sea if the AI Chinook bycatch is high, closing the Chinook savings areas and causing a harvest that is less than the quota for a particular season, but this might be balanced by the pollock harvest in the AI region, resulting in about the same amount of pollock harvested from the overall BSAI region. Given the harvesting power of today's EBS pollock fleet, it is unlikely that the overall harvest quota would not be met in a case where a savings area closure occurred a little earlier in the season. No increased pollock harvest above approved levels would occur under this alternative.

If the AI pollock fishery encounters very high Chinook bycatch rates, it is conceivable that this will change the manner in which the overall EBS pollock fishery is prosecuted: perhaps closing the EBS savings area, thereby increasing the fishing rate in some areas, reducing it in other areas, changing the geographic areas from which pollock are harvested, etc. While this situation may change the areas or time periods when pollock are harvested in the EBS, this is unlikely to affect the overall EBS pollock stock; the same amount authorized would still be harvested. Given the EBS stock is believed to be a unit, there would be no consequence to this stock from very slightly altered fishing patterns.

The pollock stock in the AI region is being evaluated by the Plan Team in light of new data on the characteristics of these and pollock genetic data. The Team may suggest changing the boundary between the EBS pollock stock (specifically the Bogoslof stock) and the AI stock to 174 degrees West. In this case, fish east of 174 degrees West would not be in the AI region and this change might affect overall quotas in the AI region in future years and locations of pollock removals as well. If quotas are smaller, pollock harvest likely would occur more quickly, with harvest location dependent on pollock school behavior in the season when fishing occurred. But the overall effect of Chinook bycatch on the pollock stock from a smaller pollock quota, or a quota defined by different geographic boundaries, is judged to be insignificant.

One other issue here is how the AI fishery is funded. If the AI pollock fishery is funded from the EBS pollock TAC, then there would be a slightly smaller quota in the EBS, and any AI pollock fishery Chinook bycatch, if counted against the EBS cap, might cause additional changes to how the EBS pollock fishery is prosecuted. If funding comes from all fisheries, most would still come from the EBS pollock quota, with similar effects. If funded by the EBS pollock and the yellowfin and rock sole fisheries, again most would come from the EBS pollock quota, again with similar effects.

6.2 In this alternative, Chinook salmon harvested incidentally to pollock in the AI fishery would not count against the BSAI Chinook bycatch cap under this alternative. Thus the AI pollock fishery would progress without constraint from Chinook bycatch, and the EBS pollock fishery would not be influenced by Chinook bycatch from an AI fishery that would count against the EBS cap. With no Chinook bycatch cap, the fishery would, however, continue to be constrained by the amount of TAC apportioned to it. No additional pollock would be harvested, and thus the effects on the pollock stock are judged to be insignificant.

6.3 If a Chinook bycatch cap were imposed on the AI pollock fishery, then when the cap was reached, the AI Chinook Salmon Savings Area (CSSA) would close, leaving the remainder of the AI open.

With a certain amount of conjecture, it could be possible for the pollock stock to be affected under this alternative; pollock could remain unharvested, thus leaving more fish in the water, but only if the AI savings area is closed and fishing that occurs prior to the end of the season does not take the full AI quota. The impacts of a small amount of these fish remaining in the marine environment would not adversely affect the stock, however, and thus the alternative is judged to be insignificant. If the AI Chinook bycatch cap were high, which the Council could set in a future year, then there may be less constraint on the pollock fishery, allowing the AI savings area to remain open longer. However, this likely would not affect the pollock stock since the quota would not be exceeded regardless of the AI Chinook bycatch cap. The effect of this alternative on the pollock stock, then, is judged to be insignificant.

Effects on Other Target Species and Fisheries

6.1 Alternative 6.1 would require Chinook harvested incidentally in the AI pollock fishery to count against the BSAI Chinook bycatch cap. As discussed above, this would have very little effect on how the fishery is prosecuted, and thus impacts on other target fisheries would not differ considerably from status quo. There might be some very small adjustments in how other fisheries are prosecuted if the EBS pollock fishery experiences an earlier-than-expected closure of the Chinook salmon savings areas. Other fisheries would not likely be affected by these closures, although some vessels participating in the pollock fishery could choose to fish for other species, increasing the removal rate of that target species and shortening that target fishery's season.

If the EBS cap is triggered earlier than expected because of high Chinook bycatch in the AI area, it is possible that the EBS pollock fishery might be shifted out of the Chinook Salmon Savings Area in the Bering Sea and into areas where this fishery might have more conflict with other fisheries - i.e. the fishing activity that would have occurred in the savings area now would occur in areas fished by vessels targeting other species, increasing potential gear conflicts. The overall effects of this situation, however, are judged to be insignificant.

6.2 The effects of this alternative on other target species or fisheries would likely be fairly minimal. An AI pollock fishery unconstrained by a Chinook PSC cap would likely proceed in geographic areas and during time periods that would be optimal for high quality pollock harvest, and these areas would not likely overlap with other fisheries in the area and would not likely harvest appreciable amounts of non-target species. Thus the effects of this alternative are considered insignificant.

6.3 However, with a specific AI Chinook bycatch cap, in this alternative 360 fish, and if the AI Chinook Salmon Savings Area closure is triggered, then vessels that would fish the savings area would be displaced to other areas, possibly with increased gear conflicts with other fisheries. This would be minimized if these fisheries occurred in seasons other than when the AI pollock fishery occurred (January to April, for the most part). The AI Chinook Salmon Savings Area is fairly distant from the Adak area, so it is unlikely that there would be many vessels displaced from the savings area because they wouldn't be there in the first place. Also, if the AI pollock stock is redefined such that it excludes the area from 170 to 174 degrees West, this eliminates the AI Chinook Savings Area completely, rendering the effect of a cap triggering closure of that area moot. And thus the effects on other fisheries would be minimized. The overall effect of this alternative, then, is judged to be insignificant.

Effects on Incidental Catch of Other or Non-specified Species

6.1 The effects of this alternative on the incidental catch of other or non-specified species would be similar to those discussed above for other target species and fisheries. Bycatch of other species or non-specified species would likely be similar to historic catches as discussed earlier in Sections 4.2 and 4.3 for this category. With the AI pollock fishery Chinook bycatch possibly triggering a change in fishing patterns in the Bering Sea, there could be very minor changes in rates or locations of bycatch of other or non-specified species. Rates of catch of other and non-specified species were very low in the historic AI and Bering Sea pollock fisheries, and it is likely this would be the pattern in the future under an AI pollock fishery, regardless if its Chinook bycatch counted or didn't count against the BSAI cap. Given the expected very small change in catch patterns or amounts of other or non-specified species under this alternative, its impacts are judged insignificant.

6.2 Without a cap, the AI pollock fishery would proceed in as optimal a manner as possible to generate harvests efficiently. The fishery would likely progress until the quota was taken and wouldn't be constrained spatially by a Chinook bycatch-triggered closure of the AI savings area. Bycatch of other or non-specified species would not be excessive since the overall fishing effort would likely be primarily controlled by the pollock TAC set for this fishery. While there is little detailed information on bycatch of other or non-specified species, a pollock fishery would likely be prosecuted essentially as described under Decision Element 1, Alternative 1.1 (TAC set during specifications process), which determined that bycatch of these species would be similar to past rates and amounts, which were not considered adverse; thus this alternative is judged to have insignificant impacts on other and non-specified species.

6.3 If the AI pollock fishery has a Chinook bycatch cap, 360 fish in this alternative, and if the cap is reached and thus does change the EBS pollock fishery by an earlier-than-expected closure of the Chinook savings areas, there could be some small changes in bycatch of other or non-specified species because the location of pollock fishing in the EBS would change. But the effects of some temporal or spatial change in fishing in the AI or in the Bering Sea on other or non-specified species would be small given the very low incidental harvest of these species in these fisheries. The effects of this alternative are thus judged to be insignificant.

Effects on Incidental Catch of Forage Fish Species

6.1 The effects of this alternative on the incidental catch of forage species would be similar to those discussed above for other target species and fisheries. Forage fish bycatch would likely be similar to historic bycatch. With the AI pollock fishery Chinook bycatch possibly triggering a change in fishing patterns in the Bering Sea, there could be very minor changes in rates or locations of bycatch of forage species. Rates of forage fish bycatch have been low in the historic AI and Bering Sea pollock fisheries, and it is likely this would be the pattern in the future under an AI pollock fishery, regardless if its Chinook bycatch counted or didn't count against the BSAI cap. Given the expected very small change in catch patterns or amounts of forage species under this alternative, its impacts are judged insignificant.

6.2 Without a cap, the AI pollock fishery would likely progress until the quota was taken and wouldn't be constrained spatially by a Chinook bycatch-triggered closure of the AI savings area. Bycatch of forage species would not be excessive since the overall fishing effort would likely be primarily controlled by the pollock TAC set for this fishery. While there is little detailed information on forage fish bycatch, a pollock fishery would likely be prosecuted essentially as described under Decision Element 1, Alternative 1.1 (TAC set during specifications process), which determined that bycatch of these species would be similar to past rates and amounts, which were not considered adverse; thus this alternative is judged to have insignificant impacts on forage fish species.

6.3 If the AI pollock fishery has a Chinook bycatch cap, 360 fish in this alternative, and if the cap is reached and thus does change the EBS pollock fishery by an earlier-than-expected closure of the Chinook savings areas, there could be some small changes in bycatch of forage fish species because the location of pollock fishing in the EBS would change. But the effects of some temporal or spatial change in fishing in the AI or in the Bering Sea on forage species would be small given the very low incidental harvest of these species in these fisheries. The effects of this alternative are thus judged to be insignificant.

Effects on Incidental Catch of Prohibited Species

6.1 Under this alternative, Chinook bycatch in the AI pollock fishery would accrue to the BSAI cap, potentially changing fishing patterns in either area if earlier-than-anticipated Chinook bycatch amounts trigger unexpectedly earlier closure of the Chinook savings areas. This may displace fishing activity and shift vessels to other areas in the AI or the Bering Sea where bycatch of chum salmon is higher. There have been instances where closure of the BSAI Chinook savings areas resulted in the pollock fleet experiencing even higher Chinook bycatch rates when fishing alternate areas[53], somewhat circumventing the purpose for the savings area closure. Other PSC species could be harvested incidentally because of this shift in fishing location including herring and, in cases where pelagic trawls are fished closer to the bottom, halibut. This may hasten the closure of fisheries for which the bycatch limits of these other PSC species are specified. In some cases this could be considered an adverse impact, particularly when attempts to avoid Chinook bycatch in the EBS pollock fishery result in even higher Chinook bycatch rates, possibly resulting in interception of Chinooks of a particularly weak stock. While this could be considered a potential impact, there is no evidence to support a concern that excessive bycatch of Chinooks may be significantly affecting Western Alaska stocks; to the contrary, Witherell et al (2002) have calculated that the bycatch in BSAI groundfish trawl fisheries *in toto* likely reduces these runs by less than 2.7%.

There is no information available to suggest that any salmon or steelhead Evolutionarily Significant Units (ESU) are present in any abundance that Chinook bycatch might be considered a concern to a threatened or endangered species. There are six threatened Chinook salmon ESUs that may occur in Alaskan marine waters; there are also five steelhead trout and one sockeye salmon ESU also present in the GOA and BSAI; these salmonids migrate from Oregon or Washington natal streams into the North Pacific to feed and mature. Nearly all recoveries of tagged salmon ESUs have been in the GOA region, with very few from the eastern portion of the AI region. Given the low abundance of these ESUs in the AI region, and the likely small numbers of Chinook that will be taken as bycatch in the AI pollock fishery, it is therefore very unlikely that an AI pollock fishery would adversely affect a threatened or endangered salmon or steelhead ESU.

In the future, the BSAI Plan Team may recommend, and the Council may consider adopting, a revised AI pollock stock definition that may exclude pollock between 174 and 170 degrees West from the AI stock. Given the recent Plan Team stock assessment in this area, there is also the possibility that this area would be closed to pollock fishing. In this case, the AI Chinook salmon savings area, which is located between 171 and 170 degrees West, would then be closed, and any trigger of its closure by a fishery reaching the Chinook cap would be moot. In such a case, however, the fishery would be prosecuted well to the west of historically-high Chinook bycatch areas, perhaps reducing the harvest of Chinook salmon in this fishery. However, there are few data that give an indication of what the future PSC bycatch might be under this alternative.

[53]Karl Haflinger, Sea State, Inc., personal communication, May 5, 2004.

The Bering Sea pollock fisheries have weathered the issue of closures of the CHSSA with subsequently higher bycatch of Chinook salmon elsewhere. It is reasonable to assume that managers will continue to manage this fishery to minimize Chinook bycatch, even if some reduction in the EBS pollock bycatch cap is reduced by Chinook bycatch in the AI region. Thus, this alternative is judged to have insignificant effects on incidental PSC catch.

6.2 This alternative would not specify a cap, and the AI pollock fishery would proceed unconstrained by a savings area closure. Thus, fishing would occur constrained only by the DPF (and applicable existing regulations). It is possible that, without a cap and the trigger of a savings area closure, the AI pollock fishery could experience some high PSC bycatch rates. This could occur if harvest effort in the AI Chinook savings area was high (i.e. high quality roe-bearing pollock CPUEs were very good) and if, as a consequence, Chinook bycatch was high. Without an incentive to avoid an area of high Chinook bycatch, theoretically this could impact some weaker Chinook stocks that would be co-mingled with other, stronger stocks, perhaps affecting the size of runs to Asian, Alaskan, or Pacific Northwest river systems in one or two years into the future. But Witherell et al. (2002) have noted that, in available records, the BSAI Chinook bycatch is comprised of a very small percentage of stocks from an area of known depressed Chinook runs, i.e. Western Alaska. And endangered or threatened Pacific Northwest salmon and steelhead ESUs are not likely present in any abundance in the AI region. Other PSC species such as herring, halibut, or crab would not likely be affected by an alternative that did not set a Chinook PSC cap. Thus, overall, the effects of this alternative on PSC species are considered to be insignificant.

6.3 Under this alternative, the 360 Chinook salmon bycatch cap, when reached, would trigger closure of the AI Chinook savings area, resulting in the possibility of some displacement of fishing into areas where PSC bycatch patterns might be different. This could have some impact on chum salmon if bycatch of this species increased as a result and the caps for this species might be affected as a result, affecting other fisheries that must be prosecuted under specific chum caps. Some change in bycatch of herring or halibut could result, although pelagic trawls harvest few halibut incidental to the target species. Also, having a separate cap for the AI fishery would remove the possibility of this fishery affecting the EBS pollock fishery. While some small changes in fishing activity, and PSC bycatch, could result from this alternative, the effects are judged to be small and thus insignificant.

Effects on Steller Sea Lions

6.1 This alternative would not result in fishing activity inside SSL critical habitat. All fishing would have to comply with existing regulations that have been established to protect foraging areas, pupping areas, and prey for Steller sea lions. Thus, this alternative would not adversely impact Steller sea lions or their critical habitat and is judged to be insignificant.

6.2 Alternative 6.2 is also judged to have insignificant impacts on Steller sea lions for the reasons discussed immediately above.

6.3 Alternative 6.3 is also judged to have insignificant impacts on Steller sea lions for the reasons discussed immediately above.

Effects on Other Marine Mammals

6.1 The potential for some modification of the EBS pollock fishery in space and time, under a scenario where the AI Chinook bycatch triggered an early closure of the EBS and AI Chinook savings areas, conceivably could result in increased fishing in other areas outside the savings areas. A similar situation could occur in the AI region as well, as the AI Chinook savings area also would be closed if the Chinook bycatch cap is reached. However, this displacement is expected to be fairly minor in magnitude and not result in appreciably increased disturbance of other marine mammals that may inhabit these areas. One concern could be increased fishing in particularly sensitive areas such as “the box” in the Bering Sea where northern right whales may congregate during summer, or in summer foraging area used by nursing fur seals from the Pribilof Islands, or perhaps in AI between-island passes through which whales and other species migrate seasonally. But there is little pollock fishing in the EBS in the summer months, and thus this is not a likely concern to right whales or fur seals. Also, the pollock fishery in the AI region likely will be mostly an A season fishery, and any shift in fishing activity would largely be confined to the winter period when marine mammal movements through the AI area are not as extensive as later in spring or in the fall. Such a scenario would not likely adversely impact other whales nor other marine mammals. No effects on more coastally-oriented species such as sea otters and northern harbor seals are likely. Thus, this alternative is considered insignificant in its potential effects on other marine mammals.

6.2 Under this alternative, no Chinook bycatch cap would be specified, and the AI pollock fishery would proceed constrained only by the TAC (and existing applicable regulations). The mere non-specification of a cap would not likely adversely affect other marine mammals.

6.3 Were a cap specified, then the impacts on marine mammals would be similar to those described immediately above under 6.1, but limited to the AI. No adverse effects would be likely. Thus this alternative is judged to have insignificant impacts on other marine mammals.

Effects on Seabirds

6.1 The potential for some modification of the EBS pollock fishery in space and time, under a scenario where the AI Chinook bycatch triggered an early closure of the EBS and AI Chinook savings areas, conceivably could result in increased fishing in other areas outside the savings areas. A similar situation could occur in the AI region as well, as the AI Chinook savings area also would be closed if the Chinook bycatch cap is reached. However, this displacement is expected to be fairly minor in magnitude and not result in appreciably increased incidental take of seabirds that may inhabit these areas. Some increased take could certainly occur, but the amount would be highly dependent on specific location and time. The pollock fishery, if displaced by a cap-triggered savings area closure, would likely be into other areas offshore where pollock are concentrated. And in the AI area, pollock trawling is restricted by SSL closures, and would not occur close to shore where encounters with some more coastally-oriented species are more prevalent. And this fishery would likely be primarily in winter, when fewer birds of some species would be present (primarily species that nest on islands and rocky shorelines in the region). This alternative would thus have effects on seabirds that are judged to be insignificant.

6.2 Under this alternative, no Chinook bycatch cap would be specified, and the AI pollock fishery would proceed constrained only by the TAC (and existing applicable regulations). The mere non-specification of a cap would not likely adversely affect seabirds.

6.3 Under this alternative, a Chinook salmon bycatch cap of 360 fish would be specified. It is likely, then, that the impacts on seabirds would be similar to those described immediately above in 6.1, but limited to the AI. No adverse effects would be likely. Thus this alternative is judged to have insignificant impacts on seabirds.

Effects on Habitat

6.1 Alternative 6.1 would require Chinook harvested incidentally in the AI pollock fishery to count against the BSAI Chinook bycatch cap. As discussed above, this would have very little effect on how the fishery is prosecuted, and thus impacts on habitat would not differ considerably from status quo. If the EBS cap is triggered earlier than expected because of high Chinook bycatch in the AI area, it is possible that the EBS pollock fishery might be shifted out of the Chinook Salmon Savings Area in the Bering Sea and into areas where this fishery might have more contact with benthic habitat. Similarly the AI fishery also could be displaced because the same trigger would also close the AI Chinook savings area, displacing any fishing activity that might have been occurring there as well. In the AI, existing SSL protection measures close much of the area to pollock fishing, and thus open areas might be more at a premium and some concentration of fishing effort could occur in such areas. But the amount of fishing activity that could result in contact with the bottom is very small given that the fishery must use pelagic trawl gear and the fisheries will be prosecuted in waters of considerable depth. These circumstances would limit the amount of gear contact with the sea floor. The overall effects of this alternative are judged to be insignificant.

6.2 The effects of this alternative would be somewhat similar to any other alternative, in that under any alternative the AI pollock fishery will be prosecuted with vessels and gear that won’t appreciably result in bottom contact. Thus impacts on sensitive seafloor habitats, regardless of whether a Chinook PSC cap is set (and under this alternative there would not be one), would be minimal, and this alternative is judged to have insignificant impacts on habitat.

6.3 Under this alternative, impacts on habitat likely would be very similar to the effects described above for Alternative 6.1. With a specific AI cap, and the AI Chinook Savings Area closure is triggered, then vessels that would fish the savings area would be displaced to other areas, possibly with some increased gear contact with the bottom. The AI Chinook Salmon Savings Area is fairly distant from the Adak area, so it is unlikely that there would be many vessels displaced from the savings area because they probably wouldn’t be there in the first place. Also, if the AI pollock stock is redefined such that it excludes the area from 170 to 174 degrees West, this eliminates the AI Chinook Savings Area completely, rendering the effect of a cap triggering closure of that area moot. And thus the effects on habitat would be minimized. The overall effect of this alternative, then, is judged to be insignificant.

Ecosystem Effects

6.1 Effects of an AI pollock fishery on the ecosystem are discussed in some length in Sections 4.2 and 4.3 of this Chapter. The effects of Alternative 6.1 would be very similar to those discussed in previous sections. The principal difference here is if, and when, a Chinook cap is triggered and what change this might bring to the pollock fleets in the AI and EBS. Regardless, fishing would likely continue, just in different areas, and the overall consequences of this to the ecosystem as a whole are considered to be insignificant.

6.2 The effects of this alternative are very similar to Alternative 6.1, discussed immediately above, and thus are considered insignificant.

6.2 The effects of this alternative are very similar to Alternatives 6.1 and 6.2, discussed immediately above, and thus are considered insignificant.

Effects on State-managed and Parallel Fisheries

6.1 As discussed above, the effects of an AI pollock fishery on State-managed or parallel fisheries were discussed in length in Section 4.2. The effects of Alternative 6.1 would be very similar to those discussed in previous sections. The principal difference here is if, and when, a Chinook cap is triggered and what change this might bring to the pollock fleets in the AI and EBS. Regardless, fishing would likely continue, just in different areas, and the overall consequences of this to State-managed or parallel fisheries are considered insignificant.

6.2 The effects of this alternative are very similar to Alternative 6.1, discussed immediately above, and thus are considered insignificant.

6.3 The effects of this alternative are very similar to Alternatives 6.1 and 6.2, discussed immediately above, and thus are considered insignificant.

Socio-economic Effects

The social and economic impacts of the three alternatives under this Decision Element are provided in tabular form in Table 4.7.2-1.

Table 4.7.2-1 Economic and socio-economic significance analysis of Chinook PSC cap options

Issue	The Council must decide whether or not to add language to the FMP that will not count AI pollock Chinook PSC against the BSAI Chinook PSC cap.		
	Alternative 6.1 **AI counts against current BSAI cap**	**Alternative 6.2** **No cap on AI Chinook PSC**	**Alternative 6.3** **AI Chinook cap of 360 fish**
Gross revenues	There is uncertainty about whether or not a new AI pollock fishery will lead to earlier closures of the CHSSA. If it does, this will lead to higher costs and potentially reduced revenues for the AFA pollock fleet, and particularly for its catcher vessel component. This will be an adverse impact for that fleet. Since the fleet can operate outside of the CHSSA, it seems unlikely that this impact will lead to a dramatic reduction in production levels or gross revenues. Not significant.	No impact on pollock fishery gross revenues in the AI or in the BS. Not significant.	AI pollock fishermen would be prevented from fishing in the AI CHSSA if the AI cap were met. It is not clear if this would be an important fishing area. While AI Chinook catches might continue to count against the BSAI cap and could lead to an earlier EBS CHSSA closure, the AFA fishery would have the protection afforded by closure of one AI area with historically high Chinook PSC rates. Not significant.
Operating costs	Somewhat higher bycatch rates are possible, and these may lead to earlier closure of BS Chinook salmon savings area. Catcher vessels are most likely to be affected and would face increased costs as they must operate further from port. Spring closure, prior to April 15, may also affect catcher/processors. These would be adverse impacts for these entities, but given the harvests potentially implicated in the past, it seems unlikely that they would increase average annual costs by 20%. Not significant.	No impact on pollock fishery operating costs in AI or in BS. Not significant.	Higher Chinook bycatch rates would not be counted against the BS cap. Overall cap would remain unchanged, however. Closure date of BS CHSSA would not be affected by AI pollock fishing Chinook bycatch. Not significant.
Net returns	As noted above, this alternative may reduce revenues and increase costs, leading to a potential reduction in net returns. This is more likely for pollock CVs than for pollock CPs.	No impact on pollock fishery net returns in the AI or in the BS. Not significant.	This alternative has the potential to reduce the risks of the AFA revenue losses and cost increases that could occur under Alternative 6.1. That alternative was determined to be not significant, therefore this alternative, with fewer risks, is not significant.
Safety and health	Closure of the CHSSA will force catcher/processors and catcher vessels to fish further from ports. This can have an adverse impact on safety. However, these members of these classes of vessels routinely fish outside of the CHSSA. This impact is considered not significance.	This option would have not effect AFA operations. Not significant.	Closure of the CHSSA will force catcher/processors and catcher vessels to fish further from ports. This can have an adverse impact on safety. However, the effect in this instance should be less than under Alternative 6.1. Since 6.1 was classified as “not significant,” this option is also classed “not significant.”

Issue	The Council must decide whether or not to add language to the FMP that will not count AI pollock Chinook PSC against the BSAI Chinook PSC cap.		
	Alternative 6.1 AI counts against current BSAI cap	**Alternative 6.2** No cap on AI Chinook PSC	**Alternative 6.3** AI Chinook cap of 360 fish
Related fisheries	The discussion of the "Effects on other Target Species and Fisheries" did not identify any significance effects for this alternative. Not significant.	The discussion of the "Effects on other Target Species and Fisheries" did not identify any significance effects for this alternative. If this leads to increased AI Chinook bycatch, it may have an adverse impact on commercial, recreational, and subsistence Chinook harvests. However, given the relatively small size of likely AI pollock DPFs it appears unlikely that these impacts would be significant. Not significant.	The discussion of the "Effects on other Target Species and Fisheries" did not identify any significance effects for this alternative. Not significant.
Consumer effects	These alternatives may have some impacts on production levels, but these are likely to be small. Any impacts on consumers should be minor. Not significant.		
Management and enforcement	These closures could be handled by existing management and enforcement personnel. Not significant.	These closures could be handled by existing management and enforcement personnel. Not significant.	These closures could be handled by existing management and enforcement personnel. Not significant.
Excess capacity	The AFA pollock fishery is highly rationalized. The impacts that may occur are marginal, increasing the capital required to harvest the TACs. Displacement of vessels from the fishery is unlikely. Not significant.	This option would have no impact on AFA pollock fishing operations. Not significant.	The impacts on AFA operations under this alternative are expected to be less than those under Alternative 6.1. Alternative 6.1 impacts are not significant, therefore, these impacts are expected to be not significant.
Bycatch and discards	Earlier discussions of the effects on other target species and fisheries and on incidental catch of prohibited species found both classes of impacts "not significant." Therefore this impact is believed to be not significant.	Earlier discussions of the effects on other target species and fisheries and on incidental catch of prohibited species found both classes of impacts "not significant." Therefore this impact is believed to be not significant.	Earlier discussions of the effects on other target species and fisheries and on incidental catch of prohibited species found both classes of impacts "not significant." Therefore this impact is believed to be not significant.
Subsistence use	This alternative maintains the BSAI non-CDQ Chinook cap. Thus it is not likely to have an impact on subsistence Chinook harvests. Not significant.	This alternative does not affect the EBS Chinook cap, but removes the AI pollock fishery from cap coverage. If this leads to increased AI Chinook bycatch, it may have an adverse impact on subsistence harvests. However, given the relatively small size of likely AI pollock DPFs it appears unlikely that there would be a significant impact on subsistence harvests of Chinook. Not significant.	This alternative maintains the BSAI non-CDQ Chinook cap. Thus it is not likely to have an impact on subsistence Chinook harvests. Not significant.

Issue	**The Council must decide whether or not to add language to the FMP that will not count AI pollock Chinook PSC against the BSAI Chinook PSC cap.**		
	Alternative 6.1 **AI counts against current BSAI cap**	**Alternative 6.2** **No cap on AI Chinook PSC**	**Alternative 6.3** **AI Chinook cap of 360 fish**
Impacts on benefits from marine ecosystems	As noted earlier, these alternatives are expected to have in significant effects on Steller sea lions, other marine mammals, seabirds, habitat, and ecosystems. It is thus expected to have insignificant effects on persons deriving benefits from ecosystem characteristics (such as persons placing an existence value on SSL). Not significant.		
Community impacts	On-shore impacts might be created if CVs were put at a competitive disadvantage to CPs, harvested a smaller proportion of the pollock TAC and delivered less to Dutch Harbor.. However, this impact is unlikely since statute and specifications require a specific allocation of harvest between CVs and CPs. Not significant.	No new restrictions imposed on BS fishery. No Chinook PSC constraint on AI pollock fishery. No community impacts. Not significant.	Higher Chinook bycatch rates would not be counted against the BS cap. Overall cap would remain unchanged, however. Closure date of BS CHSSA would not be affected by AI pollock fishing Chinook bycatch. Not significant.

4.7.3 Council's Preferred Alternative

The Council's preferred alternative was a combination of Alternatives 6.2 and 6.3. Alternative 6.2 provided that the AI pollock fishery Chinook bycatch would not count toward the BSAI Chinook salmon bycatch cap. Alternative 6.3, as adopted, created a new Aleutian Islands bycatch cap and provided that the existing Chinook salmon savings area in the Aleutians (located in eastern Area 541) would close when the incidental catch reached a level of 700 Chinook salmon. Alternative 6.3 was modified to increase the 360 Chinook salmon limit to 700 Chinook salmon.

Alternative 6.2 was analyzed in this section, and the environmental impacts associated with it were found to be insignificant. Alternative 6.3 was evaluated independently, at a level of 360 Chinook, and it was determined that it would not have environmentally significant impacts. Since 6.2 was evaluated without contemplating the implementation of 6.3, and was found not to have significant impacts on its own, the addition of the extra environmental protections associated with 6.3 at the 700 fish level would not create additional adverse environmental impacts. For these reasons, the environmental impacts created by the Council's preferred alternative are determined to be insignificant.

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5.0 CUMULATIVE EFFECTS

Cumulative impacts are those combined effects on the quality of the human environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what Federal or non-Federal agency or person undertakes such other actions (40 CFR 1508.7, 1508.25(a), and 1508.25(c)). Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time. The concept behind cumulative effects analysis is to capture the total effects of many actions over time that would be missed by evaluating each action individually.

To avoid the piecemeal assessment of environmental impacts, cumulative effects were included in the 1978 Council on Environmental Quality (CEQ) regulations, which led to the development of the CEQ's cumulative effects handbook (CEQ 1997) and Federal agency guidelines based on that handbook (e.g., EPA 1999). Although predictions of direct effects of individual proposed actions tend to be more certain, cumulative effects may have important consequences over the long-term. The goal of identifying potential cumulative effects is to provide for informed decisions that consider the total effects (direct, indirect, and cumulative) of alternative management actions.

The potential direct and indirect effects of the alternatives are described in detail in Chapter 4.0. The alternatives under consideration would (1) provide a mechanism for the Council to apportion a specific amount of pollock to the AI directed pollock fishery (DPF), (2) provide a mechanism for funding that DPF, (3) provide for monitoring the fishery so that it complies with regulations that are set for the fishery, (4) defer entry of small vessels into this fishery, (5) potentially provide a means to document how the fishery's economic return is used for economic development in Adak, and (6) provide for management of Chinook salmon bycatch. The amount of DPF is not a decision point; rather, that will occur in the specifications process (see below). The action here is to provide a process or a procedure for implementing this fishery.

Since this action is procedural in nature, the impacts of the Council's action are largely administrative. The impacts on the environment will be evaluated again when specific pollock amounts are apportioned and the other actions described above are actually taken. Thus, in and of itself, the proposed action will have little impact on the environment. However, the proposed action carries with it some ancillary issues that are discussed below. The combined effects of all of these issues, the cumulative effects of the proposed action, are summarized at the end of this chapter.

The Annual Specifications Process

This action will interact with the annual specifications to create a pollock fishery in the AI. The implementation of the harvest specifications for this proposed AI pollock fishery would occur during the 2004 process, and may allow a fishery to commence in 2005.

The specifications provide the limits and seasonal apportionments of target species and prohibited species to the AI pollock fishery. NMFS uses these specifications to control fishing activities in the EEZ. The specifications are renewed annually based on the latest fish stock assessments, ensuring that the fishery is managed on the best available science. The specifications process includes preparation of an EA/IRFA specific to the proposed levels of TAC, PSC, etc. for the coming fishing year. Thus, in the future this proposed AI pollock fishery will be included in the specifications process and will add additional analytical and management elements to this process.

The size of the allocation will depend on Council decision making during the specifications process. The Council may, or may not establish a TAC large enough to permit the allocation of a directed fishing allowance to the Aleut Corporation. The current action (an amendment to an FMP) does not itself create an AI pollock allocation to the Aleut Corporation.

The AI Steller Sea Lion Population Trajectory

On November 26, 1990, the Steller sea lion was listed as threatened under the ESA (55 FR 40204), and on August 27, 1993 (58 FR 45269) critical habitat was designated based on observed movement patterns. In 1997 the Steller sea lion population was split into two separate stocks (western and eastern stocks, called Distinct Population Segments [DPS]) based on demographic and genetic dissimilarities (Bickham *et al.* 1996, Loughlin 1997)(62 FR 30772). Due to the continued decline, the status of the western DPS was changed to endangered, while the status of the increasing eastern DPS was left as threatened. Since 1977 the western population has continued to decline while the eastern population has maintained steady increases and may be considered for de-listing if the positive trend continues and the agency can ensure that the threats to that population have been removed. For the western population, the first increase in the non-pup count was observed in 2002 during the biennial range-wide counts. Updated counts will be available from the 2004 counting year late in the year or in early 2005 when the data are analyzed.

The western DPS of Steller sea lion is the population occurring in the action area. This DPS occurs from approximately Prince William Sound westward to the end of the Aleutian Island chain and across into Asia. The latest information on the status of the species is provided in Tables 5.0-1 and 5.0-2. The most recent non-pup count in 2002 yielded 19,340 animals in the western DPS. A detailed description of these counts can be found in Sease and Gudmundson (2002). As mentioned above, a new survey of Steller sea lions is being conducted in 2004; results should be available late in 2004 or early 2005.

The western Aleutian Islands sub-population continues to be the area of most concern for NMFS. Non-pup counts have declined from 14,011 in 1979 to just 817 animals in 2002 (Table 5.0-1). Although all other sub-populations in the western DPS increased from the 2000 to the 2002 count, the western Aleutian Islands area group decreased by 23.7% in just two years (Table 5.0-2). A map of these sub-population areas can be found in Sease and Gudmundson (2002; their Figure 1). The cause of the steep decline in the Aleutian Islands subarea is unknown, although some researchers are finding links between prey composition and area (Sinclair and Zeppelin, 2002). Other hypotheses involve changes in oceanic conditions such as salinity and temperature which may result in bottom up changes (Trites, pers. comm.). Other possibilities for this sub-population include the taking of animals in Russian fisheries (e.g., herring)(Burkanov, pers. comm.).

The future of the western SSL DPS is unknown. However, the Steller Sea Lion Recovery Team[54] is discussing these issues now and will provide guidance on the importance of sub-populations to the recovery of the entire DPS. Based on recommendations from the Team in the revised Recovery Plan (draft expected in 2004), NMFS and other agencies, as well as State, private, and Native entities, may need to take further action to promote recovery. While groundfish fisheries have already been constrained in an attempt to facilitate the conservation of this species, NMFS and other groups are studying various possible causes,

[54]Under the Endangered Species Act (ESA), NMFS is required to develop and maintain recovery plans for all listed species. In 1990, NMFS convened a 10 member recovery team that developed a recovery plan for Steller sea lions which was adopted by the Agency in December 1992. Since that time, new data have been acquired on both the biology of the species and its conservation, as well as the actions taken to avoid direct and indirect impacts on the species. In October 2001, NMFS convened a new recovery team consisting of 20 members representing a wide variety of interests and scientific fields. The recovery team's primary objective is to draft a revised recovery plan. After that is completed, NMFS may request the team to continue work on other issues such as reviewing critical habitat.

including not only fishery effects but also killer whale predation, disease, and other climatic and oceanographic effects. Unfortunately this work takes many years, and answers may not be readily forthcoming. Continued research and monitoring may eventually yield information that will enable recovery of the Steller sea lion. However, because the specific causes of the decline are elusive, it is quite possible that this species may recover without human intervention.

The proposed action will not result in additional adverse effects on Steller sea lions that have not already been assessed in previous Biological Opinions and NEPA documents. The proposed AI fishery will be prosecuted outside specific SSL protection areas that are closed to pollock fishing, and the fishery will occur only in compliance with other regulations such as 40/60 percent seasonal TAC splits and the global harvest control. However, given past experience, it is reasonable to foresee changes to the suite of SSL conservation measures, especially if the western SSL DPS continues to decline. This might have an effect on future proposed changes to the groundfish fishery.

Development at Adak

This action may contribute to the growth of the port and community of Adak in the next few years. The growth of the community at Adak is an objective of Section 803, and of the Aleut Corporation. Some connected with the Aleut Corporation have suggested that they would like to see Adak grow from a community of under 200 persons to a community of about 1,000 persons. The City of Adak and the Aleut Corporation are pursuing a wide range of development projects, seeking to take advantage of the location of the facilities (harbor, airport, fuel storage, buildings) left behind by the Navy when the base was closed. Development at Adak may be associated with increased environmental impacts, ranging from the harvests of a wider range of species, to marine pollution associated with increased maritime traffic. The pollock allocation is looked on as a tool to facilitate the development of the port of Adak as well as a future resident fishing fleet, and may thus contribute to these impacts.

Other Regional Development

Military development in the Aleutian Islands may add to the cumulative effects of the proposed action. This may include missile defense systems in the region, development on Shemya Island, or possible activities on Amchitka Island to mitigate lingering effects of nuclear testing. It would be speculative to determine any specific activity, since much of this is anecdotal or militarily classified. However, in April 2003, Adak was selected as the site for a $900 million radar system as part of the national missile defense system. This facility is expected to arrive in Adak by summer 2005. Port expansion is also being proposed in the Dutch Harbor/Unalaska area; the Little South America port facility is being studied and environmental and other studies are still progressing. A new port development at the head of Akutan Bay is the subject of a recent Corps of Engineers EIS; a decision on that development may be made soon. Continuing or new military activity, and these port developments, collectively would add vessel and aircraft traffic in the AI region. The proposed AI pollock fishery would add cumulative effects to these other activities in this region.

Changes in SSL Protection Measures

Figure 3.2-1 shows that a large proportion of the historical pollock harvest in the Aleutian Islands has come from waters that are now closed to pollock fishing by the SSL protection measures. Figure 3.2-2 shows the same result for the waters within 100 miles of Adak. Under the current SSL protection measures, vessels will generally have to fish at least 20 nautical miles from shore. The inclement weather conditions prevailing during the winter, when likely the majority of the AI pollock fishery will be taking place, may make it difficult for under 60 foot pelagic trawlers to operate safely or be economically viable. The development of a small trawler fleet based in, or fishing out of, Adak is a primary goal of the Aleut Corporation. Under the statute, 50% of the Aleut Corporation allocation *must be harvested* by small vessels by 2013. This suggests that, if the small vessels can't harvest 50% by that date, the larger AFA vessels will still be constrained to harvesting the remaining 50% and could not harvest any of the small vessel allocation.

Under these circumstances, interest may be expressed in modifying the SSL protection measures to allow fishing for pollock in waters where that is now precluded. The Council recognized that reality in its February 2004 motion, when it directed its Steller Sea Lion Mitigation Committee to "consider changes to the SSL protection measures to allow small pollock trawlers to operate more safely and efficiently." The motion did note that "The Council will not take any action which would likely result in an adverse effect requiring formal consultation under the ESA" [Endangered Species Act]. A wide range of actions may be considered to relax the SSL protection measures. Pacific cod trawling restrictions are not as strict as the pollock restrictions. Some may press to apply the same restrictions that apply to Pacific cod trawling to the pollock fishery. Some may suggest more localized modifications, for example in areas near Adak where pollock harvests were relatively high historically (for example, in the waters between Kanaga and Tanaga Islands, or in the waters off the north shore of Atka Island). The Steller Sea Lion Mitigation Committee met on April 26 2004 and a brief report on the Committee's work was provided to the Council at its June 2004 meeting. That report basically states that, while a proposal for relaxing SSL protection measures near Adak was submitted to the Committee, more work is needed, through informal consultation with NMFS, to define whether this proposal could be implemented, or a modification of it implemented, without triggering formal consultation. The Committee recommended continued work with NMFS to explore some options.

The Steller Sea Lion Mitigation Committee met again to discuss possible adjustments in protection measures in the Aleutian Islands area. That meeting, held July 19-20, 2004, included a review of the NMFS position on the previous proposal discussed by the Committee. NMFS found that the proposed action would likely adversely affect Steller sea lions and their critical habitat, and thus recommended formal consultation if the Council wishes to pursue that proposal. The Committee recommended that further discussions occur with NMFS, and encouraged the development of alternative measures that would not result in the need for formal consultation. The Committee is set to meet again in the fall of 2004 to continue informal discussions with NMFS toward that end.

Other ESA Species

The Steller's eider (*Polysticta stelleri*) is listed as threatened under the ESA. This marine duck winters along the coast of southwest Alaska and is particularly prevalent during winter months in the bays and inlets around the Aleutian Islands. Causes for their decline are unknown but may include such factors as lead poisoning, predation on breeding grounds, contaminants, and ecosystem change. Concerns have been expressed over disturbance of this bird from vessel traffic or release of petroleum products into the marine environment in coastal areas where this species winters. The USFWS has completed an ESA Section 7 consultation and BiOp (USFWS 2003a,b) and has determined that the effects of the Alaskan groundfish fishery FMPs and the TAC setting process are not likely to jeopardize the continued existence of Steller's eiders or adversely modify or destroy their critical habitat.

The USFWS (2003a,b) has determined that the FMPs and the TAC setting process are not likely to jeopardize the continued existence of the endangered short-tailed albatross (*Phoebastria albatrus*)(critical habitat for this species has not been designated yet). The short-tailed albatross is present in the AI region year round, and may encounter pollock trawl vessels during fishing activities, particularly catcher/processors or processors during offal discharging. Concerns have been expressed over the potential for mortality from contact with vessel rigging or net monitor cables. Mitigative actions are being taken voluntarily by part of the trawl fleet in the Alaskan EEZ to evaluate alternative measures that might be implemented to minimize opportunities for seabird mortality from net monitor cables.

The southwest Alaska distinct population segment of the northern sea otter (*Enhydra lutris*) has been proposed for ESA listing as threatened. Because of a steep decline in abundance of sea otters, particularly in the AI region, the USFWS announced on February 5, 2004 this proposed listing. The USFWS intends to develop criteria for designating critical habitat and to begin the species recovery process. Groundfish fisheries have not been implicated in the decline of sea otters, and interactions between this species and fisheries are not believed to be significant.

The proposed AI pollock fishery may in some manner interact with any of these species, although it is not likely to be of significant concern.

State Managed or Parallel Fishery

Parallel fisheries in State waters are managed by the State of Alaska and may occur concurrently with the Federal fisheries on pollock, Pacific cod, and Atka mackerel, mirroring the Federal closures and harvest restrictions. The parallel fisheries are governed by an annual Emergency Order (EO) issued by the Commissioner of the Alaska Department of Fish & Game (ADF&G), pursuant to State law and the rules and regulations promulgated by the Alaska Board of Fisheries. This EO can be modified from one year to another. Currently, there is no Federal AI pollock fishery (other than a small quota for bycatch in other Federal fisheries); thus, there also is no parallel State pollock fishery at this time. If the proposed Aleut Corporation AI pollock fishery is authorized by the Secretary, and were a State parallel fishery for pollock in the AI to be opened by EO, that fishery would be very limited because very small areas of State waters would be open under the Federal Steller sea lion protection measures in the AI. The implementation of such a State parallel fishery was analyzed in the 2001 Steller sea lion SEIS and 2001 BiOp, and no further effects are expected from such an action beyond those already addressed in these documents.

The potential also exists for the State of Alaska to pursue a State-managed (also called "State water") pollock fishery in the AI, in which the State regulates the fishery and controls the closures and harvest restrictions. The amount of harvest allowed in such a fishery may or may not be a portion of the Federal TAC. Should this be subsequently pursued in the Aleutian Islands, the State would not be required to mirror Federal management regulations required in the Federal fishery. But if the State were to pursue a State-managed pollock fishery that did not have the same restrictions as the Federal Steller sea lion protection measures, reinitiation of Section 7 consultation on the Steller sea lion protection measures would be required to determine the cumulative effects of the State-managed pollock fishery. The State would need to determine if there would be Steller sea lion take under their action, and if an ESA Section 10 consultation[55] and incidental take statement is needed.

Also, any subsequently developed State-managed AI pollock fishery could not be controlled or limited by the Aleut Corporation. Under the State of Alaska's constitution and current law, the State does not have the statutory authority to adopt any special fish harvesting privileges for a particular group. In addition, any new limited entry program authorized by the legislature and implemented by the Board of Fisheries must serve the purpose of "preventing economic distress among fishermen and those dependent on them for a livelihood, with the least possible impingement on the equal access values of the Alaska Constitution" (Dept. of Law memo, 2/12/04).

Evolving Understanding of Pollock Stock Structure in the Aleutian Islands

Information on the structure of the pollock stock is provided in Section 3.2 of Chapter 3. Pollock stock assessments are evolving such that the Aleutian Islands subarea of the BSAI Regulatory Area may be subdivided for the purposes of pollock management in the future. Exactly when this occurs, however, is to

[55]Section 10 of the ESA provides for a process for issuance of incidental take permits.

be determined. Barbeaux et al. (2003) have examined the Aleutian Islands pollock stock and have suggested alternative approaches to assessing pollock resources in the AI region that account for spatial patterns in stock distribution.

For the 2004 fishery, the preliminary age-structured assessment arrived at an estimated maximum permissible ABC for the western sub-region of the Aleutian Islands of 67,400 mt. However, Barbeaux et al. (2003) noted that since the assessment was still preliminary and given the limited amount of data, the ABC should be adjusted downward. The Council determined that, given these factors, an ABC based on Tier 5 from FMP Amendment 56 was sufficiently conservative. This gave an ABC of 27,400 mt (for this sub-region of the Aleutian Islands).

For the area of the Aleutian Islands omitted from these calculations (i.e., east of 174˚W), Barbeaux et al. (2003) recommended that this area continue to be closed to directed pollock fishing to form a contiguous protection zone with the Bogoslof area. This pollock conservation zone would provide buffer between management areas and proactively address uncertainties regarding stock structure. In terms of reduction in available pollock fishing areas, the suggested buffer zone east of 174˚W represents approximately 22% of the "fishable" area. Fishable area in the entire NRA (Near-Rat-Andreanof islands) region is defined as the surface area of the water down to 1,000 m. Since Steller sea lion critical habitat extends to 20 nm around rookeries and haulouts, the fishable area *outside* of Steller sea lion critical habitat is 26% of the entire NRA fishable area. Further excluding the fishable area to the east of 174°W leaves about 20% of the entire NRA fishable area open to fishing. If the Council were considering opening this eastern sub-area to a directed pollock fishery, Barbeaux et al. (2003) recommended a Tier 5 ABC level for this area of 12,000 mt based on the biomass apportionment from the summer bottom trawl surveys. The Council did not subdivide the Aleutian pollock stock, and recommended a Tier 5 ABC level for the entire Aleutian region of 39,400 mt.

In summary, recent assessment analyses (e.g., Barbeaux et al. 2003) have suggested that alternative areas may be considered in recommending ABC levels. This may result in area-specific TAC recommendations (to have catch be proportional to biomass distribution) that could impact the amount of pollock available to harvest in the central region of the Aleutian Islands. This is part of the normal Council process and analyses on other stocks (e.g., Atka mackerel) have led to area-specific TACs. Whether a re-definition of management areas in the Aleutian Islands area occurs soon is unknown, but this is a reasonably foreseeable issue that the Council weighed as the decision was made on the proposed AI pollock fishery.

Benthic habitat

A DPF for pollock in the AI would add additional trawling effort to other trawling already taking place in the region. While this action doesn't create a DPF, it makes it possible for the Council to create one during the annual specifications process. However, an AI DPF is not likely to have significant cumulative impacts on marine benthic habitat. Steller sea lion closures will limit the overlap between pollock trawling areas, and areas of sensitive benthic habitat. Moreover, the fishery will be carried out with pelagic trawling gear. Bottom trawling gear is prohibited in this area. While accidental net contact with the bottom is likely to take place periodically, it is unlikely that fishermen would bring their pelagic nets in contact with the bottom as a fishing strategy. The bottom in the Aleutians is rougher and less regular that the bottom in other areas of the BSAI. Given the high degree of relief in the AI region, harvesters would strive to keep nets off the bottom to avoid gear damage or loss. Also, The Council is considering the implementation of benthic habitat protection measures in some areas of the AI region, particularly to protect areas of coral concentration; these Habitat Areas of Particular Concern (HAPCs) will be discussed by the Council in the next several meetings. If or when HAPC protection measures are in place, bottom contact fishing gear likely would be prohibited in these areas which would further limit any potential fishery impacts on benthic habitat.

Conclusions

None of the alternatives under consideration would significantly affect the human environment other than described in Chapter 4 of this document. The basic impact of this proposed action is to provide the mechanism for initiating a directed pollock fishery in the Aleutian Islands. That fishery would be prosecuted under slightly different terms than most groundfish fisheries under management by the Council and NMFS. Unique to this fishery would be the allocation to the Aleut Corporation of any directed fishing allowance apportioned by the Council. The Aleut Corporation or its authorized agent would, in turn, partner with vessels of certain size to harvest the pollock. The mandate for this fishery also includes a requirement that the pollock allocation be used for economic development in Adak. The various procedural elements that must be put into place to effect this fishery are addressed in this document. All of the proposed alternatives have insignificant effects except for Alternative 3.1, which may have some unknown for stocks of fish caught by pollock gear in the AI if monitoring measures are not sufficient, and for Alternative 3.3 which may have some unknown socio-economic effects from the proposed alternative that prescribes an increased level of monitoring of vessel activity that includes 100 percent observer coverage on all catcher vessels. Table 5.0-3 summarizes the ratings assigned to the various alternatives embodied in this action.

The actual amount of quota that would be targeted in the AI pollock fishery will be established later during the specifications process, as will other aspects of this proposed fishery. This action before the Council now is to set up the framework, or the process, for that fishery. Thus, this is more a procedural action and would not have impacts on the human environment that could be considered significant, even when considered in a cumulative manner with other ongoing or proposed actions in the Aleutian Islands region.

Table 5.0-1 Counts of adult and juvenile (non-pup) Steller sea lions at rookery and haulout trend sites by region (Sease and Gudmundson 2002). For the GOA, the eastern sector includes rookeries from Seal Rocks in Prince William Sound to Outer Island; the central sector extends from Sugarloaf and Marmot Islands to Chowiet Island; and the western sector extends from Atkins Island to Clubbing Rocks. For the Aleutian Islands, the eastern sector includes rookeries from Sea Lion Rock (near Amak Island) to Adugak Island; the central sector extends from Yunaska Island to Kiska Island; and the western sector extends from Buldir Island to Attu Island.

Year	Gulf of Alaska			Aleutian Islands			Kenai to Kiska	Western DPS US	Southeast Alaska
	Eastern (n=10)	Central (n=15)	Western (n=9)	Eastern (n=11)	Central (n=4)	Western (n=4)	(n=70)	(n=84)	(n=10)
1975				19,769					
1976	7,053	24,678	8,311	19,743					
1977				19,195					
1979					36,632	14,011			6,376
1982									6,898
1985		19,002	6,275	7,505	23,042				
1989	7,241	8,552	3,800	3,032	7,572				8,471
1990	5,444	7,050	3,915	3,801	7,988	2,327			7,629
1991	4,596	6,270	3,732	4,228	7,496	3,083	21,726	29,405	7,715
1992	3,738	5,739	3,716	4,839	6,398	2,869	20,692	27,299	7,558
1994	3,365	4,516	3,981	4,419	5,820	2,035	18,736	24,136	8,826
1996	2,132	3,913	3,739	4,715	5,524	2,187	17,891	22,210	8,231
1997		3,352	3,633						
1998		3,467	3,360	3,841	5,749	1,911	16,417	20438[1]	8,693
1999	2,110								
2000	1,975	3,180	2,840	3,840	5,419	1,071	15,279	18,325	9,862
2002	2,500	3,366	3,221	3,956	5,480	817	16,023	19,340	9,951[2]

[1] 1999 counts substituted for sites in the eastern Gulf of Alaska not surveyed in 1998.

[2] 2002 counts for Southeast Alaska are preliminary.

Table 5.0-2 Trends in sub-populations of Steller sea lions from 1991 to 2002 (Sease and Gudmundson 2002).

Year	Gulf of Alaska			Aleutian Islands			Kenai to Kiska	Western DPS US	Southeast Alaska
	Eastern (n=10)	Central (n=15)	Western (n=9)	Eastern (n=11)	Central (n=35)	Western (n=4)	(n=70)	(n=84)	(n=10)
% change 1991 to 2002	-45.6	-46.3	-13.7	-6.5	-26.9	-73.5	-26.26	-34.24	+15.4
% change 2000 to 2002	+26.6	+5.8	+13.4	+2.9	+1.1	-23.7	+4.85	+5.52	+0.9
est. annual % change 1991 to 2002	-7.0	-6.3	-2.2	-1.6	-2.3	-11.4	-3.09	-4.15	+1.8

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6.0 ENVIRONMENTAL ANALYSIS CONCLUSIONS

The significance of impacts of the actions analyzed in this EA were determined through consideration of the following information as required by NEPA, NOAA Administrative Order (NOA) 216-6, Section 6 and 40 CFR Section 1508.27:

Context: The setting of the proposed action is the groundfish fisheries of the BSAI exclusive economic zone. Any effects of this action are limited to these areas and adjacent shores, primarily Adak Island. The effects of the action on society, within these areas, is on individuals directly and indirectly participating in the groundfish fisheries and on those who use the ocean resources. Because the action affects the management of groundfish fisheries in the BSAI, which may have direct and indirect societal effects, the EA/RIR evaluated the regional societal effects of the action.

Intensity: Listings of considerations to determine intensity of the impacts are in 50 CFR § 1508.27 (b) and in the NOA 216-6, Section 6. Each consideration is addressed below in order as it appears in the regulations.

6.1 Adverse or beneficial impact determinations for marine resources (including sustainability of target and nontarget species, damage to ocean or coastal habitat or essential fish habitat, effects on biodiversity and ecosystems, and marine mammals)

Each of the alternatives for the six decisions faced by the Council was evaluated for significance with respect to the following potential direct and indirect impacts on marine resources:

- Pollock stock
- Other target species and fisheries
- Incidental catch of other and non-specified species
- Incidental catch of forage species
- Incidental catch of prohibited species
- Steller sea lions
- Other marine mammals
- Seabirds
- Habitat
- Ecosystem
- State managed and parallel fisheries

The criteria used to determine significance for each of these impacts are described in Section 4.1. The evaluations of direct and indirect significance may be found in Sections 4.2 to 4.7. These evaluations are summarized in Tables 6.0-1 to 6.0-6, and Table 6.0-9. The evaluation of the cumulative effects for significance may be found in Chapter 5. The cumulative effects significance evaluations are summarized in Table 6.0-7.

In general, these alternatives were found to have insignificant effects with respect to the range of potential impacts. There were two exceptions. Monitoring alternative 3.1 (status quo) was found to have “unknown” effects with respect to pollock fishing mortality, other target species and fisheries, incidental catch of other and non-specified species, incidental catch of forage species, and incidental catch of prohibited species. While pollock mid-water trawling is a relatively clean fishery, and bycatch of these species classes were expected to be insignificant, monitoring issues connected with Alternative 3.1 raised sufficient uncertainty about NMFS' ability to monitor mortality and mortality rates, that these impacts were given an "unknown" significance rating. (See Section 4.4.2). Monitoring alternative 3.3 (observer requirements) was found to have "unknown" effects with respect to the socio-economic impact of safety. The requirement would increase the numbers of persons potentially at risk, but vessels would be subject to more stringent safety inspection requirements. The net impact was difficult to discern. (See Section 4.2.4).

6.2 Public health and safety

Subsequent actions by the Council to create an Aleutian Islands DPF may have safety implications if trawlers under 60 feet LOA find it difficult to operate safely outside of the SSL protected areas. The CAA requires the AI pollock harvest to be allocated 50 % to vessels less than 60 feet in length starting in 2013. Many knowledgeable observers have noted the dangers of fishing in this area. A small vessel (under 60 feet in length) fleet, required to operate twenty miles from shore by SSL protection measures during a winter fishery, raises particular safety concerns. The current action does not create an allocation or, by itself, permit pollock fishing in the AI. A subsequent Council recommendation would be required for that. For this reason, the allocation size alternatives were rated "insignificant" with respect to safety. Nevertheless, it is important to keep the safety issue in mind if the fishery develops. Safety issues are further addressed in analysis of annual harvest specifications. The monitoring alternative 3.3, which would place observers on vessels under 60 feet, creating unknown safety implications by potentially increasing the number of persons on small vessel in the AI.

6.3 Cultural resources and ecologically critical areas

These actions take place in the geographic areas of the Bering Sea and Aleutian Islands, generally from 3 nm to 200 nm offshore. The land adjacent to these areas contains cultural resources and ecologically critical areas. The marine waters where the fisheries occur contain ecologically critical areas. Effects on the unique characteristics of these areas are not anticipated. Evaluations of impacts on habitat and on ecosystems were evaluated and found to be "insignificant."

6.4 Controversiality

These actions deal with management of the groundfish fisheries. Differences of opinion existed among various industry, environmental, management, and scientific groups on the appropriate levels of TAC to set for various target species and in particular fishery management areas. Aspects of the current action may be controversial. The Council has chosen to make potential AI pollock allocations from within the BSAI OY of 2 million mt. Because the OY is currently fully utilized for the TACs of other species, this means that an AI allocation will require a reduction in the TACs for other species. This creates distributional issues that may be controversial. One of the monitoring alternatives, 3.3, involves observer requirements on vessels under 60 LOA. Observers have not been required before on vessels of this size in the GOA or BSAI. This proposal may be controversial.

Some persons are concerned about the environmental impacts associated with reopening a pollock fishery in the Aleutian Islands. This could be a source of controversy. The supplemental environmental impact statement (SEIS) for the Steller sea lion protection measures and this EA fully analyzed the effects of an AI DPF outside of critical habitat for which this action establishes the management framework. Further effects on Steller sea lions of an AI DPF were determined to be insignificant. The current action does not create an allocation of AI pollock. The allocation of pollock for a directed fishery would be implemented each year during the harvest specifications process. This action amends the BSAI FMP to establish the management framework for an AI DPF to be allocated to the Aleut Corporation. The controversiality of the action primarily will depend on how allocation issues are resolved during the harvest specifications and if any new information indicates effects that were not previously anticipated.

6.5 Risks to the human environment, including social and economic effects

Risks to the human environment associated with groundfish fisheries are described in detail in the groundfish PSEIS (NMFS 2004a). Because of the mitigation measures implemented with every past action, it is anticipated that there will be no significant adverse impacts to the human environment beyond those disclosed in the PSEIS (NMFS 2004a) or the Steller Sea Lion Protection Measures SEIS (NMFS 2001b). No significant adverse impacts to the human environment were identified for the alternatives evaluated in this EA. As noted above, monitoring alternative 3.3 (observer requirements) was found to have "unknown" effects with respect to the socio-economic impact of safety. This alternative requires observer coverage on small vessels (under 60 feet in length). The requirement would increase the numbers of persons potentially at risk, but vessels would be subject to more stringent safety inspection requirements. The net direction and significance of the effect are unknown.

6.6 Future actions

Future actions related to this action may result in impacts. The action under consideration is an amendment to the BSAI FMP and supporting regulations meant to provide a structure within which future AI DPFs could be allocated to the Aleut Corporation. It does not establish a total allowable catch amount (TAC) or DPF allowance for AI pollock, and it does not affect existing BSAI TACs for other species. A subsequent recommendation by the Council during the harvest specifications process will be required in order to provide harvest amounts for an AI DPF. With the requirement to allocate a portion of the pollock harvest to vessels less than 60 feet, a potential future action may reduce some closure areas required by the Steller sea lion protection measures. Any reduction in closure areas would likely result in the reinitiation of Section 7 consultation under the Endangered Species Act (ESA), ensuring the future action is not likely to cause jeopardy or adverse modification or destruction of critical habitat. The opening of more near shore areas also may result in more potential for the introduction of rats onto rat free islands which may lead to an adverse effect on seabird colonies. However, the potential for opening new areas is speculative at this time. For all future actions, appropriate environmental analysis documents (EA or EIS) will be prepared to inform the decision makers of potential impacts to the human environment and to implement mitigation measures to avoid or minimize significant adverse impacts.

6.7 Cumulatively significant effects, including those on target and nontarget species

The EA evaluated cumulative impacts in Chapter 5. Chapter 5 reviewed nine past, present, and reasonably foreseeable future actions that could combine with the impacts of the actions considered here to have a combined effect on the quality of the human environment. These factors were:

- The annual specifications process
- The AI Steller Sea Lion population trajectory
- Development at Adak
- Other regional development
- State managed fisheries
- Changes in SSL protection measures
- Other ESA issues
- Evolving understanding of pollock stock structure in the Aleutians.

- Benthic Habitat

The cumulative effects analysis conclusions are summarized in Table 6.0-7. The cumulative effects analysis did not find that the alternatives would have significant incremental impacts when added to other past, present, or reasonably foreseeable future actions.

6.8 Districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places

This action will have no effect on districts, sites, highways, structures, or objects listed or eligible for listing in the National Register of Historic Places, nor cause loss or destruction of significant scientific, cultural, or historical resources.

6.9 Impact on ESA listed species and their critical habitat

ESA listed species that range into the fishery management areas are listed in Table 6.0-8. An FMP level Section 7 consultation was completed for the groundfish fisheries in November 2000 (NMFS 2000d) for those species under the jurisdiction of NMFS. This document is limited to those species under NMFS jurisdiction and covers most of the endangered and threatened species which may occur in the action area, including marine mammals and Pacific salmon.

Listed seabirds are under the jurisdiction of the USFWS which has completed an FMP level BiOp (USFWS 2003a) and project level BiOp (USFWS 2003b) for the groundfish fisheries. Both USFWS BiOps concluded that the groundfish fisheries and the annual setting of harvest specifications were unlikely to cause the jeopardy of extinction or adverse modification or destruction of critical habitat for ESA listed seabirds.

Under the FMP level BiOp (NMFS 2000d), the western distinct population segment of Steller sea lions was the only ESA listed species identified as likely to be adversely affected by the groundfish fisheries. A subsequent biological opinion on the Steller sea lion protection measures was issued in 2001 (NMFS 2001b, Appendix A, Supplement June 19, 2003). The 2001 BiOp found that the groundfish fisheries conducted in accordance with the Steller sea lion protection measures were unlikely to cause jeopardy of extinction or adverse modification or destruction of critical habitat for Steller sea lions.

No consultations are required on this action at this time because based on the best available information, the proposed actions will not modify the actions already analyzed in previous BiOps, are not likely to adversely affect ESA listed species beyond the effects already analyzed, and the incidental take statements of ESA species are not expected to be exceeded. Summaries of the ESA consultations on individual listed species are located in the section 3.0 with accompanying tables from the Draft PSEIS under each ESA listed species' management overview (NMFS 2003a).

6.10 Violations of Federal, state, or local laws or requirements for the protection of the environment

This action poses no known violation of Federal, State, or local laws or requirements for the protection of the environment. Implementation of this action would be conducted in a manner consistent, to the maximum extent practicable, with the provisions of the Alaska Coastal Management Program within the meaning of section 30(c)(1) of the Coastal Zone Management Act of 1972, and its implementing regulations.

6.11 Introduction and spread of nonindigenous species

This action may affect the introduction or spread of nonindigenous species into the AI; however these impacts were analyzed in Section 4.2 and were determined to be not significant. The main concern is the potential for the accidental introduction of rats on an island in the Aleutian Island region that currently is not rat infested. The impacts on the ecological relationships on such an island could be greatly changed; if burrow nesting birds were present, that species could be eventually eradicated due to rat predation. If this occurred on an island with a significant breeding population of that species, this could have large impacts. However, the likelihood of such an event is small, there is already other vessel traffic in the area to which the AI pollock vessels would be a small addition.

6.12 Comparison of Alternatives

In June 2004 the Council adopted a preferred alternative of which the allocation of TAC was further clarified in October 2004. This is described in detail in Section 2.3.

The direct and indirect effects of each alternative are evaluated in Chapter 4. The first section of that chapter describes the evaluation criteria. Each subsequent section deals with one of the Council's decision elements (for example, "allocation size," and "allocation funding"). The evaluation of the Council's preferred alternative is done in the last subsection of each of those chapters. The cumulative effects analysis may be found in Chapter 6. The direct, indirect, and cumulative effects analyses for all alternatives are summarized in the tables in this section.

Allocation Size

Four alternatives were examined for the "allocation size" decision (Table 6.0-1). Alternative 1.1 was a no action alternative. Alternative 1.2 would add language in the FMP amendment directing the Council to consider CDQ allocations when making the AI pollock allocation, and in no case to make an AI pollock allocation greater than 40,000 mt. Alternative 1.2 may constrain future AI pollock allocations in the short run, should ABCs be higher than the 40,000 mt cap. In the longer run, it would be possible for the Council to amend the FMP to relax the constraint. The proposed language directing the Council to consider CDQ program allocations when making Aleut Corporation allocations is consistent with a wide range of potential pollock allocations to the Aleut Corporation. Alternative 1.3 essentially sets a 40,000 mt cap on the amount of DPF the Council would allocate to the AI pollock fishery, and Alternative 1.4 similarly sets a maximum, in this instance 15,000 mt. Either 1.3 or 1.4 DPFs could be less than these maxima. The latter two alternatives give industry an earlier sense of what the AI allocation might be, perhaps facilitating industry negotiations and reducing acrimony during the specifications process. No alternative relating to allocation size would have significant impacts on the environment.

In addition to the alternatives described, two additional alternatives, designated 1.3^{C} and 1.4^{C} were analyzed. In February 2004 the Council requested an analysis of Alternatives 1.1 and 1.2. In April 2004 the Council requested analysis of two additional alternatives. As ntoed above,. the intent of the motion was to provide additional alternatives that would establish the specific size of the allocation to this fishery so that industry would know the approximate magnitude of the TAC prior to industry negotiations. In the review of this motion, the Council's intent was interpreted by the analysts preparing this EA/RIR and phrased as described for Alternatives 1.3 and 1.4. Upon a careful comparison of the language of 1.3 and 1.4, and the language in the Council motion, differences were evident. The Council's original April language has been identified and analyzed as Alternatives 1.3^{C} and 1.4^{C} ("C" designating "Council"). (See the start of Section 4.2.1 and Section 4.2.3 for detailed discussions of these issues.)

As recommended in October 2004, the Council's preferred alternative set a cap of 19,000 mt on the annual AI pollock TAC which includes the AI pollock DPF, the CDQ directed fishing allowance, and the ICA catches. For ABCs above the cap, the TAC would equal the cap; for ABCs below the cap, the TAC could not exceed the ABC, but could be set at a lower amount. The "A" season harvest (DPF + CDQ +ICA) would equal no more than the lessor of 40% of the ABC, or the annual ITAC after subtraction of the ICA. The "B" season apportionment would be equal to the balance. Detailed descriptions of the alternative may be found in Sections 2.3 and 4.2.4.

Allocation Mechanism

The Council has chosen to make AI pollock allocations count against the BSAI OY (Table 6.0-2). Thus, an increase in AI pollock TAC will reduce one or more other BSAI TACs. Four alternatives were considered: (2.1) no action - no FMP or regulatory changes; (2.2) fund AI pollock TACs from EBS pollock TAC; (2.3) fund AI pollock TAC equiproportionately from all other BSAI TACS; (2.4) fund AI pollock TAC as in (2.3), except that there would be no reduction in BSAI sablefish TACs; and (2.5) fund the AI allocation by reducing the BSAI yellowfin and rock sole fishery TACs and the EBS pollock TAC, rolling back unused and B season TAC to the EBS pollock fishery. The different allocations will generally have relatively small impacts on TACs. An AI pollock allocation of 40,000 mt is only two percent of the BSAI OY, and less than 3% of the current BSAI pollock TAC of 1,492,000 mt. Environmental impacts would be insignificant. This issue does have distributional implications, particularly 2.5 which reduces two sole fisheries and the EBS pollock fishery TACs while potentially "giving back" TAC only to the EBS pollock fishery.

The Council chose Alternative 2.2 as its preferred alternative. Only the FMP would be amended to reflect the Council's policy for funding AI pollock from the EBS pollock TAC.

Monitoring

Three monitoring alternatives were considered: (3.1) no action - no additional monitoring measures; (3.2) a heightened monitoring alternative with five elements; and (3.3) an "observer" alternative that adds observer requirements to the elements in Alternative 3.2 (Table 6.0-3). The "no action" alternative was rated with unknown significance over concerns with the monitoring of catch and for concerns over estimates of fishery mortality for various species in this new fishery, taking place in a remote area, under monitoring rules that are less comprehensive than those for other BSAI pollock fishing. The "observer" alternative was rated "unknown" for potential economic impacts. Observers may be expensive for small vessels and may reduce the economic viability of the small vessel fleet in this area. Moreover, placing observers on small vessels may put more persons at risk in case of an accident.

The Council's preferred alternative was 3.2, modified by requiring a cadre observer to be taken on vessels less than 60 feet LOA which meets the safety requirements of 50 CFR 679.50(g)(1)(ii), when requested by NMFS.

Small Vessel Entry

The Council considered a provision in the FMP that would prevent fishing by vessels under 60 feet LOA for two or five years (Table 6.0-4). Alternative 4.1, the "no action" alternative, would not have added this language. This action alternative, Alternative 4.2, appears to provide few benefits, at the risk of interfering with the Aleut Corporation's development plans. Initially, it was thought that making arrangements for small vessels might delay the introduction of the program. Effects from both alternatives were insignificant. However, whether or not this provision for deferring entry of small vessels is in the FMP, the Aleut Corporation would not be able to introduce small vessels unless acceptable monitoring arrangements were made. In this case, the Aleut Corporation could contract with AFA vessels to harvest its allocation until such time as the provisions were made to accept small catcher vessel deliveries.

The Council chose Alternative 4.1 as its preferred alternative.

Economic Development Reporting

The Council considered requiring the Aleut Corporation to report on the ways it had used its allocation to advance the development of Adak (Table 6.0-5). Alternative 5.1, no action (no report), Alternative 5.2, a basic report, Alternative 5.3, a CDQ-style reporting requirements were considered, and Alternative 5.4, a provision for a June 2006 report to check on the fishery performance and use of proceeds for economic development to see if adjustments should be made. The reporting requirement has no environmental implications. It may have economic implications if it helps ensure that the Aleut Corporation use of the pollock allocation is advancing the distributional goals of Congress. No legal obligation exists to monitor Aleut Corporation use of the allocation for development. A basic report could be provided at relatively low cost. A CDQ-style report could be expensive to produce, and for NMFS or the State of Alaska to fully evaluate - plus it would contain confidential data to which the Council would not have access. Because the Aleut Corporation could draw on existing reporting activities, it is believed that it could produce a detailed report at less additional expense that the average cost for CDQ reports.

The Council's preferred alternative included Alternatives 5.2 and 5.4, with modifications requiring reporting of additional information on incidental catches.

Chinook Bycatch

The Council considered proposals to address potential problems with Chinook salmon bycatch (Table 6.0-6). Alternative 6.1 would require Chinook salmon bycatch in the AI pollock fishery to count against the BSAI pollock Chinook salmon bycatch cap. If Chinook salmon bycatch in the AI is high, particularly early in the year, the Chinook Salmon Savings Areas would close, perhaps prematurely, having economic costs to vessels that have to then move and fish elsewhere. A second alternative, 6.2, would exempt the AI fishery from the cap and savings area closure process. This would have little impact other than potentially allowing larger bycatch of Chinook salmon to occur. It also would set a precedent of allowing a fishery to be prosecuted without a Chinook salmon bycatch avoidance incentive. Alternative 6.3 would set a Chinook salmon bycatch cap of 360 fish for the AI pollock fishery. Here the incentive would be to keep bycatch low or the AI Chinook Salmon Savings Area would close, perhaps having economic cost to the fleet. None of these alternatives would have adverse environmental impacts.

The Council's preferred alternative was a combination of Alternatives 6.2 and 6.3, with 6.3 modified to change the 360 fish cap to 700 fish. Reaching the 700 fish cap would result in the closure of the Chinook Salmon Savings area located in the AI subarea only. If the BS subarea Chinook salmon cap of 29,000 fish is reached, both Chinook Salmon Savings Areas in the AI and BS subareas would be closed.

Table 6.0-1 Summary of Significance Determinations for Decision 1 Alternatives: Effects of Allocation Size.

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown								
Issue	**Alt. 1 (no action)**	**Alt. 2**	**Alt. 3**	**Alt. 4**	**Alt. 1.3[C] (without 2.5)**	**Alt.1.3[C](with 2.5)**	**Alt. 1.4[C]**	**Council's preferred alt.**
	No action. TAC set through specifications process.	**Guidance for TAC from CDQ fisheries (~25,000 mt) with 40,000 mt cap.**	**DPF 40,000 mt or less.**	**DPF 15,000 mt or less, with "A" season fishery only.**	**Similar to Alt 1.3**	**Similar to Alt 1.3**	**Similar to Alt 1.4**	**19,000 mt cap, "A"/"B" season split**
Pollock stock	I	I	I	I	I	I	I	I
Other target species and fisheries	I	I	I		I	I	I	I
Incidental catch of other and nonspecified species	I	I	I	I	I	I	I	I
Incidental catch of forage species	I	I	I	I	I	I	I	I
Incidental catch of PSC	I	I	I	I	I	I	I	I
Steller sea lions	I	I	I	I	U	I	I	I
Other marine mammals	I	I	I	I	I	I	I	I
Seabirds	I	I	I	I	I	I	I	I
Habitat	I	I	I	I	I	I	I	I
Ecosystem	I	I	I	I	I	I	I	I
State-managed and parallel fisheries	I	I	I	I	I	I	I	I
Socio-economic	I	I	I	I	I	I	I	I

Table 6.0-2 Summary of Significance Determinations for Decision 2 Alternatives: Effects of Allocation Mechanism.

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown					
Issue	**Alternative 1 (no action)**	**Alternative 2 (Council's Preferred Alternative)**	**Alternative 3**	**Alternative 4**	**Alternative 5**
	No action. No fishery.	**TAC "funded" from Bering Sea pollock fishery**	**TAC "funded" from BSAI groundfish fisheries equi-proportionally**	**TAC "funded" from BSAI groundfish fisheries equiproportionally, excluding IFQ sablefish fishery**	**TAC "funded" by an amount that is 10% from yellowfin sole, 10% from rock sole, and 80% from EBS pollock TACs, with rollback to EBS pollock**
Pollock stock	I	I	I	I	I
Other target species and fisheries	I	I	I	I	I
Incidental catch of other and nonspecified species	I	I	I	I	I
Incidental catch of forage species	I	I	I	I	I
Incidental catch of PSC	I	I	I	I	I
Steller sea lions	I	I	I	I	I
Other marine mammals	I	I	I	I	I
Seabirds	I	I	I	I	I
Habitat	I	I	I	I	I
Ecosystem	I	I	I	I	I
State-managed and parallel fisheries	I	I	I	I	I
Socio-economic	I	I	I	I	I

Table 6.0-3 Summary of Significance Determinations for Decision 3 Alternatives: Effects of Monitoring Vessel Activity

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown				
Issue	**Alternative 1 (no action)**	**Alternative 2**	**Alternative 3**	**Council's preferred alternative**
	No action. Status quo monitoring and enforcement	**Increased level of monitoring**	**Increased level of monitoring plus 100 % observer coverage on C/Vs and 30% option**	**The Council adotped Alt 2 with requirement for small vessels to take Cadre observer if requested**
Pollock stock	U	I	I	I
Other target species and fisheries	U	I	I	I
Incidental catch of other and nonspecified species	U	I	I	I
Incidental catch of forage species	U	I	I	I
Incidental catch of PSC	U	I	I	I
Steller sea lions	I	I	I	I
Other marine mammals	I	I	I	I
Seabirds	I	I	I	I
Habitat	I	I	I	I
Ecosystem	I	I	I	I
State-managed and parallel fisheries	I	I	I	I
Socio-economic	I	I	I/U	I

Table 6.0-4 Summary of Significance Determinations for Decision 4 Alternatives: Effects of Small Vessel Entry Date

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown		
Issue	**Alternative 1 (no action)**	**Alternative 2**
	No action. No delay in entry of vessels < 60 feet LOA. Council's preferred alternative.	**Delay entry of small vessels 2 or 5 years from 2004**
Pollock stock	I	I
Other target species and fisheries	I	I
Incidental catch of other and nonspecified species	I	I
Incidental catch of forage species	I	I
Incidental catch of PSC	I	I
Steller sea lions	I	I
Other marine mammals	I	I
Seabirds	I	I
Habitat	I	I
Ecosystem	I	I
State-managed and parallel fisheries	I	I
Socio-economic	I	I

Table 6.0-5 Summary of Significance Determinations for Decision 5 Alternatives: Effects of Economic Development Reporting

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown					
Issue	**Alternative 1 (no action)**	**Alternative 2**	**Alternative 3**	**Alternative 4**	**Council's preferred alternative**
	No action. No annual economic report required.	**Require annual economic report.**	**Require annual economic report comparable to CDQ reports.**	**Report to Council in June 2006; Council will evaluate fishery performance.**	**The council adotped Alternatives 2 and 4, with additional requiremenst for incidental catch info.**
Pollock stock	I	I	I	I	I
Other target species and fisheries	I	I	I	I	I
Incidental catch of other and nonspecified species	I	I	I	I	I
Incidental catch of forage species	I	I	I	I	I
Incidental catch of PSC	I	I	I	I	I
Steller sea lions	I	I	I	I	I
Other marine mammals	I	I	I	I	I
Seabirds	I	I	I	I	I
Habitat	I	I	I	I	I
Ecosystem	I	I	I	I	I
State-managed and parallel fisheries	I	I	I	I	I
Socio-economic	I	I	I	I	I

Table 6.0-6 Summary of Significance Determinations for Decision 6 Alternatives: Effects of Chinook Salmon Bycatch Management

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown				
Issue	**Alternative 1 (no action)**	**Alternative 2**	**Alternative 3**	**Council's preferred alternative**
	No action. Chinook bycatch counts against BSAI cap.	**Chinook bycatch does not count against BSAI cap.**	**New 360 Chinook salmon bycatch cap for AI pollock fishery.**	**The council adopted Alt. 2 and Alt. 3 (after modifying the limit from 360 to 700 Chinook)**
Pollock stock	I	I	I	I
Other target species and fisheries	I	I	I	I
Incidental catch of other and nonspecified species	I	I	I	I
Incidental catch of forage species	I	I	I	I
Incidental catch of PSC	I	I	I	I
Steller sea lions	I	I	I	I
Other marine mammals	I	I	I	I
Seabirds	I	I	I	I
Habitat	I	I	I	I
Ecosystem	I	I	I	I
State-managed and parallel fisheries	I	I	I	I
Socio-economic	I	I	I	I

Table 6.0-7 Cumulative effects summary for this action

Environmental Component	Alternatives																												
	1.1	1.2	1.3	1.4	1.3^C	$1.3^C+2.5$	1.4	1.P	2.1	2.2	2.3	2.4	2.5	2.P	3.1	3.2	3.3	3.P	4.1	4.2	4.P	5.1	5.2	5.3	5.4	5.P	6.1	6.2	6.3	6.P
Pollock	I	I	I	I	I	I	I	I	I	I	I	I	I	I	U	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Other target	I	I	I	I	I	I	I	I	I	I	I	I	I	I	U	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Other and Non-specif	I	I	I	I	I	I	I	I	I	I	I	I	I	I	U	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Forage sp	I	I	I	I	I	I	I	I	I	I	I	I	I	I	U	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
PSC	I	I	I	I	I	I	I	I	I	I	I	I	I	I	U	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Steller sea lions	I	I	I	I	U	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Other mar mamm	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Seabirds	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Habitat	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Ecosystem	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
State fisheries	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I
Socio-econ	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	I	U /I	I	I	I	I	I	I	I	I	I	I	I	I	I

Table 6.0-8 ESA listed and candidate species that range into the BSAI or GOA groundfish management areas.

Common Name	Scientific Name	ESA Status
Blue Whale	*Balaenoptera musculus*	Endangered
Bowhead Whale	*Balaena mysticetus*	Endangered
Fin Whale	*Balaenoptera physalus*	Endangered
Humpback Whale	*Megaptera novaeangliae*	Endangered
Right Whale	*Balaena glacialis*	Endangered
Sei Whale	*Balaenoptera borealis*	Endangered
Sperm Whale	*Physeter macrocephalus*	Endangered
Steller Sea Lion (WesternPopulation)	*Eumetopias jubatus*	Endangered
Steller Sea Lion (Eastern Population)	*Eumetopias jubatus*	Threatened
Chinook Salmon (Puget Sound)	*Oncorhynchus tshawytscha*	Threatened
Chinook Salmon (Lower Columbia R.)	*Oncorhynchus tshawytscha*	Threatened
Chinook Salmon (Upper Columbia R. Spring)	*Oncorhynchus tshawytscha*	Endangered
Chinook Salmon (Upper Willamette .)	*Oncorhynchus tshawytscha*	Threatened
Chinook Salmon (Snake River Spring/Summer)	*Oncorhynchus tshawytscha*	Threatened
Chinook Salmon (Snake River Fall)	*Oncorhynchus tshawytscha*	Threatened
Sockeye Salmon (Snake River)	*Oncorhynchus nerka*	Endangered
Steelhead (Upper Columbia River)	*Onchorynchus mykiss*	Endangered
Steelhead (Middle Columbia River)	*Onchorynchus mykiss*	Threatened
Steelhead (Lower Columbia River)	*Onchorynchus mykiss*	Threatened
Steelhead (Upper Willamette River)	*Onchorynchus mykiss*	Threatened
Steelhead (Snake River Basin)	*Onchorynchus mykiss*	Threatened
Steller's Eider [1]	*Polysticta stelleri*	Threatened
Short-tailed Albatross [1]	*Phoebastriaa albatrus*	Endangered
Spectacled Eider[1]	*Somateria fischeri*	Threatened
Kittlitz Murrelet[1]	*Brachyramphus brevirostris*	Candidate
Northern Sea Otter[1]	*Enhydra lutris*	Candidate

[1]The Steller's eider, short-tailed albatross, spectacled eider, Kittlitz murrelet, and northern sea otter are species under the management jurisdiction of the U.S. Fish and Wildlife Service. For the bird species, critical habitat has been established for the Steller's eider (66 FR 8850, February 2, 2001) and for the spectacled eider (66 FR 9146, February 6, 2001). The northern sea otter has been proposed as a candidate species by USFWS (November 9, 2000; 65 FR 67343). The Kittlitz murrelet has been proposed as a candidate species by USFWS (69 FR 24875, May 4, 2004).

Table 6.0-9 Summary of Significance Determinations for Council April Motion Decision 1 Alternatives: Allocation Size

Coding: S- = Significantly adverse, I = Insignificant impact, S+ = Significantly beneficial, U = Unknown			
Issue	**Alternative 1.3^C (without 2.5)**	**Alternative 1.3^C(with 2.5)**	**Alternative 1.4^C**
Pollock stock	I	I	I
Other target species and fisheries	I	I	I
Incidental catch of other and nonspecified species	I	I	I
Incidental catch of forage species	I	I	I
Incidental catch of PSC	I	I	I
Steller sea lions	U	I	I
Other marine mammals	I	I	I
Seabirds	I	I	I
Habitat	I	I	I
Ecosystem	I	I	I
State-managed and parallel fisheries	I	I	I
Socio-economic	I	I	I

7.0 REGULATORY IMPACT REVIEW

7.1 Introduction

Section 803 of the Consolidated Appropriations Act of 2004 (CAA) requires that future directed fishing allowances of pollock in the Aleutian Islands be allocated to the Aleut Corporation for the purpose of furthering the economic development of Adak, Alaska.

In February 2004, the North Pacific Fisheries Management Council (Council) passed a motion requesting an analysis of five decision elements, and associated alternatives, that might be incorporated into an FMP amendment and a regulatory amendment to create a structure within which such an allocation could be made. The Council received a draft EA/RIR analyzing these decision elements and alternatives in April. At that time, the Council approved the document for release for public review and comment, pending addition of a new decision element and alternatives. The document was released in May. In June 2004, the Council took final action on this issue, adopting alternatives with respect to each of the six decision elements. In October 2004 the Council revisited the action and clarified its intent that CDQ groups receive a pollock allocation equal to 10% of the AI pollock TAC, to fish in the AI as a part of their overall BSAI pollock allocation (issued pursuant to the provisions of the AFA). This is the status quo position for the CDQ groups, and involves no regulatory change.

This chapter provides an economic analysis of the action, addressing the requirements of Presidential Executive Order 12866 (E.O. 12866), which requires a cost and benefit analysis of federal regulatory actions.

7.2 What is a Regulatory Impact Review?

The requirements of E.O. 12866 (58 *FR* 51735; October 4, 1993) are summarized in the following statement from the order:

> In deciding whether and how to regulate, agencies should assess all costs and benefits of available regulatory alternatives, including the alternative of not regulating. Costs and benefits shall be understood to include both quantifiable measures (to the fullest extent that these can be usefully estimated) and qualitative measures of costs and benefits that are difficult to quantify, but nonetheless essential to consider. Further, in choosing among alternative regulatory approaches agencies should select those approaches that maximize net benefits (including potential economic, environmental, public health and safety, and other advantages; distributive impacts; and equity), unless a statute requires another regulatory approach.

E.O. 12866 further requires that the Office of Management and Budget review proposed regulatory programs that are considered to be "significant". A "significant regulatory action" is one that is likely to:

- Have an annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, local or tribal governments or communities;
- Create a serious inconsistency or otherwise interfere with an action taken or planned by another agency;
- Materially alter the budgetary impact of entitlements, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or
- Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this Executive Order.

7.3 Statutory authority

The National Marine Fisheries Service manages the U.S. groundfish fisheries of the Bering Sea and Aleutian Islands (BSAI) management area in the Exclusive Economic Zone under the Fishery Management Plan (FMP) for that area. The North Pacific Fishery Management Council prepared the FMP under the authority of the Magnuson-Stevens Fishery Conservation and Management Act. Regulations implement the FMPs at §50 CFR part 679. General regulations that also pertain to U.S. fisheries appear at subpart H of §50 CFR part 600.

Section 803 of the Consolidated Appropriations Act of 2004 (CAA) directs the Council to allocate future directed fishing allocations in the Aleutian Islands to the Aleut Corporation. This section identifies the purpose of the allocation, the classes of vessels with which the Aleut Corporation may contract to harvest the allocation, incorporates the BSAI FMP two million metric ton optimum yield into statute, and provides the Council with discretion with respect to whether or not it applies the OY to the Aleutian Islands allocation for the years 2004 to 2008. Section 803 may be found in Appendix A1 to this EA/RIR.

7.4 Purpose and need for the action

Congress has mandated that, if the Council provides for an Aleutian Islands [56] directed pollock fishery, any Directed Pollock Fishery (DPF) must be allocated in its entirety, to the Aleut Corporation. This quota is to be fished with permission of the Aleut Corporation, and is to be used for economic development in Adak. Congress also specified that the Council could apportion this allocation over and above the 2 million mt Optimum Yield (OY) cap in the Bering Sea/Aleutian Islands groundfish fisheries which, based on longstanding policy, has never before been exceeded by the Council. But Congress also mandated that, should the Council choose to exceed the OY cap for the purposes of apportioning pollock to the Aleut Corporation, the OY cap could be exceeded only for the fishing years 2004 through 2008. As noted above, the text of Section 803 may be found in Appendix A1.

In February 2004, the Council approved proceeding with an analysis of possible environmental effects of such a fishery, with the intent of opening an AI pollock fishery in 2005. The Council's motion is contained in Appendix A.3. The Council also very clearly determined that it did not want to provide for this AI pollock fishery by apportioning the AI allocation over the 2 million mt OY cap. The Council directed staff to develop a preliminary EA/RIR/IRFA with which the Council will evaluate the effects of this fishery and make a recommendation. In April 2004, the Council clarified certain elements of its February motion, and added alternatives for additional evaluation. The Council approved the EA/RIR draft from the April meeting for release to the public, pending the changes it requested. The Council's April motion may be found in Appendix A.11. In June 2004, the Council took final action, adopting a preferred alternative. In October 2004, the Council revisited its action, and clarified its intent with respect to the treatment of CDQ group allocations in the AI.

7.5 Alternatives considered

The following set of decision elements and associated alternatives is based on the Council's February and April motions. The Council's preferred alternative from its June motion, as clarified in October, is also indicated for each decision element.

[56]The Aleutian Islands management area includes federal management areas 541, 542, and 543. These, along with the location of Adak and other information, are shown in Figure 1.1-1.

1.0 Allocation size[57]

1.1 No action: Determine the appropriate Aleutian Islands pollock TAC each year during the annual specifications process.

1.2 For guidance in determining the allocation amount to the AI pollock fishery, the Council shall consider pollock allocations given to the various groups that participate in the CDQ program, in order to recommend a "reasonable amount" of AI pollock to award to the Aleut Corporation, and in no case should this amount exceed 40,000 mt.

1.3 The Council shall allocate a combined AI Incidental Catch Allowance (ICA) and Directed Fishing Allowance (DFA) equal to the lesser of the TAC generated from the ABC for that year or 40,000 mt. The DFA shall be subject to the 40% "A" season and 60% "B" season apportionment required by the Steller sea lion protection measures.

1.4 Beginning in 2005, and until changed, the AI pollock "A" season DFA shall be the lesser of 15,000 mt or 40% of the AI pollock annual TAC after subtraction of the ICA. No part of the annual DFA shall be allocated to the "B" season.

1.3^C The Council shall allocate a combined Aleutian Islands ICA and DFA equal to the lesser of the ABC or 40,000 mt. This allocation shall be subject to the 40% A season, 60% B season allocation required by the SSL protection measures.

1.4^C Beginning in 2005, and until changed, the annual Aleutian Islands pollock TAC shall be the lesser of 15,000 mt or 40% of the AI pollock ABC. One hundred percent of the DFA shall be available for harvest in the pollock "A" season."

Council's preferred alternative:

Starting in 2005:

1. Annual TAC

   (a) When the AI ABC is equal to or more than 19,000 mt, the AI TAC shall equal 19,000 mt.

   (b) When the AI ABC is less than 19,000 mt, the AI TAC shall be no more than the ABC.

2. The AI pollock CDQ directed fishing allowance shall be established as 10 percent of the AI TAC. The remaining amount will be termed the initial TAC (ITAC).[58]

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[57] Alternatives 1.3 and 1.3^C and 1.4 and 1.4^C represent related pairs of Alternatives. In each case, the alternative with the superscript "C" is the alternative in the Council's original wording. The variant without the superscript is an alternative designed to accomplish similar ends without the deterministic relationship. A detailed discussion of 1.3^C and 1.4^C and their relationship to 1.3 and 1.4 may be found in EA Section 2.3.

[58] The CDQ pollock directed fishing allowance is seasonally apportioned 40/60 between the A/B seasons, respectively, under 50 CFR 679.23(e)(2).

3. The ICA[59] shall be deducted from the annual ITAC.

4. Seasonal Apportionments

The A season apportionment of the DPF shall be the lesser of

(a) no more than 40% of the ABC or
(b) the annual TAC, after subtraction of the ICA

The total harvest in the A season (DPF, CDQ, and ICA) shall not exceed 40% of the ABC.

The B season apportionment will be equal to the annual ITAC, minus the ICA and minus A season DPF. The B season apportionment may be further adjusted by rollover of unharvested A season pollock.

2.0 Allocation mechanism

2.1 No action: no regulatory changes

2.2 The pollock allocation to the AI fishery will be funded by a reduction in the EBS pollock TAC. Any unused pollock TAC from the AI fishery will be rolled back to the EBS pollock TAC. This will occur at the earliest time possible in the calendar year. Before making the apportionment as described here, the AI pollock DFA is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

2.3 The pollock allocation to the AI fishery will be funded by taking equal proportional reductions in the TAC amounts from each of the existing groundfish fisheries in the BSAI, without regard to species. Any unused TAC amount, surplus to the needs of the AI pollock fishery, will be rolled back to the fisheries from which it originated in the same proportions (and species). This should occur at the earliest practicable time in the calendar year. Before making the apportionment as described here, the AI pollock DFA is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

2.4 The pollock allocation to the AI fishery will be funded as described in Alternative 2.3 but the procedure for calculation of TAC exempts the BSAI sablefish IFQ fishery from the proportional reduction and rollback. Before making the apportionment as described here, the AI pollock DFA is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

[59]The ICA is the incidental catch allowance of pollock, for harvest in other target fisheries.

2.5 The pollock allocation to the AI fishery will be funded by a 10% reduction in the BSAI rock sole fishery ITAC, a 10% reduction in the BSAI yellowfin sole fishery ITAC, and an 80% reduction in the EBS pollock fishery ITAC. No later than June 10, unused "A"season AI pollock DFA, and the entire "B"season AI pollock DFA, shall be rolled back to the EBS pollock fishery. Before making the apportionment as described here, the AI pollock DFA is to be funded from the difference between the sum of all BSAI groundfish fishery TACS and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

Council's preferred alternative:

2.2 The AI pollock TAC will be funded by a reduction in the EBS pollock TAC. Any unused pollock ITAC from the AI fishery will be rolled back to the EBS pollock ITAC. This will occur at the earliest time practicable in the calendar year. Before making the apportionment as described here, the AI pollock <u>TAC</u> is to be funded from the difference between the sum of all BSAI groundfish fishery TACs and the BSAI 2 million mt OY cap, unless the difference is not large enough to do so.

3.0 Monitoring vessel activity

3.1 Status quo (this option imposes only those monitoring and enforcement requirements that would be required if there were no change in regulation).

3.2 "Increased monitoring" alternative. This alternative would have several required measures (not options). These include:

1. The Aleut Corporation must notify the NMFS Alaska Region with a list of which vessels are authorized by it to fish for pollock in the Aleutians; notification must be at least 14 days prior to the anticipated start of fishing. The NMFS RAM Division will verify each vessel's eligibility (FFP, ADF&G number, USCG fishery endorsement, length, or AFA status) and provide to the Aleut Corporation a list of qualified vessels and the date fishing may commence. These vessels must carry documentation showing they have RAM approval and Aleut Corporation permission;
2. Catcher vessels are prohibited from fishing for pollock in the Aleutian Islands if pollock harvested in the Bering Sea or GOA are on board. Also, catcher vessels are prohibited from fishing for pollock in the Bering Sea or GOA if Aleutian Islands pollock are on board;
3. AFA requirements extend to catcher-processors and motherships (this extends AFA level observer and scale requirements to CPs under 60 feet and to unlisted AFA vessels);
4. Shoreside processors or stationary processors accepting deliveries of AI pollock must have an approved Catch Monitoring Control Plan;
5. The Aleut Corporation will be responsible for keeping its harvests and its agents' harvests within the AI pollock directed fishing allowance. The Aleut Corporation shall be responsible for designating a person as a quota manager for pollock catch accounting; this person shall report to NMFS Sustainable Fisheries Division with weekly pollock catch summaries.

3.3 "Observer" alternative. Option 3.3a: All the requirements of Alternative 2 would apply; in addition, all catcher vessels would be required to have 100% observer coverage while operating in the Aleutian Islands. Option 3.3b: All of the requirements of Alternative 2 would apply; in addition, all catcher vessels would be required to have 30% observer coverage while operating in the Aleutian Islands and at least one trip by each participating vessel would have to be observed.

Council's preferred alternative:

3.2 "Increased monitoring" alternative. This alternative would have several components (not options). These include:

1. The Aleut Corporation must notify the NMFS Alaska Region with a list of which vessels are authorized by it to fish for pollock in the Aleutians; notification must be at least 14 days prior to the anticipated start of fishing. The NMFS RAM Division will verify each vessel's eligibility (FFP, ADF&G number, USCG fishery endorsement, length, or AFA status) and provide to the Aleut Corporation a list of qualified vessels and the date fishing may commence. These vessels must carry documentation showing they have RAM approval and Aleut Corporation permission;
2. Catcher vessels are prohibited from fishing for pollock in the Aleutian Islands if pollock harvested in the Bering Sea or GOA are on board. Also, catcher vessels are prohibited from fishing for pollock in the Bering Sea or GOA if Aleutian Islands pollock are on board;
3. AFA requirements extend to catcher-processors and motherships (this extends AFA level observer and scale requirements to CPs under 60 feet and to unlisted AFA vessels);
4. AI pollock may only be delivered to a shoreside processor or stationary processor which has an approved Catch Monitoring Control Plan or to one or more AFA qualified vessels, as permitted by legislation.
5. The Aleut Corporation will be responsible for keeping its harvests and its agents' harvests within the AI pollock directed fishing allowance. The Aleut Corporation shall be responsible for designating a person as a quota manager for pollock catch accounting; this person shall report to NMFS Sustainable Fisheries Division with weekly pollock catch summaries.
6. Vessels < 60 feet shall take a Cadre observer if provided by NMFS. The < 60 ft. vessel observer cadre restriction is waived under this program. Vessels < 60 feet that take an observer must comply with the safety provisions in 50 CFR 679.50(g)(1)(ii).

4.0 Small vessels

4.1 No action. Take no steps to delay ability of Aleut Corporation to introduce vessels under 60 feet LOA.

4.2 Defer small vessel participation until a later date 2 (2006) or 5 (2007) years from 2004 to allow for development of a management program.

Council's preferred alternative:

4.1 No action. Take no steps to delay ability of Aleut Corporation to introduce to the fishery vessels under 60 feet LOA.

Council will review the observer issue associated with vessels < 60 ft. concurrent with the June 2006 economic report review.

5.0 Economic development report mandate

5.1 No action: do not require the Aleut Corporation to submit a report to the Council or NMFS.

5.2 Require the Aleut Corporation to submit an annual report to the Council.

5.3 Require the Aleut Corporation to submit an annual report to NMFS or the State of Alaska comparable to the annual reports submitted by the CDQ groups.

5.4 Require the Aleut Corporation to submit a report to the Council prior to its June 2006 meeting. At the June 2006 meeting, the Council shall review the AI pollock fishery's performance, including information on harvest success, development of a small vessel fleet, and progress toward completion of pollock processing capacity to determine if further adjustments to the AI pollock TAC may be appropriate, in light of Section 803 of the Consolidated Appropriations Act, 2004 and Senator Stevens' floor language.

Council's preferred alternative:

5.2 Require the Aleut Corporation to submit an annual economic development report to the Council, similar to the AFA co-op reports. A draft report will be due in December and a final report will be due in February.

5.4 Require the Aleut Corporation to submit a report to the Council prior to its June 2006 meeting. At its June 2006 meeting, the Council shall review the AI pollock fishery performance, including how the money was spent, information on harvest success, Chinook salmon bycatch, development of a small vessel fleet, and progress toward completion of pollock processing capacity to determine if further adjustments to the AI pollock ITAC may be appropriate, in light of Section 803 of the Consolidated Appropriations Act, 2004 and Senator Stevens' floor language.

6.0 Chinook salmon bycatch management

6.1 No action. Chinook salmon bycatch in the AI pollock fishery would count against the BSAI Chinook salmon bycatch cap.

6.2 Chinook salmon bycatch in the AI pollock fishery would not count toward the Chinook salmon bycatch cap in the BSAI.

6.3 A new 360 Chinook salmon bycatch cap is set for the AI pollock fishery which, when attained, results in closure of the AI Chinook Salmon Savings Area only.

Council's preferred alternative:

6.2 Chinook salmon bycatch in the AI pollock fishery would not count against the BSAI Chinook salmon bycatch caps.

6.3 The Chinook salmon bycatch cap of 700 applies to the AI Chinook salmon savings area closure only.

7.6 Background

The background for this action is described in detail in Chapter 3.0 of the EA ("Affected Environment"). Sections in that chapter provide information on related literature, the history of the pollock fishery in the Aleutian Islands, on Adak and the Aleut Corporation, on Steller sea lion issues in the AI, and on existing monitoring and enforcement requirements.

7.7 Guidance on AI pollock DPF levels

Six alternatives were considered for this decision. Under Alternative 1.1, the FMP would contain no language constraining Council recommendations with respect to the appropriate Aleut Corporation allocation. Under Alternative 1.2, the Council would be constrained in two ways. First, it would have to consider the allocations received by the CDQ groups in setting the Aleut Corporation allocation. Second, it could not provide a directed pollock fishery in the Aleutians with an allocation greater than 40,000 mt.

Alternative 1.2 would have the following potential effects:

- It could, but would not necessarily, restrict the Council's freedom of action in some future years, leading to lower AI pollock DPF allocations than there might otherwise be.
- If allocations were constrained, the Aleut Corp and its affiliated entities would receive lower revenues (depending on market and price effects) than potentially could accrue absent this constraint
- If allocations were constrained, other BSAI fishery allocations would be higher than they otherwise would have been and revenues to fleets exploiting those allocations would be higher.
- The action has only indirect impacts insofar as it constrains future Council decision making for recommendations.

Under Alternative 1.3, the Council would set the annual AI pollock ITAC at or below the ABC, unless the 40,000 mt limit was smaller. Alternative 1.3 is a subset of Alternative 1.2; whereas 1.2 specifies a range of

0 to 40,000 mt, or zero to the ABC (which ever upper end is less), within which the Council may select any amount, the intent of 1.3 is to set the DPF at the upper limit of the potential range. While Alternative 1.3 is treated as a stand alone alternative here, it was originally meant to be used in combination with funding Alternative 2.5. Under Alternative 2.5, there would be an automatic and mandatory roll back of the "B" season portion of the DPF. The effect of the two alternatives in combination was to create an "A" season allocation of 16,000 mt, or 40% of the ABC, whichever was less. Alternative 1.3^C is similar to 1.3 (and uses the Council's original language). Under Alternative 1.3^C, there is a deterministic functional relationship between ITAC and ABC. Once ABC is known, the ITAC is known as well.

Alternative 1.4 set an "A" season allocation of 15,000 mt or 40% of the AI pollock ABC, whichever was less. This alternative has a very similar effect to Alternative 1.3, but is more direct, and doesn't depend on combination with Alternative 2.5 for its effect. The two alternative do differ somewhat in their implications for AI pollock DPF. Like Alternative 1.3, Alternative 1.4 is functionally a subset of 1.2. Alternative 1.4^C is similar to 1.43 (and uses the Council's original language). Under Alternative 1.4^C, there is a deterministic functional relationship between ITAC and ABC. Once ABC is known, the ITAC is known as well.

As Table 3.2-1 in Section 3.2 of the EA shows, since 1990, the pollock fishery has been subject to four different TAC levels in the AI. In 1990 and 1991, TACs were very high (100,000 mt and 85,000 mt., respectively) TACs generally declined from this period. TACs in 1992-1995 ranged between about 52,000 mt and 57,000 mt, TACs in 1996-1998 ranged between about 24,000 mt and 36,000 mt, and TACs from 1999 to 2003 were between 1,000 mt and 2,000 mt. The discussion in Section 3.2 points out that TACs during the 1980s were 100,000 mt or more. In 2004, the ABC for this fishery was 39,400 mt. This would have constrained harvests in that year to levels below the 40,000 mt ceiling cited above.

Table 4.2-1 and Table 4.2-2 in Section 4.2 show the average CDQ allocations on a per capita, per community, and per group basis. In 2004, the per capita allocation was 5.5 mt. In 2002, Adak had a population of about 150. This population and per capita CDQ allocation imply a directed fishery allocation for Adak of under 1,000 mt. High end allocations for some CDQ groups were about 18 mt per capita, implying an Adak allocation of about 2,700 mt. Average per community allocations for CDQ groups were about 2,300 mt in 2004. High end community allocations were about 7,500 mt. Average allocations for CDQ groups in 2004, were about 25,000 mt; the high end group received about 36,000 mt.

It is not clear how the Council would choose to interpret Senator Stevens' floor language with respect to considering CDQ allocations in determining Aleut Corporation allocations. The direction to the Council "...to recommend a reasonable amount of the Aleutians Islands pollock to the Aleut Corporation for purposes of economic development in Adak..." is not precise, and may not impose much of a constraint on AI pollock allocations to the Aleut Corporation beyond that in the 40,000 mt cap. As noted above, the current high end allocation to a CDQ group is 36,000 mt., only slightly short of the 40,000 mt cap. Moreover, the language, does not tie the allocation precisely to the high end of the CDQ group allocations. Certainly all the levels above might be justified. Incorporating this consideration into the FMP could not increase the DPF above the ABC. The allocations above are only suggestive, however, they indicate that, for a wide range of plausible interpretations of the language, this provision would have the effect of substantially reducing the DPF allocation below the ABC. The actual impact would depend on biomass fluctuations in the AI, which would affect the level of AI ABC, and biomass fluctuations and TAC setting decisions in the EBS, which would affect the levels of pollock allocations made available to the CDQ groups.

A decision to incorporate a 40,000 mt limit on the DPF that can be allocated to the Aleut Corporation would have constrained harvests below potential levels from 1990 to 1995, but not from 1996 to 1998. The constraints would have been quite large, 35,000 to 60,000 mt in 1990 and 1991, and more modest, 12,000 to 16,000 mt, from 1992 to 1995. The constraint would not have been binding in 1996 to 1998. The constraint doesn't appear to have any biological justification. Its objectives may be primarily distributional:

it will limit the volume of fish that may be taken from other fisheries to fund the AI pollock fishery. This constraint would not have been binding if a fishery had been allocated to the Aleut Corporation in 2004. In 2004, the ABC was 39,400 mt.

The choice of a cap on the allocation to the Aleut Corporation has distributional significance. The Council has chosen to treat the AI pollock allocation to the Aleut Corporation as one of the allocations to be made within the BSAI optimum yield. Therefore, any allocation to the Aleut Corporation will be associated with a reduction in allocations for other species in the BSAI. The extent to which this would impact other fisheries would depend on choices made by the Council with respect to the funding of the allocation. These choices are discussed in the next section. The 40,000 mt cap on Aleut Corporation allocations places a limit on decreases in the amounts of allocations for the other BSAI fisheries.

Table 4.2.3-1 in Section 4.2.3 shows that Alternative 1.4 makes it possible for the Council to allocate somewhat more fish to the corporation (depending on the size of the ICA it chooses) compared to Alternative 1.4^{C}. The potentially larger allocations under 1.4 range between 1,200 mt and 2,200 mt for ABCs between 10,000 mt and 40,000 mt. At a 40,000 mt ABC, the Aleut Corporation could receive 2,200 more metric tons under Alternative 1.4 than under Alternative 1.4^{C}. However, 1.4C permits the Aleut Corporation to harvest "A" season fish during the "B" season if it is unable to do so in the "A" season. Alternative 1.4 does not permit this.

Table 7.7-1 Potential annual revenues to the Aleut Corporation from the AI pollock allocation

Royalty values			
DPF (mt)	**Annual DPF value (Millions of $ assuming 40/60 seasonal split)**	**"A" season DPF (mt)**	**"A" season DPF value (Millions of $ using "A" season royalty)**
10,000	$2.6	4,000	$1.2
15,000	$3.8	6,000	$1.8
20,000	$5.1	8,000	$2.4
30,000	$7.7	12,000	$3.6
40,000	$10.3	16,000	$4.9
50,000	$12.8	20,000	$6.1
58,000	$14.9	23,200	$7.1
Notes: Royalty values calculated with estimated 2002 EBS CDQ royalty values of $304/mt for the "A" season, and $225/mt for the "B" season			
First wholesale values			
DPF (mt)	**Annual DPF value (Millions of $ assuming 40/60 seasonal split)**	**"A" season DPF (mt)**	**"A" season DPF value (Millions of $ using "A" season first wholesale value)**
10,000	$7.0	4,000	$3.8
15,000	$10.5	6,000	$5.8
20,000	$13.9	8,000	$7.7
30,000	$20.9	12,000	$11.5
40,000	$27.9	16,000	$15.3
50,000	$34.8	20,000	$19.2
58,000	$40.4	23,200	$22.2
Notes: First wholesale values calculated using catcher/processor first wholesale estimates for 2002 of $959/mt for the "A" season and $522/mt for the "B" season.			

Table 7.7-2 Estimated prices and royalties for EBS pollock, 2001-2003, in dollars per metric ton

"A" Season			
	2001	**2002**	**2003**
Ex-vessel	$362		
Royalty		$304	$308
First wholesale (catcher-processor)	$955	$959	
First wholesale (shoreside processor)	$863	$761	
"B" Season			
	2001	**2002**	**2003**
Ex-vessel	$174		
Royalty		$225	$261
First wholesale (catcher-processor)	$476	$522	
First wholesale (shoreside processor)	$574	$568	
Sources: Ex-vessel price estimate from NPFMC; royalty estimates from NMFS AKR; first wholesale prices from the AFSC.			

Council's preferred alternative

The allocation size provisions of the preferred alternative have several key characteristics. These include (a) a cap of 19,000 mt on the TAC, (b) an "A" season apportionment of no more than 40% of the ABC or the annual TAC after subtracting the ICA and CDQ, whichever is less, (c) a potential "A" season allocation, and (d) a deterministic link between AI pollock ABC and TAC for ABCs at or above 19,000 mt, but no deterministic link below 19,000 mt. These attributes all fall within the scope of the allocation size alternatives considered in the EA/RIR. Aleut Corporation DPFs, and the "A" and "B" season allocations of these DPFs for different ABC levels are show in Table 7.7.3 below.

The 19,000 mt TAC limit places important constraints on harvest, royalties, and gross revenues. In recent years, the pollock ICA in the AI groundfish fisheries has been 1,000 mt. Recently, fishing operations have exceeded that limit, and NMFS in-season managers have suggested that an ICA of 2,000 mt may be appropriate. These ICA estimates, combined with a 10% CDQ allocation in the AI, suggest that a range of potential DPF harvests of 15,100 to 16,100 mt would be associated with a 19,000 mt TAC. An ICA of 1,000 mt has been used in this discussion for illustrative purposes, leading to a 16,100 mt DPF, when the TAC is 19,000 mt.

As shown in Table 7.7.3, the "A" and "B" season allocations of the DPF will depend on the size of the ABC. As the AI ABC gets larger, a smaller proportion of the DPF will be allocated to the "B" season. The "B" season allocation first increases in absolute amount, and then begins to decrease, eventually falling to zero.[60] Using the 2002 CDQ royalty information summarized in Table 7.7.2, royalties would rise from about

[60]Note that the council's motion provides for a 40%/60% split of the annual ABC.

$900,000 at an ABC of 5,000 mt, up to a maximum of about $4.9 million at 45,000 mt and above. Using the 2002 first wholesale values (for catcher-processors) from Table 7.7.2, first wholesale gross revenues rise from about $2.4 million at an ABC of 5,000 mt up to about $15.4 million at ABCs of 45,000 mt and above.

At the 2004 ABC level of 39,400 mt, 14,400 mt of DPF would be allocated to the "A" season, and 1,700 mt would be allocated to the "B" season (assuming, for illustration, the 1,000 mt ICA divided 60/40 between the "A" and "B" seasons and the 10% CDQ allocated 40/60 between the "A" and "B" seasons). The royalty value of this DPF, using 2002 royalty estimates, would be about $4.8 million, and the first wholesale gross revenues would be about $14.7 million.

Table 7.7.3 Aleut Corporation DPFs for different ABC levels under the Council's preferred alternative

ABC (mt)	TAC (mt)	ICA (mt)	CDQ (mt)	DPF (mt)	DPF(A) (mt)	DPF(B) (mt)	Royalty (million $)	First wholesale gross revenues (million $)
5,000	5,000	1,000	500	3,500	1,200	2,300	0.9	2.4
10,000	10,000	1,000	1,000	8,000	3,000	5,000	2.0	5.5
15,000	15,000	1,000	1,500	12,500	4,800	7,700	3.2	8.6
20,000	19,000	1,000	1,900	16,100	6,640	9,460	4.1	11.3
25,000	19,000	1,000	1,900	16,100	8,640	7,460	4.3	12.2
30,000	19,000	1,000	1,900	16,100	10,640	5,460	4.5	13.1
35,000	19,000	1,000	1,900	16,100	12,640	3,460	4.6	13.9
39,400	19,000	1,000	1,900	16,100	14,400	1,700	4.8	14.7
40,000	19,000	1,000	1,900	16,100	14,640	1,460	4.8	14.8
45,000	19,000	1,000	1,900	16,100	16,100	0	4.9	15.4
50,000	19,000	1,000	1,900	16,100	16,100	0	4.9	15.4

Notes: Assumes an ICA of 1,000 mt (as in recent years) divided 60%/40% between A/B seasons and a 40/60 SSL split for CDQ.
Source: G:\FMGROUP\AI pollock\After October Council meeting\DPF formula.xls

The actual royalty and gross revenue values associated with these ABCs are very uncertain, for a number of reasons:

- They depend on the Aleut Corporation's affiliated vessels' ability to harvest pollock outside of AI SSL protection areas.
- They depend on whether or not the Aleut Corporation and its affiliates finds the "B" season economically viable.
- They depend on the potential premium that might be paid for Aleutian Islands pollock roe.
- They depend on changes in royalty and first wholesale values since 2002.
- They depend on Aleut Corporation decisions on sub-allocation of Aleutian Islands pollock between catcher vessels and AFA catcher processors

- They depend on decisions by the Aleut Corporation to charge less than the market rate for pollock allocation to operators who may deliver to, or base themselves in, Adak.

In October the Council clarified its intent that under its preferred alternative, the Aleut Corporation would contribute to CDQ group allocations of pollock along with other BSAI pollock users (principally the AFA). This means that the CDQ groups will receive up to 1,900 mt (depending on ABC levels and future Council decisions about TAC levels) of their CDQ allocations in the AI, and an equivalent reduction in their EBS allocation. CDQ group harvests are subject to the 40/60 "A"/"B" season SSL split. Using royalty values from Table 7.7.2, this amount of pollock would have an estimated royalty value of almost $500,000.

It is unclear whether the CDQ groups actually benefit from receiving an Aleutian Islands specific allocation. In the absence of an Aleut Corporation contribution, the entire CDQ allocation would be available in the EBS. The CDQ groups would be almost certain to take their full allocation in the EBS, but there is some risk they may not be able to fully harvest it in the AI (because important historical pollock fishing areas are closed by SSL protection measures). Moreover, EBS pollock may be less costly to fish. Finally, each of the six CDQ groups would receive a relatively small portion of the potential 1,900 mt allocation. On the other hand, larger AI pollock and/or higher roe content may command a higher price, CDQ groups could contract for joint harvest of their allocations, or they could contract with the Aleut Corporation and its affiliates to harvest it.

An Aleutian Islands contribution to the CDQ groups would reduce the fish available for the Aleut Corporation. The $500,000 estimated royalty value, cited above, provides a first approximation of the cost to the Corporation of funding the CDQ share. However, this value is subject to the caveats indicated, with respect to the value of the fish to the CDQ groups.

An Aleut Corporation contribution to the CDQ groups would increase the fish available to the EBS AFA fishery (since the AFA sector would no longer be the funding source for this 1,900 mt CDQ amount. A lower bound estimate of the increased value to the AFA operations may be approximated by the $500,000 bid amount offered by AFA operators for access to CDQ allocations (i.e., the royalty value referenced above). Note that the actual value to the AFA sector will almost certainly be higher than this, because they will be permitted to capture the full "rent" from this 1,900 mt, rather than the residual rents after paying the royalty. In addition, some AFA operations will also benefit from the provisions of the CAA that reserve at least 75% of the Aleut Corporation allocation in the first years of the program exclusively for harvest by AFA pollock vessels. Expectations are that the actual share will be even higher. In the long run, the CAA guarantees that at least 50% of the allocation must be harvested with AFA-qualified vessels.

The CDQ groups have the option of requesting the rollover of unused CDQ allocations from the AI to the EBS. If this option is exercised, it may offset some or all of any potential losses in the AI fishery. CDQ groups which anticipate that they may not be able to harvest an AI allocation may request a rollover in advance of the season. If CDQ groups exercise this option, the AI pollock allocation may impose little, or no cost on them, in the event that AI pollock fishing would be unprofitable. The fish available to the Aleut Corporation would still be reduced by the amount of the CDQ allocation in the AI.

7.8 Funding the AI pollock allocation

Section 803 incorporates into statute the Council's longstanding BSAI OY limit of two million mt, but allows the Council to create AI pollock allocations in excess of the OY cap, for the years 2004 to 2008. At its February 2004 meeting, the Council determined to include any AI pollock allocations within the 2 million mt OY.[61] For this reason, therefore, an AI pollock allocation to the Aleut Corporation will require reductions

[61] See Appendix A.6 for the transcript of the Council's discussion.

in the allocations for one or more other species. The Council must decide whether to provide itself future direction on the appropriate approach to specifications, and, if so, what sort of direction to provide.

Five principal alternatives, one of which has a significant optional element, are evaluated for this decision. These are: (2.1) No action - FMP is not amended to provide the Council with direction on future approaches; (2.2) The pollock allocation to the AI fishery will be funded by a reduction in the EBS pollock ITAC. Any unused pollock ITAC from the AI fishery will be rolled back to the EBS pollock ITAC. This will occur at the earliest time possible in the calendar year; (2.3) The pollock allocation to the AI fishery will be funded by taking proportional reductions in the ITACs for each of the existing groundfish fisheries in the BSAI. Any unused pollock ITAC from the AI fishery will be rolled back to the fisheries from which it originated, in the same proportions. This should occur at the earliest time in the calendar year; (2.4) Fund the pollock allocation as in alternative 2.3, but exempt IFQ sablefish from the funding obligation; (2.5) Fund the AI pollock allocation 80% from the AFA pollock, 10% from yellowfin sole, and 10% from rock sole. Rollover the entire AI "B" season allocation automatically to the AFA pollock fishery.

As previously noted, the BSAI groundfish fisheries are managed on the basis of an OY cap of 2 million mt. Currently, fish stock levels are high, and the sum of fishery TACs is equal to the OY cap. It is possible in the future that the sum of TACs may not be equal to that OY cap. In this case, assuming the sum of the ABCs was greater than the 2 million mt OY, an AI pollock fishery could be funded, in whole or in part, without adversely affecting the allocations for any other fisheries. In April, the Council clarified that all of its alternatives contemplate that this procedure would be used, if it was available, before any other species allocations were reduced to provide AI pollock funding.

The annual specifications process has several steps. Key points include the recommendation of ABCs by the BSAI and GOA plan teams, in November; negotiations between industry sectors on appropriate allocations of the OY among species (based upon the Plan Team information) between November and December; ABC recommendations by the SSC and TAC recommendations by the AP at the December Council meeting; Council recommendations of appropriate ABC and TAC levels in December; and submission of these recommendations for Secretarial approval, following the December meeting. The Council's Alternatives 2.3 and 2.4 imply a sequential decision making process in which overall BSAI allocations are created for all species, other than AI pollock. Subsequently, an AI pollock directed harvest level is determined, and then one or more of the existing allocations to other gear and/or species groups are adjusted to create the AI pollock allocation. Under Alternative 2.1, the AI pollock allocation would be created simultaneously with other BSAI allocations through the normal specifications process. Indeed, this has been the case in recent years, when the Council opted to set the AI pollock TAC at "zero".

The "funding" mechanism decision raises several issues. In its most basic sense, the funding decision is a decision about the fishing fleet sectors that will bear the burden of providing the Aleutian Islands DPF. Since the fleets involved are under different management regimes, ranging from essentially regulated open access to highly rationalized, the fisheries are expected to be able to use any given allocation with different levels of profitability. Different approaches to allocation may have social efficiency implications. Finally, the alternatives include differing provisions for rolling back unused AI pollock DPF to the BSAI. These provisions create other important economic efficiency, equity, and logistical issues.

Alternative Distributions of the Burden

In 2004, the EBS pollock TAC accounted for almost three-quarters of the BSAI OY. If Alternative 2.2 is chosen, and the Council decided to take all future allocations from the EBS pollock ITAC, 100% of the AI allocation would come from AFA operations. It is worth noting that after 2013, at a minimum 50% of this AI allocation <u>must</u> be made available by the Aleut Corporation, through contractual agreement, to the same AFA sector. In earlier years the Aleut Corporation will probably contract with AFA operations for an even larger percentage of the harvest (i.e., >50% and, initially, likely near 100%). While the intra-sectoral distribution "among" the AFA cooperatives may be altered by the AI contractual affiliations, and some level of royalty will likely be paid to the Aleut Corporation, the net impact on the AFA sector, when taken in toto, will be much less than the "gross" reduction in EBS pollock ITAC might suggest. Furthermore, to the extent that AI pollock are, as reported, larger fish, bearing a significantly higher roe content than their EBS counterparts, some AFA operations will be "trading" somewhat less valuable EBS ITAC for access to superior AI pollock. How these contradictory economic forces sort out cannot currently be estimated. This is, nonetheless, a "mitigating" factor to consider when weighing the expected economic impacts of this alternative.

If the Council chose Alternative 2.3, at current TAC levels three quarters of the allocation would still come from AFA operations. Since the impact of this decision will vary, depending on the relative sizes of the various groundfish species TACs, this analysis has also looked at TACs in 1999, the year in which pollock accounted for the lowest proportion of OY, since the Inshore/Offshore and, subsequently, AFA management actions restructured the sector. In 1999, the EBS pollock TAC accounted for about 50% of the BSAI OY. In that year, on the order of 50% of any AI pollock allocation would have come from the EBS pollock fishery.

The potential impacts of alternative funding mechanisms on the fish of different TACs in non-AI pollock fisheries are summarized in a series of tables in Section 4.3 of the EA.[62] These tables show the contributions to the AI pollock DPF, funded from different species combinations, for each of the four action alternatives, under a range of assumptions about the size of the DPF to be funded. DPFs from 10,000 mt to 58,000 mt were evaluated, using 10,000 mt increments. The 58,000 mt DPF corresponds to an AI pollock ITAC of 60,000 mt and an AI pollock ICA of 2,000 mt. The 60,000 mt level was 1.5 times the highest level under general discussion by the Council in 2004. Separate tables are also provided showing the impacts on funding of different assumptions about the starting point for the distribution of OY among fishery allocations. The base year 2004 provides a year in which EBS pollock accounts for about 75% of the 2 million mt groundfish OY, while the base year 1999 provides a year in which EBS pollock accounts for only about 50% of this OY.

If all of a 40,000 mt AI pollock allocation were funded from the EBS pollock ITAC, as Alternative 2.2 would require, the EBS pollock allocation would drop by three or four percent. In 1999, the EBS pollock TAC was 992,000 mt. Acknowledging that AFA had not, at this time, fully taken effect, if all of the AI pollock allocation was taken given a TAC of that size, it would create a "gross" reduction of about 4% in the AFA pollock ITAC. In 2004, the EBS pollock TAC was 1,492,000 mt. If all of a 40,000 mt AI pollock allocation was taken given a TAC of that size, it would create a "gross" reduction of just under 3% in the AFA pollock ITAC. For the reasons noted above, these "gross" percentages almost certainly "overstate" the aggregate impact on the AFA sector, given the mandatory participation of AFA operations in the AI pollock harvest, and the roll back provisions under consideration. Nonetheless, some individual AFA cooperatives may incur a disproportional share of the burden that does accrue, if they are not selected, by the Aleut Corporation, to participate in the harvest of their DPF.

Under Alternative 2.3, the reductions in the EBS pollock would be smaller. In 1999, if each species TAC has been reduced by an equal proportion, the need to fund a 40,000 mt AI pollock allocation would have meant that the EBS pollock fishery would have had to be reduced by 19,840 mt. This would have been a 2% reduction in the EBS pollock ITAC. In 2004, the impact on the EBS pollock ITAC would have been 29,840 mt. This would also have been a reduction of about 2% in the EBS pollock ITAC.

Alternative 2.3 does, however, impose reductions in the TACs available to sectors fishing for other groundfish species, few if any of whom could expect to be involved in the Aleut Corporation's pollock harvest. Under current conditions, in which the sum of species TACs is equal to the 2 million mt OY, a

[62] See Tables 4.3.1-1 to 4.3.1-14.

40,000 mt AI pollock allocation would reduce species TACs by 2% each (40,000/2,000,000 = .02). Alternative 2.4, which funds the AI allocation with tonnage from all species except IFQ sablefish, produces results that are very similar to those for Alternative 2.3. Alternative 2.5 funds the allocation from AFA pollock and BSAI yellowfin sole and rock sole quotas. Ten percent of the AI pollock is to be funded from yellowfin, and 10% from rock sole. The emphasis on yellowfin and rock sole in this alternative increases the percentage of TAC required from these fisheries over that under other alternatives. In 2004 the yellowfin TAC was 86,075 mt and the rock sole TAC was 41,000 mt. Under this alternative, at these TAC levels, the funding would have taken about 5% of the yellowfin TAC and about 10% of the rock sole TAC.

The environmental impacts of the alternative funding mechanisms were discussed in Section 4.3 of the EA. Tables 4.3.1-1 to 4.3.1-14 summarized the metric tonnage impacts of the different funding alternatives on the BSAI fisheries under different assumptions about AI pollock DPF levels, and different assumptions about the potential roll back of AI "B" season DPF to funding fisheries.

Estimated total gross revenue estimates for these metric tonnage impacts may be found in Tables 7.8-1 and 7.8-2 in this section.[63] Net revenue or profit impacts are the desirable and appropriate measure. Those would make it possible to quantitatively compare the welfare impacts of the funding alternatives. However, information on groundfish fishing costs in the BSAI is unavailable and it is impossible to make net returns estimates. Royalty estimates are available for CDQ pollock, and these have been applied to estimate the gross earnings accruing to the Aleut Corporation in Section 4.7. With these shortcomings in mind, and acknowledging that "gross" revenue changes are not necessarily indicative of "net" revenue impacts, gross revenue estimates have been made for all the species, and have been provided in the indicated tables. The analysts believe that, while imperfect, they nonetheless provide some insights into the direction and distribution of impacts attributable to the respective alternatives and options.

Separate tables are provided with information on the gross revenue impacts on the inshore sector (including fishing operations and shoreside plants) and for catcher/processors. The tables show the impacts for a wide range of DPF funding arrangements, both with and without a "B" season roll back.

Only the AFA pollock fishery will lose gross revenues under Alternative 2.2 (fund from the EBS pollock ITAC). Funding a 10,000 mt allocation reduced inshore sector first wholesale gross revenues by about $3.7 million and the catcher/processor sector by $2.9 million; funding a 20,000 mt allocation reduced inshore sector revenues by about $7.4 million and catcher/processor revenues by about $5.9 million. These estimates, again, likely overstate the impact on the aggregate AFA sector. As noted earlier, components of the AFA fleet may catch a larger portion of the AI pollock allocation, and so could be expected to make up some (and, if the fish are significantly more valuable, e.g., higher roe content in "A" season, perhaps all) of the loss of revenue from EBS pollock. However, not all AFA operations will participate in the AI pollock fishery and those non-participating firms will incur a net revenue loss.

Under Alternative 2.3, the gross revenue impact will fall on fleet sectors harvesting other species of groundfish, as well as on the AFA pollock operations. This reduces the potential cost to the pollock fleet, by shifting a portion of the funding costs to other BSAI fleets. The impact on the different fleets will depend on the relative sizes of the included groundfish species TACs. Table 7.8-1 shows that, when funding a 20,000

[63] Estimates of the proportion of metric tons that would be caught and processed by inshore and catcher/processor sectors are based on proportions from the years 2001-2003. Estimated annual 2002 first wholesale price estimates by species group supplied by the AFSC. For catcher/processors these were: Atka mackerel ($662), flatfish ($669), Other species ($357), Pacific cod ($974), pollock ($697), rockfish ($640), and sablefish ($4,925). For shoreside processors these were Pacific cod ($1,101), pollock ($634), rockfish ($562), sablefish ($6,007). For small amounts of Atka mackerel, other species and flatfish reported delivered shoreside the catcher/processor prices were used. Special prices were used for "A" season pollock ($761 shoreside, $959 catcher/processor) and for "A" season rock sole in the analysis of Alt 2.5 ($1,185).

mt DPF, the inshore sector first wholesale revenue reduction drops from $7.4 million under Alternative 2.2 to $5.5 million under Alternative 2.3, while the CP revenue reduction drops from $5.9 million, to $4.4 million. In the inshore sector, most of the additional revenue loss is shifted to vessels fishing Pacific cod; among the CPs, the costs increase mainly for Pacific cod and flatfish.

In 2004, pollock accounted for about 75% of the OY; thus, even were the funding to be shared among all the fleets, pollock still would incur the greatest revenue decline. The analysis of Alternative 2.3 (and of 2.4) in Table 7.8-1 is based on relative TACs in 2004. Relative TACs may change, and in fact, the pollock TAC has been a smaller part of the OY in other years. In 1999 the pollock TAC was only about 50% of the OY. Under these circumstances, the shift in funding from pollock to other groundfish species would be greater.

Alternative 2.4 differs from Alternative 2.3 in that IFQ sablefish TAC is left out of the funding calculations. The estimated losses in gross revenues for the different fisheries appear to be very similar for these two alternatives.

Under Alternative 2.5, the annual DPF is funded 80% from the EBS pollock ITAC, 10% from the yellowfin sole ITAC, and 10% from the rockfish ITAC. However, this alternative includes a mandatory roll back of all “B” season AI pollock DPF to the EBS pollock fishery. The net result is that the EBS pollock ITAC effectively funds 50% of the “A” season DPF, and the yellowfin and rock sole fisheries effectively fund 25% of the “A” season DPF each. While over half the pollock are caught by the inshore sector, almost all of the yellowfin sole and rock sole catches are taken with CPs. The impact of this alternative would be to reduce the potential gross revenue losses of the pollock inshore sector, compared to all the other alternatives, and to increase the revenue losses to that portion of the at-sea sector comprised of the yellowfin sole and rock sole fishermen and processors. Under this alternative, the 20,000 mt DPF could cost the pollock sectors $1.8 million and $1.6 million in gross revenue (before adjusting for any offsetting AI participation), respectively, for the inshore and catcher/processor sector, and $3.6 million for the flatfish sector.

The AFA provided for a $75 million loan to buy nine pollock catcher/processors and retire them from the fishery. The loan’s principal carries a fixed interest rate of 7.09 percent. The loan and accrued interest are being repaid by an assessment on the AFA inshore fleet of six tenths of a cent on each round pound of pollock landed. This is equivalent to an assessment of about $13 on each metric ton (2002 ex-vessel pollock prices averaged about $260/mt). The current (May 2004) balance on this loan is $67.15 million of principal and $0.44 million of accrued interest. The impact of a reduction in ITAC available to the inshore vessels would be an increase in the number of years it would take to repay the loan, and an increase in the inshore fleet’s aggregate interest liabilities over that period.

Potential Efficiency Implications

Gross revenues do not measure net returns to fishing and/or processing operations. The information on operating costs that would allow us to make these estimates for most BSAI fishing operations does not exist. It is possible, however, to make some qualitative remarks about the relative efficiency of the alternative “funding” mechanisms.

Table 7.8-1 Estimates of the reduction in BSAI non-CDQ *inshore sector* first wholesale gross revenues by species and alternative for hypothetical DPF funding levels, with and without a "B" season roll back - using 2004 Relative TACs as a baseline (in millions of dollars)

Species	Alter native	Assuming no roll back						Assuming "B" season roll back.					
		10,000	20,000	30,000	40,000	50,000	58,000	10,000	20,000	30,000	40,000	50,000	58,000
Pollock	2.2	3.7	7.4	11.0	14.5	18.4	21.3	1.8	3.5	5.3	7.0	8.8	10.2
	2.3	2.7	5.5	8.2	11.0	13.7	15.9	1.3	2.6	4.0	5.3	6.6	7.6
	2.4	2.8	5.5	8.3	11.0	13.8	16.0	1.3	2.6	4.0	5.3	6.6	7.7
	2.5	0.8	1.8	2.6	3.5	4.4	5.1	0.8	1.8	2.6	3.5	4.4	5.1
Pacific cod	2.2	0	0	0	0	0	0	0	0	0	0	0	0
	2.3	0.3	0.7	1.0	1.4	1.7	2.0	0.1	0.3	0.4	0.6	0.7	0.8
	2.4	0.3	0.7	1.0	1.4	1.7	2.0	0.1	0.3	0.4	0.6	0.7	0.8
	2.5	0	0	0	0	0	0	0	0	0	0	0	0
Flatfish	2.2	0	0	0	0	0	0	0	0	0	0	0	0
	2.3	0	0	0.1	0.1	0.1	0.1	0	0	0	0	0	0
	2.4	0	0	0.1	0.1	0.1	0.1	0	0	0	0	0	0
	2.5	0	0.1	0.1	0.2	0.2	0.2	0	0.1	0.1	0.2	0.2	0.2
Sable-fish	2.2	0	0	0	0	0	0	0	0	0	0	0	0
	2.3	0.1	0.2	0.3	0.4	0.5	0.6	0	0.1	0.1	0.2	0.2	0.2
	2.4	0	0.1	0.1	0.2	0.2	0.2	0	0	0	0.1	0.1	0.1
	2.5	0	0	0	0	0	0	0	0	0	0	0	0
Rock-fish	2.2	0	0	0	0	0	0	0	0	0	0	0	0
	2.3	0	0	0	0	0	0	0	0	0	0	0	0
	2.4	0	0	0	0	0	0	0	0	0	0	0	0
	2.5	0	0	0	0	0	0	0	0	0	0	0	0
Atka mack.	2.2	0	0	0	0	0	0	0	0	0	0	0	0
	2.3	0	0	0	0	0	0	0	0	0	0	0	0
	2.4	0	0	0	0	0	0	0	0	0	0	0	0
	2.5	0	0	0	0	0	0	0	0	0	0	0	0
Other	2.2	0	0	0	0	0	0	0	0	0	0	0	0
	2.3	0	0	0	0	0	0	0	0	0	0	0	0
	2.4	0	0	0	0	0	0	0	0	0	0	0	0
	2.5	0	0	0	0	0	0	0	0	0	0	0	0
Totals	2.2	3.7	7.4	11.0	14.5	18.4	21.3	1.8	3.5	5.3	7.0	8.8	10.2
	2.3	3.2	6.5	9.7	12.9	16.1	18.7	1.5	3.0	4.5	6.0	7.5	8.7
	2.4	3.2	6.3	9.5	12.7	15.8	18.4	1.5	3.0	4.5	6.0	7.4	8.6
	2.5	0.9	1.8	2.8	3.6	4.6	5.4	0.9	1.8	2.8	3.6	4.6	5.4

Table 7.8-2 Estimates of the reduction in BSAI non-CDQ *catcher/processor sector* first wholesale gross revenues by species and alternative for hypothetical DPF funding levels, with and without a "B" season roll back - using 2004 TACs as a baseline (in millions of dollars)

Species	Alter native	Assuming no roll back						Assuming "B" season roll back.					
		10,000	20,000	30,000	40,000	50,000	58,000	10,000	20,000	30,000	40,000	50,000	58,000
Pollock	2.2	2.9	5.9	8.8	11.5	14.6	17.0	1.6	3.2	4.8	6.3	8.1	9.3
	2.3	2.2	4.4	6.6	8.7	10.9	12.7	1.2	2.4	3.6	4.8	6.0	7.0
	2.4	2.2	4.4	6.6	8.8	10.9	12.7	1.2	2.4	3.6	4.8	6.0	7.0
	2.5	0.8	1.6	2.4	3.2	4.0	4.7	0.8	1.6	2.4	3.2	4.0	4.7
Pacific cod	2.2	0	0	0	0	0	0	0	0	0	0	0	0
	2.3	0.7	1.5	2.2	3.0	3.7	4.3	0.3	0.6	0.9	1.2	1.5	1.7
	2.4	0.7	1.5	2.2	3.0	3.7	4.3	0.3	0.6	0.9	1.2	1.5	1.7
	2.5	0	0	0	0	0	0	0	0	0	0	0	0
Flatfish	2.2	0	0	0	0	0	0	0	0	0	0	0	0
	2.3	0.6	1.1	1.7	2.3	2.8	3.3	0.2	0.5	0.7	0.9	1.1	1.3
	2.4	0.6	1.1	1.7	2.3	2.8	3.3	0.2	0.5	0.7	0.9	1.1	1.3
	2.5	1.8	3.6	5.3	7.0	8.9	10.3	1.8	3.6	5.3	7.0	8.9	10.3
Sable-fish	2.2	0	0	0	0	0	0	0	0	0	0	0	0
	2.3	0.1	0.1	0.2	0.2	0.3	0.4	0	0	0.1	0.1	0.1	0.1
	2.4	0	0.0	0.1	0.1	0.1	0.1	0	0	0	0	0	0.1
	2.5	0	0	0	0	0	0	0	0	0	0	0	0
Rock-fish	2.2	0	0	0	0	0	0	0	0	0	0	0	0
	2.3	0.1	0.1	0.2	0.2	0.3	0.3	0	0	0.1	0.1	0.1	0.1
	2.4	0.1	0.1	0.2	0.2	0.3	0.3	0	0	0.1	0.1	0.1	0.1
	2.5	0	0	0	0	0	0	0	0	0	0	0	0
Atka mackere l	2.2	0	0	0	0	0	0	0	0	0	0	0	0
	2.3	0.1	0.1	0.2	0.3	0.3	0.4	0	0.1	0.1	0.1	0.1	0.2
	2.4	0.1	0.1	0.2	0.3	0.3	0.4	0	0.1	0.1	0.1	0.1	0.2
	2.5	0	0	0	0	0	0	0	0	0	0	0	0
Other	2.2	0	0	0	0	0	0	0	0	0	0	0	0
	2.3	0	0.1	0.1	0.2	0.2	0.3	0	0	0.1	0.1	0.1	0.1
	2.4	0	0.1	0.1	0.2	0.2	0.3	0	0	0.1	0.1	0.1	0.1
	2.5	0	0	0	0	0	0	0	0	0	0	0	0
Total	2.2	2.9	5.9	8.8	11.5	14.6	17.0	1.6	3.2	4.8	6.3	8.1	9.3
	2.3	3.7	7.5	11.2	14.9	18.7	21.6	1.8	3.6	5.5	7.3	9.1	10.6
	2.4	3.7	7.4	11.1	14.8	18.5	21.5	1.8	3.6	5.4	7.2	9.0	10.5
	2.5	2.1	4.2	6.3	8.3	10.5	12.2	2.1	4.2	6.3	8.3	10.5	12.2

BSAI fisheries are currently subject to a wide range of management regimes. Some of these, such as the AFA cooperatives, the CDQ groups and the sablefish IFQ program, represent rationalized fisheries in which operations have the freedom to harvest fish quotas in a relatively efficient manner. Other fisheries have not been rationalized, and fishing operations harvest the fish under arrangements that approximate open access fisheries. Currently, most non-CDQ fisheries, other than the IFQ fisheries for halibut and sablefish, and the AFA fishery for pollock, fall in the latter category. Rationalized fisheries are likely to produce relatively high net returns for the participants involved. Open access fisheries are subject to competitive dissipation of fishing rents through excessive entry and over investment (e.g., capital stuffing).. Net returns are likely to be relatively smaller in these latter fisheries. As a result, it is likely that allocations made from non-rationalized fisheries involve the transfer of fishery quota from operations with relatively lower net returns to operations with relatively higher net returns. Moreover, the equal proportions option that excludes sablefish may generate somewhat higher "fishery-wide" aggregate net returns than the option that includes sablefish. Note that this is likely to be a temporary effect; under the aegis of proposed BSAI FMP Amendment 80 ("Sector allocations and cooperatives"), most BSAI groundfish fisheries may move to more rationalized operating arrangements in a few years.

The "roll back" Issue

The Aleut Corporation may not be able to harvest its allocation in a given year. The fishery will generally be taking place 20 miles from shore because of the SSL protection measures. However, the last directed fisheries, prior to 1999, took place within 20 miles to a great extent. There is uncertainty about whether vessels will be able to catch the pollock allocation outside of 20 miles. Moreover, there is uncertainty about the ability of vessels under 60 feet LOA to operate successfully outside 20 miles. SSL protection measures mandate that no more than 40% of the DPF be taken in the lucrative "A" season roe fishery. There is uncertainty about whether the Aleut Corporation will have an interest in catching and marketing large volumes of pollock in the "B" season. Since BSAI fishery allocations are at the OY cap, and since the Council has chosen to include the AI pollock allocation within that OY cap, an AI pollock allocation, whether it is caught or not, means a reduced allocation for other fishermen. The Council has included "rollback" provisions in its proposal to return pollock DPF that the Aleut Corporation may be unable to use to the fisheries that originally funded the allocation.

Under Alternative 2.1, the "no action" alternative, the FMP would not be modified. Under these circumstances, the language of the FMP (for example, with respect to CDQ allocations) would be in conflict with the statutory language in Section 803. Therefore, this is not a viable alternative.

Alternative 2.2 funds the AI allocation from the EBS pollock ITAC. Any change in the pollock ITAC amount mid-way through the year would require publishing the reallocation in the Federal Register for approximately 16 allocations for the AFA coops and open access fishery and an additional 6 if CDQ groups contribute to funding the allocation. Section 206(a) of the AFA requires that 10% of the BSAI pollock TAC be allocated as a directed fishing allowance (DPF) to the CDQ program. The remainder of the EBS pollock TAC, after the subtraction of an allowance for the incidental catch of pollock by vessels participating in other directed fisheries (3.0 percent in 2004) , is allocated as follows: 50 percent to catcher vessels harvesting pollock for processing by AFA inshore processors, 40 percent to catcher/processors and catcher vessels harvesting pollock for processing by catcher/processors, and 10 percent to catcher vessels harvesting pollock for processing by AFA motherships. The inshore pollock allocation is further allocated to 7 cooperative and one "open access" allocations. The details of the allocation are described in regulations at 679.20(a)(5)(i). For this alternative reallocation would require 2 tables in the final specifications to be updated.

The least complicated way to reallocate the unused "B" season AI pollock would be in the final specifications instead of later in the year under a separate reallocation notice. The Council would recommend the AI ITAC and DPF. The harvest specifications could state the "A" and "B" season amounts, and determine prior to the fishing year that the “B” season AI pollock ITAC could not be fully caught and therefore that some or all of it could be reallocated to the fisheries that funded the AI pollock DPF. For this approach to work, the Aleut Corp would have to determine in December that it would not make use of pollock allocations after June 10 (the start of the “B” season). Aleut Corp representatives have indicated that they may be unable to utilize “B” season pollock DPF in 2005, and possibly in subsequent years. However, they have also indicated that at some point they may want to exercise the option of a “B” season fishery.

A roll back of unused AI pollock DPF would increase the DPF for the EBS pollock fishery. Regulations at 679.20(a)((5)(i)(B)(1) require the DPF to be split 40% and 60% between the two fishing seasons. A roll back of 10,000 mt in December would increase the EBS “A” season DPF by 4,000 mt and the “B” season portion of the DPF by 6,000 mt. A roll back of 10,000 mt at the start of the “B” season on June 10 would increase the “B” season portion of the DPF by 6,000 mt, but would result in a 4,000 mt increase in the completed “A” season. This “A” season DPF could be rolled over from the pollock “A” season to the pollock “B” season (Regulations at 679.20(a)(5)((i)(B)(2) allow the Regional Administrator to add “under harvest...of a seasonal allowance for a component to the subsequent seasonal allowance for the component” through a Federal Register notice.). The net result would be a 10,000 mt increase in “B” season pollock.

Roll back of “A” season DPF within the “A” season may be difficult to do soon enough to be useful. Both the AI and EBS fisheries are targeting on roe bearing pollock in the period from late-January to early April. Both fisheries may take place simultaneously, or the AI fishery may even lag behind the EBS fishery. It may be difficult to identify AI pollock that would not be used, and make arrangements for a timely roll back, in this time frame.

There are several ways to determine when to initiate a roll back and to determine how much pollock to roll back. A simple approach would be to framework in regulations a requirement that all unused “A” season DPF, and all “B” season DPF, would be rolled back on June 10 (the start of the “B” season) unless the Regional Administrator had received a certified letter from the Aleut Corporation indicating its intent to use the “B” season quota.

Alternative 2.3 funds the AI allocation with equal proportional reductions in the TACs of all other BSAI groundfish fisheries. This alternative affects approximately 80 groundfish TACs and 71 groundfish sideboards, and may affect 176 CDQ allocations. Under current specification regulations the reallocation would require that eight groundfish allocation tables in the final specifications to be updated.

Before the reallocation is effective, a DPF or TAC amount may be reached and could result in unnecessary closures and disruption within the fishing industry. Once the fishery for a species is closed to directed fishing, only maximum retainable amounts (MRAs) of that target species may be retained in other fisheries open to directed fishing. The amount of a target species that is caught could possibly move a target species to a prohibited species status which requires that all subsequent catch be discarded. Both of these cases may require mandatory discards, which may pose an economic loss to the industry and increase waste.

The fisheries that would experience the highest impact under this alternative are the IFQ sablefish, pollock, Pacific cod, and Atka mackerel fisheries, because of their complex allocations. The pollock, Pacific cod and Atka mackerel TACs are further allocated by some or all of the following categories: gear type, processing sector, seasons, critical habitat, and vessel size. The IFQ sablefish fishery has allocations to individuals or groups.

Fisheries that are completely utilized would be vulnerable to closures because many of the DPFs or ITACs would be reached before the roll back. If a fishery has been closed to directed fishing and then the reallocation to increase ITACs occurs, the remaining uncaught DPF or ITAC may not be large enough to support a directed fishery and therefore ITAC may remain unharvested, representing a potential economic loss to the industry. The loss potential depends on the survival, growth rates, and reproductive potential of the fish that are not harvested.

In some instances, fisheries occur in the winter and spring, but not in the summer or fall. Two examples include the rock sole fishery, and the trawl fishery for Pacific cod. In these instances, there would be no ongoing fishery that could take advantage of the roll back, at least under current operational scenarios.

Alternative 2.4 is similar to 2.3, except that it exempts the sablefish fishery from the original allocation. "In season" roll back to the sablefish individual fishing quota (IFQ) fishery raises a number of problems that don't occur for other fisheries.

The hook-and-line and pot sablefish fishery in the BSAI operates under an IFQ program. This program divides the annual hook-and-line and pot sablefish share of the TAC among the individual fishermen with permits to fish for a specified quota of sablefish. The fishermen have considerable discretion about how to fish for their own quota during the course of the year. Each has a known allocation, and may fish throughout the year at their own pace. The benefits of an IFQ program flow in part from this certain knowledge about the size of the allocation. If a portion of the sablefish TAC were used to create an AI pollock allocation, with a commitment to return unused quota to the sablefish fishery at some unknown time late in the season, fishermen would lose some of their ability to plan the catch of their IFQ during the course of the year. This would reduce the benefits of the IFQ program for sablefish.

A roll back of AI pollock to the IFQ sablefish fishery would create administrative problems. The hook-and-line and pot sablefish fishery is an IFQ fishery. Each year, the annual IFQ allocation and permit computation requires that the fishery be closed to harvesting/landing for a minimum of 30 days between allocation periods. This is necessary to allow landings for each permit holder to be identified, overages and underages of IFQ catch to be identified, and for transfers of quota share to be completed. The roll back of unused AI pollock DPF to the sablefish fishery would only affect a subset of the total QS holders: those who hold EBS or AI quota share. However, this would still require that all existing IFQ accounts be frozen and recomputed because many more permits are interdependent as a result of transfer activity. The required cessation of sablefish fishing in the BSAI, and of BSAI QS transfers to accommodate a roll back, is most likely to come in the period from late spring to mid-summer, when weather and logistics are most amenable to sablefish fishing in this area.

The proposal to roll back unfished AI pollock DPF to the IFQ sablefish fishery in the middle of the year poses several difficulties for enforcement. It will become very difficult to prosecute any sablefish IFQ overages before a roll back decision has been made. For example, the preparation of a case, involving the seizure of catch and property, may be rendered moot if a fisherman receives additional IFQ in a roll back (while NOAA Enforcement and General Counsel have proceeded on the assumption that subsequent events can't offset or "cure" an overage, it may be hard to convince a court of the seriousness of an offense). Given the potential problems with these prosecutions, NOAA Enforcement may reallocate resources to enforcement actions that are more likely to result in convictions. Fishermen may be tempted to exceed their limits against the hope that a roll back in the future would cover them. Finally, the action would increase the administrative burden of proving overage cases.

Such a roll back is likely to be of modest benefit to sablefish fishermen. Sablefish hook-and-line and pot fishermen in the EBS and AI do not typically catch their full allocation. In 2003 sablefish hook-and-line and pot fishermen in the EBS only caught 60% of the quota available to them. The sablefish fishermen in the AI only caught about 52% of the quota available. In some instances, fishermen will have completely caught their initial allotment of sablefish IFQ or otherwise have completed fishing operations, and will have left the fishery. These participants would not be able to take advantage of the roll back, or may only be able to do so at considerable cost. Moreover, the reallocation is likely to be administratively expensive. An increase in administrative costs would be reflected in an increase in IFQ cost recovery fees for all program participants, regardless of their area of participation.

Alternative 2.5 funds the AI pollock allocation from the pollock, yellowfin sole, and rock sole ITACs. It requires the roll back of unused “A” season AI DPF, and all “B” season AI DPF by the start of the “B” season on June 10. Alternative 2.5 mandates a roll back only to the EBS pollock fishery, and in this regard it is similar to Alternative 2.2. The Alternative 2.2 roll back discussion applies to Alternative 2.5 as well.

As noted earlier, in October 2004 the Council clarified its intent that 10% of any AI pollock TAC be set aside for harvest by CDQ groups. CDQ groups which are unable to harvest their full allocation may seek a rollover of their allocation back to the EBS. CDQ groups may seek a rollover to the EBS in advance of the fishing season, if they expect that they will not harvest their allocations. Rollovers from this source may total as much as 1,900 mt, the maximum potential CDQ group allocation in the AI. This should mitigate the potential for income losses to CDQ groups, if fishing opportunities in the AI are uneconomic.

Council’s preferred alternative:

The Council chose Alternative 2.2 as its preferred alternative. This alternative would fund the allocation from the difference between the OY and the sum of the TACs for the BSAI species, if the sum of the TACs were lower than the OY. If the sum of the TACs were equal to the OY, as it has been in recent years, the allocation would be funded from the BSAI pollock TAC. Under this alternative, the CDQ groups would not contribute to the AI pollock TAC under any scenario. Pollock that the Aleut Corporation was unable to utilize would be rolled over to the EBS pollock ITAC at the earliest possible time in the calendar year. The Council’s preferred alternative has only minor differences in terminology from Alternative 2.2, resulting in no substantive differences.

7.9 Monitoring harvest

Three monitoring and enforcement objectives are considered in this EA/RIR. These are:

3.1 Status quo (this option imposes only those monitoring and enforcement requirements that would be required if there were no change in regulation).

3.2 “Increased monitoring” alternative. This alternative would have several required measures (not options). These include:

1. The Aleut Corporation must notify the NMFS Alaska Region with a list of which vessels are authorized by it to fish for pollock in the Aleutians; notification must be at least 14 days prior to the anticipated start of fishing. The NMFS RAM Division will verify each vessel’s eligibility (FFP, ADF&G number, USCG fishery endorsement, length, or AFA status) and provide to the Aleut Corporation a list of qualified vessels and the date fishing may commence. These vessels must carry documentation showing they have RAM approval and Aleut Corporation permission;
2. Catcher vessels are prohibited from fishing for pollock in the Aleutian Islands if pollock harvested in the Bering Sea or GOA are on board. Also, catcher vessels are

prohibited from fishing for pollock in the Bering Sea or GOA if Aleutian Islands pollock are on board;

3. AFA requirements extend to catcher-processors and motherships (this extends AFA level observer and scale requirements to CPs under 60 feet and to unlisted AFA vessels);
4. AI pollock may only be delivered to a shoreside processor or stationary processor which has an approved Catch Monitoring Control Plan;
5. The Aleut Corporation will be responsible for keeping its harvests and its agents' harvests within the AI pollock directed fishing allowance. The Aleut Corporation shall be responsible for designating a person as a quota manager for pollock catch accounting; this person shall report to NMFS Sustainable Fisheries Division with weekly pollock catch summaries.

3.3 "Observer" alternative. Option 3.3a: All the requirements of Alternative 2 would apply; in addition, all catcher vessels would be required to have 100% observer coverage. Option 3.3b: All of the requirements of Alternative 2 would apply; in addition, all catcher vessels would be required to have 30% observer coverage while operating in the Aleutian Islands and at least one trip by each participating vessel would have to be observed.

Alternative 3.1: the status quo

Alternative 1, the status quo alternative, imposes no new monitoring requirements. Vessels under 60 feet in length, and AFA vessels, would only be subject to current regulatory requirements. The status quo monitoring and enforcement rules are described in Section 3.6

Alternative 3.2: upgraded monitoring and enforcement measures

Alternative 3.2, described above, imposes four new monitoring and enforcement requirements in addition to those described in Alternative 3.1. These extensions, with estimates of their benefits and costs, are summarized in Table 7.9-1.

Under the first monitoring and enforcement element for Alternative 3.2, the Aleut Corporation would be responsible for determining that the vessels with which it contracts have the appropriate permits and meet the requirements of the statute for participation. The Corporation will also be responsible for notifying NMFS about the identities of eligible vessels, and of changes in the list. The Aleut Corporation will provide a letter to the NMFS Alaska Region with a list of vessels authorized to fish the AI pollock DPF on their behalf, before the beginning of the fishery. The Aleut Corp will be required to provide each approved vessel with a letter of authorization for participation in the AI pollock fishery. Vessels will be prohibited from fishing for pollock in the AI unless they have a valid, authorized letter on board. It will be the responsibility of the vessel owner/operator to ensure their authorization is valid before fishing.

The second monitoring and enforcement element would prohibit catcher vessels from fishing for pollock in the Aleutian Islands if pollock harvested in the Bering Sea or GOA are on board. Also, catcher vessels are prohibited from fishing for pollock in the Bering Sea or GOA if Aleutian Islands pollock are on board. As described in Statute, the Aleut Corporation may choose to contract with AFA vessels to harvest part of their allocation. By definition, these vessels would also be able to harvest pollock in the Bering Sea. Catcher vessels that participate in these fisheries may mix multiple hauls in recirculating salt water tanks for transport back to the plant where the fish are processed. Under these circumstances, if a catcher vessel chose to fish in both the Bering Sea and the Aleutian Islands on the same trip, it would be very difficult for managers to deduct fish from the proper quota. Furthermore, vessel operators may have incentives to misreport the portion of fish harvested in each area, and these circumstances may be difficult to track and take enforcement action against. For these reasons, a catcher vessel may not fish in the Aleutian Islands area at any time during a trip, carrying pollock harvested in the Bering Sea or GOA. Moreover, a catcher vessel may not fish in the Bering Sea or GOA if it is carrying Aleutian Islands pollock. Because all catch is 100 percent observed and weighed at-sea, AFA catcher processors and motherships would be allowed to harvest Bering Sea and Aleutian Islands quota on the same trip. Compliance with this requirement should not present a significant operational or economic burden to participating catcher vessels, and is a reasonable requirement on the part of the Agency to assure attainment of conservation and management objectives.

The third element would extend the scale, sampling station, and observer coverage requirements to all catcher processors and motherships. Observer and catch weighing requirements for AFA-listed catcher processors apply, whenever the vessel is fishing for groundfish off Alaska. However, catcher processors less than 60 feet, and the Ocean Peace (the only unlisted AFA vessel catcher processor) are not required to meet these requirements when fishing for non-AFA pollock. However, at this time, there are no trawl vessels under 60' capable of processing at-sea and endorsed to do so. Thus, NMFS does not anticipate that these regulations will have any additional impact except to the extent that the Ocean Peace voluntarily chooses to participate in this fishery.

The fourth element would require all fish harvested in the Aleutian Islands to be delivered to a shoreside processor or stationary floating processor which is operating under an approved catch monitoring and control plan (CMCP). All shoreside or stationary floating processors which process AFA pollock are required to operate under an approved CMCP (see 50 CFR 679.28). This element extends this requirement to any shoreside or stationary floating processor that process pollock harvested in the Aleutian Islands. Each CMCP would be required to address the following performance standards:

- NMFS must be able to verify that all catch is sorted, weighed, and reported by species.
- All scales used to weigh groundfish must be approved by the State of Alaska, meet minimum standards for accuracy, and must produce paper printouts of scale weights that would be retained by the plant for use by observers and for auditing and verification by other NMFS personnel.
- Each plant must develop scale testing and calibration procedures and scales must be tested upon request by NMFS-authorized personnel.
- An observer work station must be provided that contains: A platform scale with at least 50 kg capacity, a work table of at least 2 square meters, at least 4.5 square meters of floor space, is free of safety hazards, has adequate lighting, and has a secure cabinet for the observer's use.
- Each plant must have an observation area where an observer can see the entire flow of fish, or otherwise ensure that no unobserved removals of catch can occur, between the catcher vessel and the location where all sorting has taken place and each species has been weighed.
- Catch monitoring plans must be reviewed by NMFS. Plans that meet the standards are approved. After plan approval, the plant must make any required alterations to the factory and purchase all necessary scales, printers, test weights and other equipment. The plant must then be inspected to ensure that the design meets the performance standards.
- Each scale used to weigh catch must be approved annually by the State of Alaska, Division of Measurement Standards. Additionally, the plant is required to submit a scale testing plan that lists the procedures the plant uses to test each scale used to weigh catch.
- The plant must designate a plant liaison who must be available whenever pollock is offloaded or processed to assist the plant and catcher vessel observers

The plan must:

- Describe the procedure for testing the accuracy of each scale throughout its range of use;
- List the test weights and equipment needed to test each scale;
- Describe where the test weights and equipment will be stored;
- List the plant personnel responsible for conducting the test;
- Be posted in a prominent location in the scale house or observer sampling station.

With no less than 20 minutes notice, NMFS staff, or NMFS-authorized personnel, may demand that any scale used to weigh catch be tested by plant personnel at any time, provided that scale had not been tested and found to be accurate within the last 24 hours. Scales found to be inaccurate may not be used until repaired, recalibrated, or re-approved by the State of Alaska, Division of Measurement Standards. Finally, each plant is required to maintain a printed record of the total weight of each species. NMFS anticipates that this alternative would extend these requirements to one additional facility.

Under this alternative, catcher vessels would not be required to have every haul observed, would not carry certified flow scales, and would not have an observer sampling station. However, current IR/IU regulations would require the retention of all pollock, which would be harvested within the Aleutian Islands and weighed by a certified scale at a shoreside or stationary floating processor.

The fifth element in Alternative 3.2 places an affirmative burden on the Aleut Corporation to keep the AI pollock DPF harvest within the DPF limit. The Aleut Corporation will be liable for penalties if the DPF is exceeded. As noted, the Aleut Corporation shall be responsible for designating a person as a quota manager for pollock catch accounting; this person shall report to NMFS Sustainable Fisheries Division with weekly pollock catch summaries. NMFS will monitor the AI pollock harvest using its normal procedures, and will exercise its option of closing the directed fishery if necessary. This will not relieve the Aleut Corporation of its responsibilities or potential liability under this program.

Table 7.9-1 Costs and benefits of elements of Alternative 2

Element	Benefit	Cost
Aleut Corp must let the NMFS Alaska Region know which vessels are authorized by it to fish for pollock in the Aleutians, and these vessels must carry documentation showing they have permission	Monitoring and enforcement will be facilitated if NMFS knows, in advance, which vessels are authorized to fish for pollock in the Aleutian Islands, and which are not. Requiring vessels to carry documentation stating that they have Aleut Corporation authorization to fish for pollock in the Aleutian Islands will facilitate the efforts of USCG enforcement boarding efforts. Additionally, enforcement agents who are tracking VMS data will have information on which vessels harvesting pollock are allowed to fish within the Aleutian Islands. These measures would be of some benefit to the Aleut Corporation, as it would facilitate NMFS identification of vessels fishing for pollock without Aleut Corporation authorization.	Current plans involve imposing two regulatory obligations on the Aleut Corp. It must notify the NMFS Alaska Region of vessels authorized to fish in the AI pollock fishery prior to entry by those vessels into the fishery, and it must provide those vessels with documentation that they can carry, indicating that they have been authorized to participate in this fishery. NMFS will incur costs for collecting data and processing the paperwork. Aleut Corporation costs to notify NMFS and provide documentation to vessels are expected to be relatively small. NMFS estimates that these will be under $200. Most of the cost will be labor costs associated with preparing the letters. The information for these should be available to the Corporation following its negotiations with its affiliated fishing firms.
Catcher vessels are prohibited from fishing for pollock in the Aleutian Islands if pollock harvested in the Bering Sea or GOA are on board. Also, catcher vessels are prohibited from fishing for pollock in the Bering Sea or GOA if Aleutian Islands pollock are on board.	Many of the vessels that will be authorized to fish for the Aleut Corporation also have authority to fish for AFA pollock in the EBS. This may make it difficult to determine whether fish delivered by a vessel were harvested under AFA or Aleut Corporation authority. Vessels may have an incentive to misstate the origins of their fish under certain conditions. On AFA catcher-processors, every haul is observed, all catch is weighed by approved flow scales, a motion compensated platform scale is available for the exclusive use of the observer, and each vessel is required to have an approved observer sampling station. Catcher vessels do not have these controls. Therefore, this measure would extend only to catcher vessels, and would provide the necessary control over harvests inside and outside of the Aleutian Islands area.	Catcher vessels, that may have been fishing for pollock in the GOA or EBS before entering the AI to fish for Aleut Corporation pollock will have to put into port and offload their product before entering the Aleutians. Similarly, vessels fishing in the Aleutian Islands fishery will have to offload any Aleutian Islands fish before fishing for pollock in the EBS or GOA.
AFA requirements extend to catcher-processors and motherships (this extends AFA level observer and scale requirements to CPs under 60 feet and to unlisted AFA vessels)	The use of at-sea scales and observer work stations in the pollock fishery gives NMFS and the industry accurate and reliable catch data. AFA-listed catcher processors and motherships must currently weigh all groundfish caught off Alaska. Unlisted AFA vessels and CPs under 60 feet are not required by regulation to have the same monitoring measures as AFA listed CPs. On AFA catcher-processors, every haul is observed, all catch is weight by approved flow scales, a motion compensated platform scale is available for the exclusive use of the observer, and each vessel is required to have an approved observer sampling station. Since an unlisted AFA CP, or any CP under 60 feet LOA that processes at sea, has reduced observer coverage requirements, and may offload at sea, there is no way to determine if product is from the EBS or the AI. By requiring these AFA equivalent monitoring measures on CPs under 60 feet, and unlisted AFA vessels, managers have the ability to account for catch. This creates a more enforceable program.	Any CP under 60 feet or unlisted AFA vessel seeking to participate in the AI pollock fishery must ensure every haul is observed, all catch is weight by approved flow scales, a motion compensated platform scale is available for the exclusive use of the observer, and each vessel is required to have an approved observer sampling station. This will impose costs in the form of equipment acquisition and maintenance, observer coverage, and factory modifications. There would also be additional paperwork and reporting requirements. NMFS will incur costs as it must approve the scales and observer sampling station. However, NMFS does not anticipate that any of these vessels will participate in this fishery.

Element	Benefit	Cost
Catcher vessels may only deliver to a shore plant or shoreside processor with an approved catch monitoring control plan (CMCP)	Currently, a processor accepting deliveries of AFA pollock must have a CMCP approved by NMFS. The regulations provide minimum requirements for the CMCP, including an observer sampling station, an MCP for the observer, and a plan for communicating with the observer. The onus is on the plant to develop a CMCP within the published guidelines. NMFS approves the CMCP. This plan ensures that deliveries can be effectively monitored and that delivery weights will be accurately reported. These plans also help ensure more accurate and reliable reporting by the processor and enable NMFS and the industry to more efficiently resolve reporting discrepancies.	PRA estimates of the cost of creating a new CMCP are $8,000 for the firm and $1,000 for NMFS. Subsequently, CMCPs must be modified as changes are made in plant operations or layout. Costs associated with a modification of a plan would be less than the costs of creating the original. One processing firm in Adak is expected to incur these costs. Additionally, the plant would be required to incur equipment costs and any costs that may result from changes to the plant in the course of complying with CMCP guidelines. Depending on the layout of the existing plant, modifications to the catch-weighing system, the observer work area, or the layout of the plant could be necessary. These costs are difficult to predict but would probably range between $10,000 and $70,000.
The Aleut Corp. will be responsible for keeping its harvests and is agents' harvests within the AI pollock directed fishing allowance.	This provision should improve control of harvest, and reduce the potential of exceeding the AI pollock DPF. The Aleut Corp. or its agents will contract with fishing operations to harvest and deliver pollock. The Corp., or its agents, will be in a position to monitor catches almost as they occur. The Corp. will have the ability to slow harvests as the directed fishery allocation is approached, and to end harvests when it has been reached. Penalties for overage will give the Corp. or its agents an incentive not to exceed the DPF. NMFS will continue to monitor catches and deliveries through its normal monitoring systems.	Costs appear to be minimal. This approach makes use of catch and delivery monitoring procedures that would be undertaken by the Aleut Corp, its agents, and NMFS.

Alternative 3.3: increased observer coverage

Alternative 3.3 would require increased levels of observer coverage on vessels fishing in the AI pollock fishery (in addition to all the provisions of Alternative 3.2). Under one option all catcher vessels would be required to have 100% observer coverage. Under another, all catcher vessels would be required to have 30% observer coverage while operating in the Aleutian Islands and at least one trip by each participating vessel would have to be observed.

The benefit of the observer coverage requirement is the improvement in the monitoring of fishing vessel harvests at sea. Under the status quo, and Alternative 2, the only catch data for unobserved catcher vessels will be the landings records prepared when the catcher vessel delivers to a shoreside plant, mothership, or catcher processor. These records may differ from actual catches by the amounts of discards or unreported events (e.g., gear loss, bird or marine mammal takings). By placing an observer on these vessels, fisheries managers may verify at-sea discards as reported on the fish ticket, obtain additional biological sampling, and monitor marine mammal and seabird interactions.

This may not be a large potential benefit in this fishery. Pollock fishing is a "clean" fishery with relatively small amounts of incidental catch. Pollock fishermen tend not to routinely discard fish at sea (historically, <2% of total catch), although intermittent discards undoubtedly take place. These vessels will, in addition, operate under all prevailing regulations, including IR/IU requirements (which "prohibit" discarding of pollock and Pacific cod). However, under these conditions, the value of the information on discards and unreported events may not be large.

Under Alternative 3, catcher vessels would be required to carry 100% observer coverage. NMFS commonly uses an estimated daily contract rate of $355/observer to estimate private observer costs. This cost estimate includes $30 per day towards travel expenses, but doesn't include an estimated $15/day for food provided by the vessel.

In addition to cash expenses, these fishing operations incur economic and operational impacts that are not directly reflected in the money they must spend on observer coverage. For example, fishing vessel operators may have to alter their travel plans and schedules to pick up or drop off observers; the observers take up limited (and valuable) space on vessels which (especially in the class of vessels under 60 feet) may be at a premium. That is, provisions must be made to accommodate the necessary work of the observer on deck (e.g., observing gear setting and retrieval, recording and sampling of catch and bycatch). The observer also occupies "living space" aboard, which otherwise could have housed additional crew members. These operational impacts may be reflected in both increased operating expenses and reduced harvests and revenues. It is not possible, with available information, to quantify these effects, but they may represent a substantial additional cost of operation for this class of vessels.

The discussion above was predicated on a set of costs that reflect experience in the current 100% and 30% observed fleets. There are a number of reasons to believe that the costs of supplying certified observers to the small boat fleet (which, as noted, has heretofore been exempted from observer coverage requirements) will be higher, on average, than the costs of supplying observers to the larger vessel fleet. These may include, among others:

- Observers are likely to find the working and living conditions more difficult on the smaller boats; they will have fewer amenities, more restricted living and working space, and may not be as safe as when assigned to larger vessels. Wages may have to be higher to continue to attract sufficient numbers of qualified observers to meet the new demand associated with extending coverage requirements to this segment of the industry. These higher wage costs (should they emerge) are not reflected in the present estimates.
- Moreover, the logistical expenses are likely to be higher to supply observers for these small boats. Small vessels are expected to be operating out of the port of Adak. Adak is remote and transportation costs to and from Adak are high, making it more expensive to get the observers to their assigned vessels
- Smaller vessels tend to take shorter (but more frequent) trips than their larger counterparts, in these fisheries. This means that observers will spend more time transferring between operations (and perhaps locations), as each deployment is made for a shorter "trip" duration. The logistical and transportation costs are thus likely to be higher, per unit observer coverage, than under present conditions.
- It may be harder for observer provider companies to supply observers to small operations in a timely manner; thus, fishermen may lose fishing time and profits due to an inability to obtain the required observer coverage.
- Costs for the vessel associated with carrying an observer may be high. Smaller vessels have less living space and working space than larger vessels. A vessel that is required to carry an observer may find that they must displace a crew member in order to accommodate the observer. This may increase the amount of work for each crew member, lower the overall productivity of the vessel, and ultimately, lengthen the trip.

A further consideration is that the Council has never before required observer coverage on vessels less than 60 feet in length. This action would establish a precedent, and impose observer coverage requirements (and costs) on the AI pollock fleet that are not imposed on other vessels under 60 feet fishing elsewhere in the GOA and BSAI. Moreover, the 100% coverage requirement would increase coverage requirements on this small class of vessel above those required on larger trawlers between 60 and 125 feet in length. Option 6.2.2, which only requires 30% coverage, and coverage of at least one trip in the Aleutians, requires coverage similar to that on the larger vessels, and would involve lower costs than the previously examined monitoring option.

A further consideration is that the Council has never before required observer coverage on vessels less than 60 feet in length. This action would establish a precedent, and impose observer coverage requirements (and costs) on the AI pollock fleet that are not imposed on other vessels under 60 feet fishing elsewhere in the GOA and BSAI.

Council's preferred alternative

The Council adopted Alternative 3.2 with modifications as its preferred alternative. The Council made two modifications. First, it clarified the language to note that "AI pollock may only be delivered to a shoreside processor or stationary processor which has an approved Catch Monitoring Control Plan *or to one or more AFA qualified vessels, as permitted by legislation* (italicized text represents the change). Second, it required that vessels < 60 feet take a Cadre observer if provided by NMFS (which implies that they meet requirements to enable them to do so if requested, including complying with safety provisions). The first modification clarifies the language to reflect the intent of the analysis: that entities receiving fish meet the monitoring standards imposed on AFA vessels. The second modification incorporates a modified version of Alternative 3.3 for observer coverage.

7.10 Delay entry of small vessels

The proposed action would ban participation of vessels less than 60 feet LOA from participating in this fishery for two or five years. The "no action" alternative puts no restriction on small vessel activity into the FMP.

The proposed amendments to the BSAI FMP and regulations are meant to provide a framework within which an allocation of AI pollock may be given to the Aleut Corporation. It may be that elements of the framework can be put in place faster for AFA catcher-processors and motherships than for catcher vessels under 60 feet. For example, under monitoring and enforcement Alternative 2, shoreside plants accepting pollock deliveries must have a catch monitoring and control plan in place. Given the short time frame for this action, it may not be possible to accomplish that by January 2005 (the target date for implementation of the AI pollock allocation program). This decision element was introduced so that, if it would potentially take longer to prepare for small vessel entry, the use of small vessels could be deferred for a few years, and the program could begin with AFA vessels without delay.

The Aleut Corporation is planning to provide fishing opportunities in 2005, to catcher vessels under 60 feet LOA, if the fishery is opened that year. The boats that would fish are most likely vessels that are currently fishing for Pacific cod in the area. Currently the Aleut Corporation planning is in its early stages, and in the absence of an FMP and regulatory framework for the fishery, or of an allocation in specifications, must proceed under considerable uncertainty. In separate communications at different times in the winter and spring of 2004, representatives of the Aleut Corporation and its affiliates have suggested that they were considering working with from three to eight vessels under 60 feet in 2005. The number may well depend on the size of the allocation. Thus, a provision in the FMP that explicitly delays the entry of small vessels for from two to five years, until monitoring and management issues unique to this class of vessel are resolved, may impose some cost on the Aleut Corporation and those small vessels wishing to enter the fishery.

The provisions that may prevent small vessels from fishing are those in Alternatives 2 and 3 under the decision on monitoring. However, small vessel entry would be effectively precluded by the absence of the regulatory prerequisite for their entry (for example, the CMCP). There is no need for a special regulation precluding small vessel activity for this reason. If a plant with a catch monitoring or control plan is required, but not available, small vessels would not be able to make landings. They would be prevented from making these landings whether or not the FMP contained language that prevented them from entering the fishery.

Concerns have been raised about the safety of small vessel fishing operations fishing for pollock in the Aleutian Islands. The most lucrative pollock fishery will be a winter fishery, and because of SSL protection measures, there aren't many pollock fishing areas available within 20 miles of shore. Moreover, under monitoring and enforcement Alternatives 3.1 and 3.2, these small vessels will not be observed. It may be desirable to concentrate fishing on larger vessels, which are more likely to carry observer coverage, during the first years of the program. Thus the program would generate better information on catches and incidental catches. For these reasons, it may be desirable to defer entry of vessels under 60 feet for the first few years of the program.

Council's preferred alternative

The Council chose "no action" Alternative 4.1. The Council noted that it would review the observer issue associated with vessels < 60 ft. concurrent with the June 2006 economic review. This modification to the alternative element is likely to require an unknown amount of staff time for preparation and an unknown amount of the Council's time at the June 2006 meeting. Aside from time required to monitor the issue in the June meeting, the alternative is unlikely to impose significant costs on the Aleut Corporation.

7.11 Reporting requirement

Section 803(d) states that the allocation is "...for the purposes of economic development in Adak, Alaska..." The Council's February 2004 motion, under the heading "Economic Development Mandate" requests the evaluation of an option to "Require an annual report to the Council along the lines of CDQ reports."[64] The purpose of such a report would be to allow the Council to monitor the Aleut Corporation's use of their allocation, to assure it is used to promote the economic development of Adak. Four alternatives are considered in this EA/RIR: (5.1) no reporting requirement, (5.2) require an annual report with no confidential information, (5.3) require an annual report with elements equivalent to the reports provided by CDQ groups, and (5.4) a one-time report in June 2006. A detailed discussion of the implications of these alternatives may be found in Section 4.6 of the EA.

The clearest benefit of reporting requirements would be the contribution they would make to insuring the advancement of Congresses' distributional goals in making this allocation. The pollock allocation to the Aleut Corporation may be thought of as a lump sum grant to the Corporation for the purpose of the economic development of Adak. This grant will change the constraints faced by the corporation, and may change its allocation of resources. The Corporation faces competing objectives; as noted below, it is committed to the development of a community at Adak, on the other hand, as a for-profit corporation with shareholders, the Aleut Corporation has the objectives of maximizing shareholder value and of treating shareholders fairly. It is possible that the development of a community at Adak may conflict with the profit maximizing objective. The possibility also exists that the corporation may misuse the allocation, by utilizing resulting revenues for purposes unrelated to the development of Adak. To the extent that these are possibilities, and to the extent that monitoring by the Council can detect potential problems, this requirement might help advance Congresses' distributional objectives.

[64] Section 803 and the Council's motion may be found in Appendices A.1 and A.3.

However, as noted in Section 4.6, the Council is not under any legal obligation to monitor the Aleut Corporation's use of the allocation to promote Adak development. It is uncertain that the Council has the "authority" to closely monitor and regulate the details of the Corporation's use of these funds.

Moreover, Section 4.6 notes that "the Aleut corporation has made a significant commitment and investment in the economic development of Adak. It's subsidiary, the Aleut Enterprise Corporation, was formed to manage the corporation's business development projects in Adak. According to the corporation's 2003 annual report, "the acquisition and privatization of Adak has been the largest business development effort by the Company for the last eight years." To the extent that these considerations reflect a considerable commitment by the Aleut Corporation to Adak development, it shows a congruence of interest between Congress and the Corporation with respect to community development goals and objectives.

Finally, Section 4.6 notes that the "economic development" purpose of the Aleut Corporation "is very broad and could encompass almost any activity funded or undertaken by the Aleut Corporation in or for Adak. It would include any activity that produced jobs or income for residents of Adak; any education, training, or scholarship programs; support or services for any business in Adak; construction of almost any type of infrastructure; and any administrative costs associated with these economic development activities." Allocations would not necessarily have to be used to generate income for the Aleut Corporation, or result in investments or payment of ongoing operating costs. For example, allocations may be made to owners and operators of vessels under 60 feet in overall length at no or very little cost in order to encourage them to deliver to, or homeport their vessels in Adak. The Corporation may choose to provide Aleutian Island pollock grants to crewmembers or skippers who choose to live in Adak, or enroll their children in local schools, in order to encourage the development of a community there. A reporting requirement that sought to be definitive, would have to be extremely comprehensive.

The two annual reporting alternatives, 5.2: reporting non-confidential information, and 5.3: CDQ-style reporting, would impose costs of the Aleut Corporation and on the Council and NMFS. As indicated in Section 4.6, the CDQ groups report paying between \$30,000 and \$75,000 (average \$49,000) annually for the annual independent audit and preparation of the annual report required by the State and NMFS. One of the primary differences between the CDQ groups and the Aleut Corporation is that the CDQ groups were formed specifically to manage CDQ allocations and they did not exist as corporate entities prior to implementation of the CDQ Program in 1992. The Aleut Corporation is an existing corporate entity and the allocation of AI pollock will be just one source of revenue and expenses among many for the corporation. Therefore, information prepared as part of the annual audited financial statements could provide a level of reporting and accountability that would provide some basis to monitor the use of funds from this allocation and to determine whether it was consistent with the purpose of the allocation. For this reason, the CDQ-style reporting from the Aleut Corporation would be expected to cost less than the costs reported by the CDQ groups.

It probably would take a limited amount of effort for the Aleut Corporation to provide a general description of how it was using the pollock allocation for economic development in Adak. In fact, the corporation probably would have to provide such a general descriptive document for its own use in informing board members and shareholders in the existing annual report process for the corporation itself. A general report to the Council would not add to the administrative cost for NMFS to administer the AI pollock allocation, because the report would not be submitted to NMFS and NMFS would not have oversight responsibilities for the economic development aspects of the allocation to the Aleut Corporation. The Council would incur limited costs associated with receiving, photocopying, and allocating time during a Council meeting to address the annual report.

Alternative 5.3 requires reports from the Aleut Corporation similar in scope to those required from CDQ groups. Section 4.6 of the EA provides a description of the elements one might expect in a report of this scope. This alternative would provide the highest level of monitoring of whether the Aleut Corporation was using the AI pollock allocation in a manner the Council judged to be consistent with the requirements of the statute. However, it also would be the most costly option to the Aleut Corporation, its affiliated business partners, and NMFS. It probably would require the Aleut Corporation to alter its recordkeeping to maintain financial and administrative records in a manner that would provide the information for the annual report. It would expand the task of the annual auditors and increase the costs of that audit for the Aleut Corporation. In addition, NMFS would have to assign staff to review and evaluation of the annual report, and interpret "compliance". It is not clear under what authority, on the basis of what criteria, and to whom NMFS would confirm such "compliance," however.

Alternative 5.4 was introduced by the Council in April 2004. This alternative would require the Aleut Corporation to submit a report to the Council prior to its June 2006 meeting. At that meeting, the Council would review the AI pollock fishery performance with respect to Adak development, to determine whether adjustments to the AI pollock DPF may be appropriate. This Alternative could be used in combination with any of the other alternatives. That is, this report could be the only report requested, or it could be a supplement to the annual report or CDQ level annual reports proposed in Alternatives 5.2 and 5.3. The purpose of this alternative is to provide the Council with a cumulative review (after the second "A" season fishery) of the Aleut Corporation's success in using the AI pollock allocation for promoting the development of Adak. In June 2006, the Council would be in a position to consider appropriate changes in the Adak allocation for 2007. The alternative appears to contemplate a report of less complexity and cost than the "CDQ level" report proposed in Alternative 5.3, but with more cumulative information than the annual reports proposed in Alternative 5.2.

Council's preferred alternative

The Council chose modified versions of Alternatives 5.2 and 5.3. The modifications clarify the information requested by the Council. Under Alternative 5.2, the Council requested information similar to that provided in the reports submitted each year by the AFA cooperatives. This requirement is a request that the Aleut Corporation provide information on PSC bycatch. Alternative 5.3 was modified to request information on the ways the money received by the Aleut Corporation for its pollock allocation was spent and to request information on Chinook salmon bycatch. None of these clarifications are believed to significantly change the costs of providing the requested reports.

7.12 BSAI Chinook PSC Cap

In April 2004, the Council identified an additional decision that it would have to make. Should Chinook PSC harvests in the Aleutian Islands associated with a new pollock DPF count against the BSAI pollock fishery Chinook cap, or not. The non-CDQ pollock fishery in the BSAI is subject to a 26,825 Chinook salmon bycatch cap. If this cap is reached two areas in the BSAI are closed to pollock fishing. Closure of one of these areas, to the northwest of Dutch Harbor, could have significant cost impacts on the AFA pollock fleet, particularly its inshore component. There are concerns that the new AI pollock fishery might lead the cap to be reached more rapidly. This could happen if bycatch rates were higher in the AI, or it could happen if the AI pollock DPF was funded in part from fisheries that had relatively low Chinook bycatch.

6.1 No action. Chinook salmon bycatch in the AI pollock fishery would count against the BSAI Chinook salmon bycatch cap.

6.2 Chinook salmon bycatch in the AI pollock fishery would not count toward the Chinook salmon bycatch cap in the BSAI.

6.3 A new 360 Chinook salmon bycatch cap is set for the AI pollock fishery which, when attained, results in closure of the AI Chinook Salmon Savings Area only.

The decision about whether or not to count AI pollock fishery Chinook bycatch against the cap was discussed in Section 4.7 of the EA. Table 4.7.1-2 in that section provided estimates of potential AI Chinook bycatch under different assumptions about bycatch rates and DPF levels, and compared these with estimates of potential reductions in EBS Chinook bycatch under different alternatives. The analysis was subject to considerable uncertainty about future levels of bycatch. As noted in Section 4.7, there are many problems with extrapolating historical Chinook bycatch rates into the future. However, the analysis did suggest that the potential range of impacts included possible reductions in net bycatch as well as potential increases.

If the actual rate is higher than the current rate, the result could be that the BSAI Chinook cap would be reached earlier, and an earlier closure of the Chinook salmon savings areas in the EBS and AI. As noted in Section 4.7, this would impose costs on the EBS pollock fleet. The burden is especially likely to fall on the inshore sector catcher vessels and processors.

A closure of the EBS CHSSA would increase the costs for vessels that would otherwise have fished in this area. These vessels will be forced to fish in waters beyond its boundaries. This would increase the vessel operating costs. Fuel expenses and wear and tear on the vessel from increased time at sea would both be important. Moreover, the move may be associated with increased operating costs due to lower catch per unit of effort as vessels are pushed from more desirable fishing grounds. These costs are likely to be more of a burden for catcher vessels, which must travel back and forth to port to deliver their catches. Moreover, a closure in the fall would only affect catcher vessels, since catcher/processors are not permitted to fish within the Catcher Vessel Operating Area (CVOA), within which the CHSSA is located, during this period. Only catcher vessels would be affected by a closure.

Loss of "continuity" may be one factor contributing to reduced catcher vessel CPUE. A company may "sequence" the activity of the vessels in a fleet of catcher vessels. For example, while one vessel is fishing, another may be returning to port, and a third may be traveling to the location of the vessel that is fishing. When the outbound vessel reaches the location of the vessel fishing, it can take the place of that vessel without losing contact with the productive fish. If the fleet must fish further from port, the increased transit times, coupled with the limited amount of time a catcher vessel can hold fish before delivery, may interrupt this continuity. This could be associated with a loss of contact with the school, an increased need for exploratory fishing, and lower CPUE. In port, the increased transit time from the grounds may be associated with the interruption of the smooth flow of pollock deliveries, and the need for more frequent shut down - start up of the processing plant.[65]

Increased running time to and from the grounds may also be associated with a decline in the quality of delivered product by catcher vessels, with consequent price effects. Catcher vessels want to offload the oldest fish aboard after about 25 hours. In March, when the pollock are school for spawning, it may take 12 to 18 hours to fill a vessel on the grounds in the CHSSA, and the trip back to Dutch Harbor could take 10 hours. Fishing and travel time together produce a time frame on the order of 15 hours before delivery of the oldest product.[66] A CHSSA closure may affect these times in two ways; fishermen operating in new grounds may face lower CPUE and take longer to fill the vessel, and the return time to Dutch Harbor is lengthened by hours.[67] Processors producing fillets prefer larger pollock than processors producing surimi. A vessel fishing

[65] Alden, Marcus. President of Westward Fishing Co. 1111 3rd Avenue, Suite 2360, Seattle, WA 98101. Personal communication. May 10, 2004.

[66] These estimates are meant to be plausible and approximate and are meant to illustrate the issue.

[67] Alden, ibid.

for a processor with a size preference may be forced off of desirable sized pollock and forced to fish for unsuitably sized pollock by an area closure.[68]

Salmon caught by the pollock fleet will not return to their natal waters and will not become available to the fisheries exploiting those waters. Returning salmon are used in subsistence, commercial, and recreational fisheries and for escapement and reproductive investment in future stocks. Changes in trawl technology that reduce by-catch rates and that increase the possibility that the pollock trawl fleet will not take the full PSC cap will increase the numbers of salmon returning to these uses.

Under Alternative 6.1, there would be no change in the cap. Chinook salmon caught by vessels in the AI pollock fishery would be counted against the cap and would affect the timing of the CHSSA closures. It is not clear whether or not AI pollock fishery could increase the Chinook PSC bycatch rate, but this is a very plausible outcome. In 2001 and 2002, an increase in the bycatch rate would probably have closed the CHSSA a week or two earlier in the fall; in 2003, it might have closed the CHSSA a week or two earlier in the winter fishery (but would not have had an effect on the CHSSA in the fall fishery, since that would have been closed anyway given events in 2003). This would have had the impacts described above during this the closures. These costs are likely to have been relatively larger for the inshore sector.

Alternative 6.2 would take the AI fishermen out from under the BSAI cap. This alternative would be a benefit to the EBS pollock fishery. While the AFA pollock ITAC would be reduced, the reduction would be associated with a small reduction in Chinook PSC bycatch - a reduction not offset by Chinook bycatch associated with the AI pollock fishery. This should relax the pressure on the cap somewhat. Second, the uncertainty associated with potential Chinook bycatch in AI pollock harvests would be eliminated for the EBS fleet. Conversely, the AI pollock fishery would not be subject to the constraints associated with the cap and CHSSA closure regime. There could be a reduced incentive to avoid Chinook salmon bycatch, should pollock schools be found together with Chinook. This may lead to higher Chinook salmon bycatch than otherwise, with a potentially adverse effect on domestic (U.S.) users of this resource (e.g., subsistence, commercial, and recreational salmon fisheries). This effect is unlikely to be large, given the relatively small size of the likely AI pollock DPF, the historical Chinook bycatch rates, the natural mortality of Chinook salmon before they return to their natal streams, and the contribution of Asian and Canadian stocks to BSAI Chinook salmon trawl bycatch. There would clearly be no economic incentive “for” higher bycatches, as all fish must be discarded, cost of sorting and disposing of fish would be uncompensated, and public concern and attention over any such bycatch “waste” would harm the image and reputation of the Aleut Corporation, its subsidiaries, and Adak.

Alternative 6.3 would apply AI pollock fishery Chinook bycatch against a local AI cap, leading to potential closure of the AI CHSSA. Under this option, the AI pollock fishery would be assigned a 360 Chinook bycatch cap. The 360 fish approximates the Chinook harvest expected with a 15,000 mt DPF, and the average 1991-1998 AI Chinook bycatch rate in the AI pollock fishery. When this cap was reached, the AI CHSSA area on the eastern boundary of Area 541 would be closed to directed pollock fishing. Chinook bycatch in the AI pollock fishery would continue to count against the overall BSAI Chinook cap. Note that the AI portion of the CHSSA covers an area of high historical Chinook bycatch. This option would close that area if the AI pollock fishery reached its local cap. Once closed, however, the AI pollock fishery would have a reduced incentive to minimize bycatch in its fishing activity, and that bycatch would continue to count against the BSAI cap.

[68] Gruver, John. Intercoop Manager, United Catcher Boats. Fisherman’s Terminal, 4005 20th Ave. W - Suite 110, Seattle, WA 98199. Personal communication, May 29, 2003.

Council's preferred alternative

The Council adopted 6.2 as its preferred alternative, "Chinook salmon bycatch in the AI pollock fishery would not count against the BSAI Chinook salmon bycatch caps." In addition, the Council adopted a modified version of 6.3: "The Chinook salmon bycatch cap of 700 applies to the AI Chinook salmon savings area closure only."

Under this combination of alternatives, Chinook salmon bycatch in the AI would not count against the BSAI cap, and would not influence the date on which the Chinook salmon savings area in the EBS would close. Thus, salmon bycatch in the AI pollock fishery could not increase the fishing costs of the AFA pollock vessels in the EBS. The AI would have its own cap of 700 Chinook salmon, and the AI Chinook salmon savings area would close if the AI fishermen reached that cap. Pollock fishing could continue after that time in other parts of the AI. The EBS Chinook bycatch would continue to count against the AI Chinook salmon savings area, and if the EBS pollock fishery reached its cap, the AI pollock fishery would close.

Alternatives 6.2 and 6.3 were evaluated above. The 700 Chinook cap is an increase from the 360 Chinook considered under 6.3. The 700 Chinook figure is approximately equal to the highest bycatch rate from the domestic fishery in the 1991 to 1998 period (0.0433 Chinook per metric ton of pollock) and an estimated 17,000 mt pollock DPF. The 17,000 mt DPF represents an ITAC of 19,000 mt, with an ICA of 2,000 mt. This is the ICA suggested by NMFS Alaska Region in-season managers as meeting bycatch needs in recent years.

The impacts on subsistence, recreational, and commercial fisheries for Chinook associated with this 700 Chinook cap will be modest. The 19,000 mt of pollock will be deducted from the EBS pollock fishery and will be associated with some reduction in EBS Chinook bycatch (see Table 4.7-1 in the EA for an analysis of the potential EBS/AI bycatch tradeoffs). As noted in the EA, the Chinook bycatch is drawn from a large number of natal areas, including Asia, Canada, the U.S. West Coast, and Western , South Central, and Southeast Alaska. Perhaps half to 60% may come from Western Alaska. Moreover, Chinook are taken as bycatch one or two years before they would return to their natal streams. The impact of the bycatch must be measured in returning adult equivalents, and any given bycatch will be associated with a smaller change in adult equivalents because of annual mortality. (Queirolo, 1988)

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APPENDICES

A1. Appropriations rider

Section 803 of Title VIII of the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act 2004, requires that any directed pollock fishery in the Aleutian Islands Subarea of the Bering Sea and Aleutian Islands (BSAI) be allocated to the Aleut Corporation to be fished by it, or by its authorized agents. Allocations under this section are to be used for the economic development of Adak, Alaska. The section identifies the classes of vessels that may be used to fish these allocations. The section allows allocations in excess of the BSAI optimum yield of 2 million metric tons.

Text of the Section 803

SEC 803. ALEUTIAN ISLANDS FISHERIES DEVELOPMENT.

(a) ALEUTIAN ISLANDS POLLOCK ALLOCATION. - Effective January 1, 2004 and thereafter, the directed pollock fishery in the Aleutian Islands Subarea (AI) of the BSAI (as defined in 50 CFR 679.2) shall be allocated to the Aleut Corporation (incorporated pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601 et seq.)). Except with the permission of the Aleut Corporation or its authorized agent, the fishing or processing of any part of such allocation shall be prohibited by section 307 of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1857), subject to the penalties and sanctions under section 308 of such Act (16 U.S.C. 1858), and subject to the forfeiture of any fish harvested or processed.

(b) ELIGIBLE VESSELS. - Only vessels that are 60 feet or less in length overall and have a valid fishery endorsement, or vessels that are eligible to harvest pollock under section 208 of Title II of Division C of Public Law 105-277, shall be eligible to form partnerships with the Aleut Corporation (or its authorized agents) to harvest the allocation under subsection (a). During the years 2004 through 2008, up to 25 percent of such allocation may be harvested by vessels 60 feet or less in length overall. During the years 2009 through 2013, up to 50 percent of such allocation may be harvested by vessels 60 feet or less in length overall. After the year 2012, 50 percent of such allocation shall be harvested by vessels 60 feet or less in length overall, and 50 percent shall be harvested by vessels eligible under such section of Public Law 105-277.

(c) GROUNDFISH OPTIMUM YIELD LIMITATION. - The optimum yield for groundfish in the Bering Sea and Aleutian Islands Management Area shall not exceed 2 million metric tons. For the purposes of implementing subsections (a) and (b) without adversely affecting current fishery participants, the allocation under subsection (a) may be in addition to such optimum yield during the years 2004 through 2008 upon recommendation by the North Pacific Council and approval by the Secretary of Commerce (if consistent with the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.)).

(d) MANAGEMENT AND ALLOCATION. - For the purposes of this section, the North Pacific Fishery Management Council shall recommend and the Secretary shall approve an allocation under subsection (a) to the Aleut Corporation for the purposes of economic development in Adak, Alaska pursuant to the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.).

A2. Senator Stevens' floor language

[Congressional Record: January 22, 2004 (Senate)] [Page S129-S157] From the Congressional Record Online via GPO Access [wais.access.gpo.gov] [DOCID:cr22ja04-16] AGRICULTURE, RURAL DEVELOPMENT, FOOD AND DRUG ADMINISTRATION, AND RELATED AGENCIES **APPROPRIATIONS** ACT, 2004--CONFERENCE REPORT

The PRESIDING OFFICER. The senior Senator from Alaska.

[[Page S150]]

In an effort to gradually establish a small boat fleet in Adak, subsection (b) of section 803 provides that during the years 2004 through 2008, up to 25 percent of the Aleutian allocation may be harvested by vessels 60 feet or less in length overall. During the years 2009 through 2013, up to 50 percent of such allocation may be harvested by vessels 60 feet or less in length overall. After the year 2012, 50 percent of such allocation shall be harvested by vessels 60 feet or less in length overall, and 50 percent shall be harvested by vessels eligible under section 208 of Title II of Division C of Public Law 105-277. Establishing a small boat fleet will be critical for the economic diversification of Adak and the revenues generated from the use of the Aleutian Islands pollock allocation will allow for greater investment opportunities in this community. For purposes of implementing this section, section 206 of the American Fisheries Act (AFA) is redefined so that the allocations in section 206(b) of the AFA should only apply to the Bering Sea portion of the directed pollock fishery.

Subsection (c) of section 803 codifies one of the longest standing conservation and management measures of the North Pacific Fishery Management Council, the 2 million metric ton cap for groundfish in the Bering Sea. The optimum yield for groundfish in the Bering Sea and Aleutian Islands Management Area shall not exceed 2 million metric tons. Upon the recommendation of the North Pacific Council and approval of the Secretary of Commerce, and only if consistent with the conservation and management goals and requirements of the Magnuson-Stevens Fishery Conservation and Management Act, the allocation of Aleutian pollock for economic development in Adak, may be in addition to the 2 million metric ton optimum yield. This treatment of the Aleutian Islands pollock allocation would only be during the 2004 through the 2008 fishing years, but only if harvests in excess of the cap do not result in overfishing and then only to the extent necessary to accommodate a directed pollock fishery in the Aleutian Islands and should not adversely affect the current participants in the Bering Sea pollock fishery in the near term. Eventually this pollock allocation will come under the combined optimum yield for all groundfish in the Bering Sea and Aleutian Islands 2 million metric ton cap by taking proportional reductions in the total allowable catches for each of the existing groundfish fisheries as necessary to accommodate the establishment of the Aleutian Island pollock fishery. Subsection (d) of section 803 allows the North Pacific Fishery Management Council to recommend and the Secretary to approve an allocation of Aleutian Islands pollock to the Aleut Corporation for the purposes of economic development in Adak pursuant to the requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The North Pacific Council should consider pollock allocations given to the various groups that participate in the Community Development Quota program to recommend a reasonable amount of the Aleutian Islands pollock to the Aleut Corporation for purposes of economic development in Adak and in no case should this amount exceed 40,000 metric tons. Nothing in this section requires the North Pacific Council to open the Aleutian Islands pollock fishery. The Council should not take any action in regards to this fishery which would require a new consultation under the current biological opinion or Endangered Species Act covering Steller sea lions.

Section 804 of Title VIII--Alaskan Fisheries prohibits any Regional Fishery Management Council or the Secretary from approving any fishery management plan or plan amendments to allocate or issue individual processing quota or processor share in any fishery of the United States other than the crab fisheries of the Bering Sea and Aleutian Islands.

A3. Council's February 2004 motion

North Pacific Fishery Management Council
165th Plenary Session

Agenda Item C-6
Congressional Legislation - Aleutian Islands Pollock Fishery
February 8, 2004

Motion:

The Council recommends that an amendment to the BSAI FMP be initiated for an AI pollock fishery. In the development of this amendment, the Council will be cautious that any opening of a directed Aleutian Islands pollock fishery is accomplished in full compliance with all applicable law and not disruptive to existing fisheries to the extent practicable. The Council will avoid taking any action in regards to this fishery which would likely result in an adverse effect requiring a formal consultation under the Endangered Species Act.

It is the Council's intent that this amendment should be developed on a schedule that will address all these considerations. These considerations must be met in order for the fishery to occur. As long as these considerations are met, and if possible, the schedule should mesh with the normal specifications process for a fishery to occur in 2005.

Further, the Council provides the following comments on the potential FMP amendment alternatives:

Initial Allocation Amount

For guidance in determining the allocation amount to the AI pollock fishery, the Council shall consider pollock allocations given to the various groups that participate in the CDQ program in order to recommend a reasonable amount of AI pollock to the Aleut Corporation and in no case should this amount exceed 40,000 mt.

Optimum Yield Cap and Allocation of Unutilized AI Pollock Allocation

The following will be analyzed. The pollock allocation to an AI fishery will come from within the OY cap:

Option 1: The pollock allocation to the AI fishery will be funded by a reduction in the EBS pollock TAC. Any unused pollock TAC from the AI fishery will be rolled back to the EBS pollock TAC. This will occur at the earliest time possible in the calendar year.

Option 2: The pollock allocation to the AI fishery will be funded by taking proportional reductions in the TACs for each of the existing groundfish fisheries in the BSAI. Any unused pollock TAC from the AI fishery will be rolled back on a pro-rata basis to the fisheries from where it originated in the same proportions. This should occur at the earliest possible time in the calendar year.

Suboption 2.1: Exempt the BSAI sablefish IFQ fishery from the proportional reduction.

Use of B Season Allocation

Option 1: Maintain the current 40/60 percent A/B seasonal apportionment requirement for pollock fisheries. Unutilized B season TAC is addressed in the options above.

Small Vessels

Option 1: Provisions for small vessels to fish starting in 2005.

Option 2: Defer small vessel participation until a later date 2 or 5 years from now to allow for development of a management program.

Economic Development Mandate

Option 1: Require an annual report to the Council along the lines of CDQ reports.

Monitoring Vessel Activity

Option 1: Have NMFS staff consult with enforcement and provide the Council with options.

Option 2: Mandatory shoreside monitoring.

Safety and Efficiency of Small Vessel Operations

Option 1: No change in Steller sea lion protection measures.

Option 2: Charge the SSL Mitigation Committee to consider changes to the SSL protection measures to allow small pollock trawlers to operate more safely and efficiently. The Council will not take any action which would likely result in an adverse effect requiring formal consultation under the ESA.

A4. The Optimum Yield of the BSAI Groundfish Complex – Language from the "Fishery Management Plan for the Bering Sea/Aleutian Islands Groundfish"

10.0 OPTIMUM YIELD (OY) AND TOTAL ALLOWABLE CATCH (TAC)

10.1 <u>Maximum Sustainable Yield (MSY) of the Groundfish Complex</u>

The groundfish complex and its fishery are a distinct management unit of the Bering Sea. The complex has more than 10 commercially important species and many others of lesser or no commercial importance. This complex forms a large subsystem of the Bering Sea ecosystem with intricate interrelationships between predators and prey, between competitors, and between those species and their environment. Therefore, the productivity and MSY of groundfish should be conceived for the groundfish complex as a unit rather than for many individual species groups.

The MSY of the groundfish complex is the range of 1.7 to 2.4 million mt. This is calculated by summing the MSYs of each target species and of the "other species" category, as defined in Section 13.2.2 of this plan, that are derived from species-by-species analysis. A reasonable verification of the MSY for the groundfish complex is derived by averaging the 1968-1977 catches when the fishery went through periods of growth, peak, decline, and some stability. The average catch was 1.8 million mt with a range of 1.1 to 2.4 million mt.

An ecosystem model of the Bering Sea developed by the Northwest and Alaska Fisheries Center (1981) showed that the mean exploitable biomass for the groundfish species covered by this FMP is about 9.3 million mt. This ecosystem model, the Prognostic Bulk Biomass (PROBUB) model, simulated the principal components of the ecosystem (mammals, birds, demersal fish, semi-demersal fish, pelagic fish, squid, crabs, and benthos) and considered their fluctuations in abundance caused by predation, natural mortality, environmental anomalies, and fishing. The magnitude of the mean exploitable biomass (9.3 million mt) suggests that the annual yield from it is probably much higher than the 1.7 to 2.4 million mt range estimated conservatively by the single species approach.

The ecosystem consideration also indicates that MSY of the groundfish complex may change if the present mix of species is altered substantially from the present period. Therefore, as changes take place, MSY for the complex may have to be reexamined.

10.2 Optimum Yield of the Groundfish Complex

The optimum yield (OY) of the groundfish complex is set equal to 85% of the MSY for the target species and the "other species" categories (1.4 to 2.0 million mt) to the extent this can be harvested consistently with the management measures specified in this FMP plus the actual amount of the nonspecified species category that is taken incidentally to the harvest of target species and the "other species" category. This deviation from MSY reflects the combined influence of biological and socioeconomic factors. The important biological factors indicate that:

1. When considering condition of individual species within the complex, the OY range encompasses the summed Acceptable Biological Catches (ABC) of individual species for 1978-1981. This sum may be used as an indicator of the biological productivity of the complex, although it is not completely satisfactory, because multi-species/ecosystem interactions cannot be adequately taken into account. The 15% reduction of MSY reduces the risk associated with relying upon incomplete data and questionable assumptions in assessment models used to determine the condition of stocks.

2. When considering multi-species/ecosystem models, the OY range is probably a conservatively safe level for the groundfish complex. The mean exploitable biomass of 9.3 million mt for the species groups suggests that the harvest level can be considerably higher than the OY range.

Although the multi-species/ecosystem models suggest that the harvest level can be higher than 2.0 million mt, it would only be so if the proper combination of exploitation rates by individual species commensurate to the natural balance of the groundfish complex is applied. This combination may not be desirable to the fishermen because the industry prefers only certain species. The recent catch history indicates that the present mix of species is socio-economically acceptable and that the groundfish complex should probably not be exploited at levels higher than 2.0 million mt at this time.

All of the socioeconomic considerations indicate that:

1. The OY range is not likely to have any significant detrimental impact on the industry. On the contrary, this range, when compared to the annual determination of OY, is more desirable because it creates a more stable management environment where the industry can consistently plan its activities with a minimum expectation of OY being equal to 1.4 million metric tons.

2. The OY range also covers actual catch levels during 1974-76 when the foreign fishery operated profitably before the MFCMA was implemented and is slightly higher than actual catches since then. It will allow the foreign fishery to operate near historic levels and yet offer considerable opportunities for domestic fishery expansion.

Therefore, the range of 1.4 to 2.0 million mt of the target species and "other species" categories, to the extent it can be harvested consistently with the management measures prescribed in this FMP, plus the incidental harvest of nonspecified species, will be the OY of the Bering Sea/Aleutian Islands groundfish complex covered by this FMP unless the plan is amended. An amendment will be made when the status of the groundfish complex changes substantially from the present condition or when socioeconomic considerations dictate that OY should fall outside the present range. OY may also have to be reexamined if substantial change from the present mix of species occurs or is desired of the groundfish complex.

10.3 Total Allowable Catch (TAC)

The Secretary, after receiving recommendations from the Council, will determine TACs and apportionments thereof among DAP, JVP, TALFF, and reserves for each target species and the "other species" category by January 1 of the new fishing year, or as soon as practicable thereafter , by means of regulations implementing the FMP. The Secretary will implement one-fourth of the preliminary TACs and apportionments thereof on or about January 1 of each year on an interim basis. They will be replaced by final TACs as approved by the Secretary following the Council December meeting.

Notwithstanding designated target species and species groups listed in Section 13.2B.2 on page 14-1, the Council may consider whether splitting or combining species in the target species category for purposes of establishing new TACs is desirable based on commercial importance of a species or species group and whether sufficient biological information is available to manage a species or species group on its own biological merits.

Prior to making recommendations to the Secretary, the Council will make available to the public for comment as soon as practicable after its September meeting, a preliminary Stock Assessment and Fishery Evaluation (SAFE) and preliminary specifications of ABC and TAC for each target species and the “other species” category, and apportionments thereof among DAP, JVP, TALFF, and reserves. At a minimum the SAFE will contain information listed in Section 10.3.1.

At its December meeting, the Council will review the final SAFE and comments received. The Council will then make final recommendations to the Secretary.

NOTE: The above language excerpt from the BSAI FMP has not been revised or routinely updated since the early 1980s, although important changes in the FMP have been incorporated, mostly in an additive fashion, annually or as often as approved by the Secretary. The most recent revision of this FMP was in June 2002. The Council is currently planning to review a completely revised and updated draft FMP that eliminates language and terms not used any more, and incorporates in a more streamlined and logical framework the various elements that embody the contemporary BSAI groundfish fishery management process, probably at its April or June 2004 meeting.

A5. RFA Certification

A.5.1 Introduction

The Regulatory Flexibility Act (RFA) was passed in 1980, and substantially amended in 1996. The Small Business Administration (SBA) guidelines for the implementation of the act state:

> “The Regulatory Flexibility Act...requires agencies to consider the impact of their regulatory proposals on small entities, analyze effective alternatives that minimize small entity impacts, and make their analyses available for public comment. The RFA applies to a wide range of entities, including small businesses, small not-for-profit organizations, and small governmental jurisdictions.” (SBA, 2003, page 1)

In January, 2004, in Section 803 of the Consolidated Appropriations Act of 2004 (CAA), Congress required that future directed fishing allowances of pollock in the Aleutian Islands be allocated to the Aleut Corporation.[69] Only fishing vessels approved by the Aleut Corporation or its agents would be allowed to harvest this allowance. In turn, the Aleut Corporation was only allowed to contract with vessels under sixty feet long, or with listed AFA vessels, to harvest the fish. The allocation was made to the Aleut Corporation for the purpose of furthering the economic development of Adak, Alaska.

[69] The text of Section 803 may be found in appendix A.1.

At its February 2004 meeting, the North Pacific Fisheries Management Council (Council) passed a motion requesting an analysis of various options that might be incorporated into an FMP amendment creating a structure within which such an allocation could be made.[70] It was the Council's intent that this analysis be presented to it at its April 2004 meeting in order that the Council could make a final decision on the amendment at its June 2004 meeting. In June, the Council took final action, and adopted a preferred alternative. In October 2004, the Council clarified its intent that the Aleut Corporation contribute, on the same basis as other BSAI pollock users, to funding of CDQ pollock allocations (10% of the BSAI pollock TAC) under the provisions of the AFA.

SBA's RFA guidelines state that:

> "If, after conducting an analysis for a proposed or final rule, an agency determines that a rule will not have a significant economic impact on a substantial number of small entities, section 605(b) provides that the head of the agency may so certify. The certification must include a statement providing the *factual* basis for this determination, and the certification may be published in the *Federal Register* at the time the proposed or final rule is published for public comment." (SBA, 2003, page 8)

NMFS has conducted a preliminary examination of the probable implications of the proposed FMP amendment for small entities, and has found that it will not have a "significant economic impact on a substantial number of small entities..." This Appendix reviews the factual basis for this conclusion.

A.5.2 What is a small entity?

Small businesses. Section 601(3) of the RFA defines a 'small business' as having the same meaning as 'small business concern' which is defined under Section 3 of the Small Business Act. 'Small business' or 'small business concern' includes any firm that is independently owned and operated and not dominant in its field of operation. The SBA has further defined a "small business concern" as one "organized for profit, with a place of business located in the United States, and which operates primarily within the United States or which makes a significant contribution to the U.S. economy through payment of taxes or use of American products, materials or labor...A small business concern may be in the legal form of an individual proprietorship, partnership, limited liability company, corporation, joint venture, association, trust or cooperative, except that where the firm is a joint venture there can be no more than 49 percent participation by foreign business entities in the joint venture."

The SBA has established size criteria for all major industry sectors in the U.S., including fish harvesting and fish processing businesses. A business involved in fish harvesting is a small business if it is independently owned and operated and not dominant in its field of operation (including its affiliates) and if it has combined annual receipts not in excess of $3.5 million for all its affiliated operations worldwide. A seafood processor is a small business if it is independently owned and operated, not dominant in its field of operation, and employs 500 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. A business involved in both the harvesting and processing of seafood products is a small business if it meets the $3.5 million criterion for fish harvesting operations. Finally, a wholesale business servicing the fishing industry is a small business if it employs 100 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide.

The SBA has established "principles of affiliation" to determine whether a business concern is "independently owned and operated." In general, business concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party controls or has the power to control both. The SBA considers factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists. Individuals or firms that have identical

[70] The text of this motion may be found in appendix A.3. The council's motion was turned into a set of decisions and alternatives for evaluation in this EA/RIR/IRFA. These may be found in Section 2.1 of the EA.

or substantially identical business or economic interests, such as family members, persons with common investments, or firms that are economically dependent through contractual or other relationships, are treated as one party with such interests aggregated when measuring the size of the concern in question. The SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic and foreign affiliates, regardless of whether the affiliates are organized for profit, in determining the concern's size. However, business concerns owned and controlled by Indian Tribes, Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U.S.C. 1601), Native Hawaiian Organizations, or Community Development Corporations authorized by 42 U.S.C. 9805 are not considered affiliates of such entities, or with other concerns owned by these entities solely because of their common ownership.

Affiliation may be based on stock ownership when (1) A person is an affiliate of a concern if the person owns or controls, or has the power to control 50 percent or more of its voting stock, or a block of stock which affords control because it is large compared to other outstanding blocks of stock, or (2) If two or more persons each owns, controls or has the power to control less than 50 percent of the voting stock of a concern, with minority holdings that are equal or approximately equal in size, but the aggregate of these minority holdings is large as compared with any other stock holding, each such person is presumed to be an affiliate of the concern.

Affiliation may be based on common management or joint venture arrangements. Affiliation arises where one or more officers, directors, or general partners controls the board of directors and/or the management of another concern. Parties to a joint venture also may be affiliates. A contractor or subcontractor is treated as a participant in a joint venture if the ostensible subcontractor will perform primary and vital requirements of a contract or if the prime contractor is unusually reliant upon the ostensible subcontractor. All requirements of the contract are considered in reviewing such relationship, including contract management, technical responsibilities, and the percentage of subcontracted work.

Small organizations. The RFA defines "small organizations" as any not-for-profit enterprise that is independently owned and operated and is not dominant in its field.

Small governmental jurisdictions. The RFA defines small governmental jurisdictions as governments of cities, counties, towns, townships, villages, school districts, or special districts with populations of fewer than 50,000.

A.5.3 Factual basis for certification

The Council's preferred alternative, and the other alternatives considered, are described in detail in Section 2.1 of the EA. The Council's preferred alternative has six components: (1) a mechanism for determining the size of the allocation to be made to the Aleut Corporation, (2) a mechanism for determining how that allocation is to be funded from within the BSAI OY [either from unallocated portions of the OY, or from the ITAC allocated to the AFA pollock fleet in the EBS], (3) a program for monitoring and enforcement, (4) a possible temporary prohibition on AI pollock small vessels, (5) a requirement that the Aleut Corporation report on the ways it is using its pollock allocation for economic development, and (6) provisions creating a Chinook salmon bycatch cap in the Aleutians, providing for the closure of a portion of the waters in the Aleutians to pollock fishing if the cap is met, and providing that the Aleutian's Chinook bycatch will not count toward closure of the Chinook Salmon Savings Area in the EBS.

This action does not have a "significant impact on a substantial number of small entities."

Substantial Number of Small Entities

The Council's action has the potential to directly regulate the following entities: (a) the Aleut Corporation and its subsidiaries, (b) fishing operations harvesting pollock in the AI, under contract to the the Aleut

Corporation, or its subsidiaries, (c) processors processing AI pollock under contract to the Aleut Corporation, or its subsidiaries, (d) American Fisheries Act (AFA) pollock vessels that may be affected by the Council's policy on funding the AI allocation, or which may be involved in fishing the AI allocation under the terms of the CAA.

Section 803(a) of the CAA requires that effective January 1, 2004 and thereafter, the directed fishery for pollock in the Aleutian Islands Subarea (AI) of the BSAI shall be allocated to the Aleut Corporation. Except with the permission of the Aleut Corporation or its authorized agent, the fishing or processing of any part of such allocation shall be prohibited by Section 307 of the Magnuson-Stevens Fishery Conservation and Management Act."

For the purposes of the RFA, the Aleut Corporation is best characterized as a holding company. A holding company is "a company that usually confines its activities to owning stock in and supervising management of other companies. A holding company usually owns a controlling interest in the companies whose stock it holds."[71] The Aleut Corporation carries out most of its significant activities through a variety of other companies whose stock it holds. These include the Aleut Enterprise Corporation, the Adak Reuse Corporation, SMI International Corporation, Tekstar, Inc, Akima Corporation, Aleut Real Estate L..L.C., and the Alaska Trust Company. (Aleut Corp Annual Report, pages 29-30).

The Aleut Corporation is a large holding company entity under the SBA criteria. Aleut Corporation revenues ranged from about $72 million in its 2001 fiscal year, to about $49 million in its 2003 fiscal year.[72] SBA small entity criteria at 13 CFR 121.201 provide a small entity threshold for "Offices of Other Holding Companies" of $6 million.[73] [74]

The vessels used to fish for the subject pollock allocation are expected to enter into a joint venture cooperative agreement with the Aleut Corporation (and/or one or more of its subsidiaries). The Aleut Corporation shall have authority over dispersing the component shares of the block allocation to individual fishing operations, as well as managing and coordinating the harvesting, processing, transshipment, marketing, and sale of the resulting products. If that is approximately the structural organization, then all those vessels "allocated" a working share of the Aleut Corp.'s DPF are "affiliates" of the larger group and, by definition, are not "small entities", themselves, for RFA purposes.

As described in Section 8.2, entities affiliated with one another are evaluated, based upon the annual revenues (or employee numbers) of all member affiliates combined. This criterion means that entities which contract with the Aleut Corporation (itself determined to be a "large entity") are subsumed within the larger aggregate entity, for RFA purposes.

The decisions identified as (1), (3), (4), (5), and (6) at the start of this section (allocation size, monitoring, delay entry of vessels < 60 feet, reporting, Chinook salmon cap and closure) of the EA are only expected to directly regulate entities which would harvest or process the Aleut Corporation allocation of AI pollock. Since, as noted above, these entities are affiliated with the Aleut Corporation, they are all considered large, within the meaning of the RFA.

[71](Definition accessed at http://www.incorporating-online.org/Definition-holding-company.html on February 25, 2004).

[72]Aleut Corp. 2003. page 16.

[73]This is sector NIACS Subsector 551, NIACS code 551112. "Other" holding companies is in contrast to "Offices of Bank Holding Companies." 13 CFR 120.201 accessed at http://www.blm.gov/nhp/news/regulatory/CFR/13CFR121.201.html on February 25, 2004.

[74]Section 803 "requires" the Aleut Corp. to contract with AFA boats to harvest some (or all, initially) of the pollock allocation. Once they enter into a cooperative agreement, that "entity" is large (i.e., because all its AFA partners are "large", as documented in AFA, and the Aleut Corporation is "large" by affiliation).

Council decision (2) will establish a "mechanism" by which the AI allocation is "funded," in order that it be contained under the 2 million ton total BSAI groundfish OY. This action will not actually reapportion the various pollock allocations to fund AI pollock. It will simply establish the process by which subsequent action, in the annual specifications process, will apportion the 2 million ton OY. Under the Council's preferred alternative, if the sum of the TACs in the BSAI were less than the 2 million mt OY, the funding of the allocation would take place, to the maximum extent practicable, from the difference between the sum of the TACs and the OY. In this situation, (some or all of) the funding would not come at the expense of other fleet segments. Alternatively, if the sum of the TACs were equal to the 2 million mt OY, the funding would come from the BSAI pollock ITAC. ITACs are defined after subtraction of CDQ group allocations, therefore the CDQ groups in the BSAI would not contribute to the funding. The entire funding would come from a reduced ITAC accruing to the AFA pollock fishing fleet in the EBS.

The AI pollock proposed action establishes a "process" which will be followed by the Council and NMFS when setting the species/fishery ITACs, at which time all attributable impacts to small entities will be assessed, as required by RFA. The potential "direct effects" on small entities, attributable to funding the AI pollock allocation would be treated during the annual specifications process, an action which always contains an IRFA. This is appropriate, because it is not until the specifications are set that any adverse impacts may actually be "defined" (i.e., ITAC shares allocated).

To illustrate the point, note that the Council is free to set the AI DPF at zero, or any number above zero (presumably up to the AI pollock ABC, minus the ICA), according to the legislation. If it selects zero, no ITAC will be reallocated from other fisheries, and there clearly are "no significant adverse effects on a substantial number of small entities." If it selects some "non-zero", but very small DPF (which is within its purview), say 100 mt, there clearly are "no significant adverse impacts...". This logic extends continuously until some, as yet undefined, point at which an amount of AI DPF "does" create a "significant adverse impact..." (unless the funding source is the EBS pollock fishery, wherein there are no small entities). However, it is the "setting" of all the annual ITACs (AI pollock and its funding sources), and not the mechanism "for" setting, which will result in those impacts, and permit an analysis which has the potential to identify the likely number, distribution, and attributes of the entities impacted. The Council won't actually "set" the ITAC amounts until it has the recommended ABCs for the coming fishing year.

Moreover, the Council's preferred alternative either funds the allocation from an unallocated portion of the OY, or funds the allocation by a reduction in the ITAC available for harvest by the AFA pollock fleet in the BSAI. The vessels in the AFA pollock fleet are either affiliated with processors or fishing cooperatives. In all instances, the affiliated entities have gross revenues exceeding the $3.5 million threshold separating small and large entities. Thus, the Council's preferred alternative would only affect large entities.

Six CDQ groups harvest pollock in the BSAI. CDQ groups represent Western Alaska communities and are given allocations of the annual pollock TAC to use for the purpose of fisheries related economic development to benefit these communities. Under the terms of the AFA, these entities are entitled to 10% of the pollock TAC in the BSAI. The CDQ groups are private, non-profit, entities, and are small entities within the meaning of the RFA.

In June, the Council explicitly excused the CDQ groups from contributing to the funding of the Aleut Corporation allocation. In October, the Council clarified its intent that the Aleut Corporation, as one of the users of BSAI pollock, was expected to contribute 10% of its AI allocation to the CDQ groups.

Consistent with the Council's intent, the current regulations governing the allocation of pollock to CDQ groups will not be revised under this action. Under current regulations, the CDQ groups will receive 10% of any TAC issued in the Aleutian Islands, and must fish their allocation there. This would have been the case if the Council had chosen, as it could have, to allocate pollock in the AI in 2003 and 2004. It would be the case if Section 803 had not been included in the CAA, and the Council had chosen to create a pollock TAC in the AI in 2005, or in a future year. CDQ groups will receive a part of their CDQ allocation in the AI, and their EBS CDQ allocation will be reduced by a corresponding amount. CDQ groups may request the rollover of unused AI CDQ allocations to the EBS. They may request the rollover of all of their AI allocation prior to the season if they expect to be unable to harvest it. The potential advantages and disadvantages of this to the CDQ groups were described in the RIR (Section 7.7).

The CDQ groups will not be directly regulated by the FMP amendment or by the changes in regulations associated with it.

Significant Impact

Since this action will not significantly impact a substantial number of small entities (as defined by the SBA), an initial regulatory flexibility analysis is not required and none was prepared.

A6. Transcript of Council debate, February 2004 meeting, Agenda Item C-6

NPFMC Discussion - Aleutian Islands Pollock Fishery, Agenda item C-6, February 8, 2004

Tape 53, approximately 10:44 a.m.

Stephanie Madsen (Council Chair): O.K., that finally concludes our public testimony and we're back to the action for Aleutian Islands pollock and rockfish; bring staff back up to the table. Are there any questions for staff, are we ready to move into any motions? Mr. Fuglvog.

Arne Fuglvog (Council member): Madam Chairman, is your preference, then, to start with Adak and do the Gulf after that?

Madsen: Whichever you would prefer.

Fuglvog: Madam Chairman, I have a motion. Under item C-6, Legislation on Adak pollock. For the Council members, if they could. . .we're going to be working off of that handout that Gerry Merrigan passed around. It's a 3-page handout, in bold at the top, says 'C-6, Adak pollock'.

Madsen: Does everybody have their copy of Mr. Merrigan's testimony?

Fuglvog: And, Madam Chairman, I will read it into the record to start:

> The Council recommends that an amendment to the BSAI FMP be initiated for an Aleutian Island pollock fishery. In the development of this amendment, the Council will be cautious that any opening of a directed Aleutian Islands pollock fishery is accomplished in full compliance with all applicable law and not disruptive to existing fisheries to the extent practicable. The Council will avoid taking any action in regards to this fishery which would require a new consultation under the current biological opinion or Endangered Species Act covering Steller sea lions. It is the Council's intent that this amendment should be developed on a schedule that will address all these considerations. These considerations must be met in order for the fishery to occur. As long as these considerations are met, and if possible the schedule should mesh with the normal specifications process for a fishery to occur in 2005.

And, Madam Chairman, just for clarification, I believe that staff would provide information on dates, so that last sentence of that one I'm not reading into the record.

> Further, the Council provides the following comments on the potential FMP amendment alternatives:

Under Initial Allocation Amount: For guidance in determining the allocation amount to the Aleutian Island pollock fishery, the Council shall consider pollock allocations given to the various groups that participate in the CDQ program in order to recommend a reasonable amount of Aleutian Island pollock to the Aleut Corporation and in no case should this amount exceed 40,000 metric tons.

Under Optimum Yield Cap, an allocation of unutilized Aleutian Island pollock allocation, the following options will be analyzed:

And, we would re-number. . .Option 2 is now Option 1:

The pollock allocation to an Aleutian Island fishery will come from within the OY cap. There will be two suboptions: [moving to page 2]

Suboption 1: The pollock allocation to the Aleutian Island fishery will be funded by a reduction in the Eastern Bering Sea pollock TAC. Any unused pollock TAC from the Aleutian Island fishery will be rolled back to the Eastern Bering Sea pollock TAC. This will occur at the earliest time possible in the calendar year.

Suboption 2: The pollock allocation in the Aleutian Island fishery will be funded by taking proportional reductions in the TACs for each of the existing groundfish fisheries in the BSAI. Any unused pollock TAC from the Aleutian Island fishery will be rolled back on a pro-rated basis to the fisheries from where it originated in the same proportions. This should occur at the earliest possible time in the calendar year.

And, under Suboption 2, I guess rather than. . .since it's a suboption, I believe it would still be a decision point, so it could be another suboption, and that would be:

Exempt the Bering Sea Aleutian Islands sablefish IFQ fishery from the proportional reduction.

If I could speak to just that point for clarification. The reason being, it's an IFQ fishery. IFQs are set at the beginning of the year in the TAC-setting process. Fishermen go out and. . .they're issued their cards, they go out and fish–it's very problematic to roll back fish to an IFQ fishery. We've seen what that problem can be. A lot of fishermen. . .it's very difficult to set the schedule.

Use of 'B' season allocation: Option 1: maintain the current 40/60 seasonal apportionment requirement for pollock fisheries.

Again, following the 'B' season TAC issue from Suboption 2. Now, we're going to follow the AP motion. These are the same as the AP motion.

On small vessels, Option 1: Provisions for small vessels to fish starting in 2005; Option 2: defer small vessel participation until a later date, 2 or 5 years from now to allow for development of a management program.

On the Economic Development Mandate: Option 1: Require an annual report to the Council.

On the Mandatory Vessel Activity: Option 1: Have NMFS staff consult with Enforcement and provide the Council with options. And, Option 2 would be mandatory shoreside monitoring.

And, I'm on page 3, now.

> Under Safety and Efficiency of Small Vessel Operations: Option 1 would be no change in the Steller sea lion protection measures. Option 2 would be to charge the Steller Sea Lion Mitigation Committee to consider changes to the Steller sea lion protection measures to allow small pollock trawlers to operate more safely and efficiently. The Council will not take any action which would require a new consultation under the current biological opinion.

Unidentified: Second, and request a clarification.

Madsen: Moved and seconded. I think Mr. Oliver had a question about how this relates to our previous action on the EA/EIS for Adak. . .or, Aleutian Island pollock. Mr. Oliver.

Chris Oliver (Council staff): Maybe this is just a clarification, Madam Chair. The Council had previously initiated an analysis of the Aleutian Island pollock issue and you had alternatives that included no action, i.e., no explicit closure; the second alternative was to prohibit a directed Aleutian pollock fishery and then in December you added a third alternative as a place holder in anticipation of legislation, which was to provide for a fishery as defined in the draft legislation, with the provision that the Council would not exceed the 2 million metric ton cap. Now, what we assume is that now that we have this legislation that this ongoing analysis which Ben and Bill have pulled together a lot of pieces for is simply going to be morphed, if you will, into this new document. So, in essence you're really not initiating a new amendment, rather we're sort of modifying the one that's already tasked. And so if you adopted this motion, for example, it would move forward as part of the package we already have underway you would simply be modifying obviously the alternatives and some of the alternatives from you had in December.

Fuglvog: That's my understanding.

Madsen: O.K. Mr. Wilson.

Bill Wilson (Council staff): Madam Chairman, just a quick clarification on that issue. My understanding is that this would supercede the intent and the components of that previously assigned analysis. This is the way Council wishes to go. I just didn't want to imply here that we were going to do what we had already started plus this. Is that correct?

Madsen: I appreciate that clarification. I think. . .the way I understand what Mr. Oliver said was we have taken action; we are not talking about a new document. What we're talking about is we are making changes to that document, and you're going to need to know when there's inconsistencies, today's action will supercede anything that was in that previous document.

Wilson: Thank you, Madam Chair.

Madsen: I think I have Mr. Anderson, Dr. Balsiger, and. . .I think a hand over here. . .Mr. Duffy? Mr. Anderson.

Stosh Anderson (Council member): Madam Chairman, through the chair, on the bottom of page 1, you have optimum yield caps, etc., and then you have the following options will be analyzed, and you struck Option 1 and then you made Option 2 Option 1? In doing that, shouldn't that sentence be above following the option, 'cause it's not an option any more. It's a statement and policy call?

Madsen: And, actually Mr. Anderson, that is in the existing document, so this would be something that is almost a repeat of what we had in the document, because we explicitly said in December that we would not exceed so this is almost a re-statement of that.

Anderson: Madam Chairman, where the difference is, is there's suboptions. And if we didn't choose that, we'd have a problem, so I just wanted the motion maker to clarify that.

Madsen: O.K., Mr. Fuglvog.

Fuglvog: Madam Chair, I would delete the actual option 2 or 1 language and it would just state the pollock allocation to an Aleutian Island fishery will come from within the OY cap, and then there are two suboptions to that statement.

Madsen: O.K., so what we've done is we've made that option to actually a statement that would precede the two options on how that will be decided. Thank you. Dr. Balsiger?

Jim Balsiger (Council member): Thank you, Madam Chairman. On that particular point, then, the language that was originally option 1 is entirely gone, is that correct?

Madsen: That's correct.

Balsiger: Thank you. And, then if I could, Madam Chair, on the very last sentence of this document where the language says the Council will not take any action which would require a new consultation. I don't understand very well, perhaps, the art of the various terms of the ESA, but we may have a consultation. We don't want to have a formal consultation, and so I don't know if we need to get the exact language. It may be something more appropriate to say the Council will not take any action which would likely result in a adverse effect or something like that, but if that's the intent of the words and consultation, perhaps we can leave it this way and straighten that out later.

Fuglvog: Madam Chairman, I think this was associated with the language from the Act, but I'm certainly amenable to wordsmithing that better to suit the Agency.

Madsen: Do you have that now, Dr. Balsiger, or are you going to come back to us?

Balsiger: Well, Madam Chair, I'm not sure that I can provide the exact right words, but of course the language of the Act says that we can't skip ESA, so we want to have the right words that say the right kind of consultation so it doesn't imply that we're intending to avoid the requirements of the ESA and that's all I was looking for.

Fuglvog: Madam Chairman, if I can, this language was taken directly out of the language of the Act and I think staff has a comment.

Madsen: Mr. Wilson.

Wilson: Madam Chairman, if the Council chooses to go forward with an analysis of changes in the Steller sea lion protection measures in the Aleutian Islands, that would necessarily imply a consultation with the Protected Resources Division of NMFS; it doesn't necessarily mean it has to be formal. Informal consultations are almost an ongoing process. I don't think you should fear an informal consultation process at all.

Fuglvog: So, Madam Chairman, what I'm hearing is, we could get further input from the Agency, but the word could have been 'formal' instead of 'new' if that would suffice, but that's a question maybe for Dr. Balsiger, or GC.

Madsen: Dr. Balsiger.

Balsiger: Madam Chairman, a proposed amendment, if this is the time, although I know we haven't discussed the main motion, . . .

Madsen: Well, I think we're on this topic. Let's see, I'll just ask. Mr. Duffy, is it all right? O.K., go ahead.

Balsiger: I would offer an amendment on that very last sentence, it would say, 'The Council will not take any action which would require a formal consultation under the ESA.'

Madsen: Is there a second? [Unidentified: Second] It's been moved and seconded. Dr. Balsiger, do you have any other comments about your amendment?

Balsiger: No, I believe I've bumbled through my explanation already.

Madsen: O.K., is there any other discussion on the amendment? Mr. Benson.

Dave Benson (Council member): Madam Chair, I guess I'm having difficulty knowing how we can make that definitive statement. The Council takes an action and it goes to the analysts. They look at what we did and determine if it's an informal or if a formal is necessary for consultation. It takes them some time to do the whole analysis of cumulative effects, etc., etc., so it's hard to predict for this Council, I think, ahead of time, to say we're not going to do anything that's going to trigger formal consultation. It's always after the fact, and so. . .I mean, we can say the Council will attempt to not take any action which would require a formal consultation, but I think that's about the best we can.

Madsen: Let's see, I think I had Mr. Bundy, Mr. Anderson. **[Change to Tape 54]**

John Bundy (Council member): Madam Chair, I think that Dr. Balsiger's language the first time around might have addressed Mr. Benson's points, so if it's appropriate I'd like to move to amend . . .

Madsen: You're going to amend the amendment.

Bundy: Amend the amendment. So, looking at the language on the page, just substitute for the very last line, the line that starts. . .'require', substitute the following there: 'likely result in an adverse effect requiring. . .'

Madsen: Could you read the whole thing, Mr. Bundy, please?

Bundy: O.K. Starting with the sentence, 'The Council will not take any action which would likely result, likely result, in an adverse effect requiring formal consultation under the ESA.'

Benson?: Second.

Madsen: Moved and seconded. Mr. Bundy.

Bundy: So, there is an element of judgment in there that would be exercised before the Council would take such an action.

Madsen: Further discussion on the amendment to the amendment. Mr. Benson.

Benson: Madam Chair, I think after we dispense with this we need to go and do the same thing in the first paragraph. I guess there's two amendments on the floor already, so. . .but I just want to notice folks that we've got the same problem in the first paragraph.

Madsen: O.K. And, it would be the Chair's call that if this amendment passes it carries the amendment. . ., if this amendment to the amendment passes, it carries the amendment and we would be back to the main motion. Is there any further discussion on the amendment to the amendment? Seeing no further discussion, is there objection to the amendment. Seeing no objection, the amendment to the amendment carries the amendment; we're back to the main motion. Mr. Duffy.

Kevin Duffy (Council member): Question of clarification, Madam Chair. Mr. Fuglvog, the second paragraph, page 1, down at the end, I didn't catch it. The hard copy in front of me reads, 'the schedule will be,' and then it's blank. Did you include that in your motion anywhere or not?

Fuglvog: Madam Chairman, Mr. Duffy. No. I stopped at the year 2005.

Duffy: O.K., thank you.

Madsen: Mr. Benson.

Benson: I'll give it a try on this first paragraph to clean up that language to be consistent with the amendment we just adopted. So, the last sentence in the first paragraph, 'The Council will avoid taking any action in regards to this fishery which would likely result in an adverse effect requiring a formal consultation under the current biological opinion or Endangered Species Act covering Steller sea lions.'

Madsen: One more time, Mr. Benson. Just real slow, Chris is trying to write it down.

Benson: O.K. 'The Council will avoid taking any action in regards to this fishery which would likely result in an adverse effect requiring a formal consultation under the current biological opinion or Endangered Species Act covering Steller sea lions.'

Madsen: O.K., it's been moved; is there a second?

Unidentified: Second.

Madsen: O.K., it's been moved and seconded. Any other comments, Mr. Benson?

Benson: I think it's been spoken to well enough.

Madsen: Mr. Anderson.

Anderson: Madam Chairman, I guess I'd ask the motion maker why he's just limiting it to Steller sea lions. Why couldn't he just. . .Endangered Species Act? Because I think we're probably dealing with more endangered species than Stellers at this point.

Benson: I think that's a good point. I'm just reading the language as it's written here. If you would like to offer an amendment I could support it.

Madsen: Mr. Anderson.

Anderson: Madam Chairman, I move to amend the amendment by putting a period after Endangered Species Act, after the word 'Act', so that would delete 'covering Steller sea lions', Madam Chairman.

Madsen: The amendment to the amendment would put a period after 'Act' and delete 'covering Steller sea lions'. Is there any further. . .is there a second.

Unidentified: Second.

Madsen: It's been moved and seconded. Is there any further discussion about the amendment to the amendment? Is there any objection to the amendment to the amendment? Seeing no objection, the amendment to the amendment passes; we're back to the amendment. Any further discussion? Counselor?

Lauren Smoker (NOAA GC): Thank you, Madam Chair. I have to admit I am not familiar right now with the problem statement for the analysis the Council requested be initiated at its October meeting, or whichever meeting last year. However, at that time we did have regulations in place, which we still have in place, that provide an OY range for the Bering Sea/Aleutian Islands of up to 2 million metric tons. At this point in time we now have statutory legislation that provides the Council the ability to exceed that cap for this kind of action and if you are. . .I guess I'm asking the maker of the motion and any other Council members to think about whether the deletion of the option, the alternative to have pollock allocation that is in excess of the 2 million metric ton cap is unreasonable and how that is not consistent with the problem statement or the purpose and need for this action because under NEPA, as you know, we do need to look at reasonable alternatives.

Madsen (Council Chair): Thank you, Counselor. I guess the first question is to the staff. Have we developed a purpose and need statement for this action?

Madsen: Point of Order? Because it wasn't on the amendment? O.K. Counselor, I think your question is on the main motion, so Mr. Benson's correct. Let's go ahead and dispense with this amendment. So, the amendment is. . .Mr. Benson's language modified by Mr. Anderson's. In the first paragraph; everyone understand what the amendment is? Is there any objection to the amendment? Amendment passes. We're back to the main motion and we need to address the Counselor's comments. Mr. Wilson.

Wilson: Madam Chairman. Could you rephrase your question, Ms. Smoker. In light of looking back at the. . .you're looking back to what, two meetings ago, in the discussions that led up to even consideration of putting an FMP amendment process on track here? Is that correct? It's going to be difficult for me to recall a lot of the discussion and debate that the Council had in that process. I probably have them here in my notebook here, though. Is that what you're requesting?

Smoker: Madam Chair, I want to note that when the Council initiated this analysis, at the time we did not have the current legislation in front of us; it had not passed, and. . .

Madsen: Counselor, actually when we initiated this analysis we did not even address the legislation. It was only whether we open the pollock the fishery or we do not. In December we modified it to include an alternative, but when we initiated this analysis we may not have even known there was potential legislation actually, so we initiated it prior to any Congressional legislation that we knew of at the time.

Smoker: Thank you, Madam Chair, that's right, and that's what I had thought. And, what I'm trying to get at is, now there is authorizing legislation that allows the Council and the Secretary to consider exceeding the 2 million metric ton cap when considering an Aleutian Islands pollock fishery and the current main motion eliminates an alternative from the analysis that would examine the impacts of such a measure, of taking the Aleutian Island pollock fishery from something above and beyond the 2 million metric ton cap. If we want to continue to not examine this particular alternative, I think it would be very helpful to have a discussion as to why that alternative is no longer reasonable and that might be in light of the problem statement or the purpose and need that was developed with your initial request for an analysis, if this analysis of the main motion is suggesting it's folded into that, which I think I understood is going to happen.

Madsen: I guess my only comment, Counselor, is that we're not deleting anything. We've never adopted an option that would look at exceeding the 2 million metric ton cap, so. . .the AP recommended that, but we never adopted it, so we really aren't dropping it, but I do think your comments are probably appropriate in relationship to building a record why we are not taking up looking at that given that we were given Congressional authority to do so, it may not be. . .I think it's a little semantical but just for the record we've never adopted anything that would exceed the 2 million metric ton cap, so it's not that we're deleting it, it's just that we've never taken it up and probably need to have a record built why we haven't, maybe. I think I had Mr. Anderson. . .do you have something, Mr. Wilson?

Wilson: Well, Madam Chairman, I've looked back to my notes from the December meeting and you did explicitly discuss this issue and in fact Mr. Krygier made a motion to add a third alternative to the analysis that you asked us to do and that was to provide for a fishery as defined in the rider with the assumption that the Council will not go over the OY cap. The motion further discussed issues about how to do the pollock fishery within the OY cap; there was a lot of discussion about having before you the accumulative assessment information that actually we provided for you at this meeting. Dr. Balsiger asked about where we're going to find the TAC if we're under the OY cap; there was quite a bit of discussion on that while issue, Madam Chairman. And, Ms. Smoker, this isn't necessarily getting at your question; I don't know if it is or not, but this is the record from the last meeting that I have some information on and I think Mr. Oliver probably has some more recollections.

Chris Oliver: I was going to speak to the other issue Counselor raised. You did have some discussion and record for why you had made that. . .passed that motion in December. I don't have that transcript in front of me, but you may or may not want to add to that at this meeting. But your other point, Ms. Smoker, had to do with a problem statement. We've talked about this issue many times, but when the Council originally initiated this issue back in October 2002, it was a motion by Mr. Duffy, there was quite a lengthy, in essence, problem statement associated with that motion which we assumed would be folded into this document, so I think we do have a basic problem statement for the issue. . .the 2 million cap. . .[words drowned out by someone coughing]. . .may be a separate issue.

Madsen: Maybe it's important for staff to bring that record back and label it whatever it needs to be labeled so that we understand that we have on the record described why we wanted to move forward with this analysis and I think actually identify some pretty specific things that we wanted in the analysis between Mr. Duffy's motion and Mr. Bundy's motion that actually turned it into an EIS at that time. I also think that it would probably be appropriate to continue to build the record on why the Council is not going to look at exceeding the 2 million metric ton cap, but we can go to that. . .I have a few reasons why I'm not in favor of it. Mr. Bundy. . .well, actually Mr. Anderson had his hand up first.

Anderson: Thank you, Madam Chairman. I think when we started this agenda item after the motion was put on the floor we did clarify that it was a policy call, that the Council was making a statement not to exceed OY of 2 million metric tons. I believe post Congressional action it's important for us to build a record that even though we have that option that we choose not to take that option. The Council's record over the years of the 2 million metric ton cap has had a lot of verbiage about its success and why the Bering Sea has been successful and that has been a significant element. When we were in DC in November it was touted as one of the reasons we've had a safety net in the rebuilding and in the sustainability of the Bering Sea, so it's been a major element of the responsibility and the objectives of this Council. With regard to Congressional actions, from the public testimony that we've had on this item, there's only been one individual that even hinted that he would want to be on death row for four years. So I think it's the consensus of the industry and I think it's the consensus of all comments I've heard the Council not to exceed the 2 million metric ton so I think it's a very explicit policy call by the Council not to include an option to exceed, Madam Chairman.

Madsen: Thank you. Mr. Bundy.

Bundy: Madam Chair, I was actually going to talk about something else, but now I want to respond to Mr. Anderson. I fully expect to be a minority here, but I don't agree entirely with everything Mr. Anderson said. The tool that was provided in this rider with regard to exceeding the 2 million OY cap is simply a very temporary and frankly deminimus exceeding of that cap, deminimus, I think, in a biological sense. In a financial sense, it's not deminimus. If you're talking about 40,000 tons of pollock, that's approximately $30 million of revenue annually, so that gives you an idea about the money involved. And, at the same time that this particular rider is allowing a temporary and deminimus exceeding of the cap it is putting in stone, as I think the word was used by Counselor, the 2 million cap in Federal legislation. I'd remind you also of the F_{40} report that we got last year which said that our 2 million cap is certainly positive and we deserve credit for that. It is not necessarily ecosystem-based because . . .and I think that the implication was that a cap that should be indexed to what the biomass is might be better so that there's always a constant cushion but not just an arbitrary number. So, anyway, I don't entirely agree with the statements made, but I just wanted to say that for the record.

Madsen: O.K. Mr. Hyder.

Roy Hyder (Council member): Thank you, Madam Chair. I for one really appreciate Ms. Smoker's question relative to this 2 million ton cap. The legislation that we're talking about certainly addresses it and addresses it in a very clear manner and there's a temporary ability to do something there if we need to. The legislation also, however, in four years brings back down and takes the science out of that cap. I for one would appreciate an opportunity to see an analysis of the cap and how we could apply science to a cap as opposed to a legislative limit that didn't preclude our scientists and our management from considering looking at the biomass in relation to the fishery. So, I appreciate the Counselor's question and at the risk of being aligned with the State of Washington, I guess I'm comfortable with Mr. Bundy's comments.

Madsen: Any other further comments on the main motion? Mr. Anderson.

Anderson: Madam Chairman, to respond to Mr. Hyder's comments, I think examining the 2 million metric ton cap is an appropriate task to do at some point, as a separate issue. But I think the issue we're dealing with here now has a limited time frame--you're wanting to accomplish this by June; to accomplish this by June that will allow us to fold the process into our normal TAC-setting process. If we're going to do a thorough examination on what is the appropriate F_{40} rate or the 2 million metric ton cap, I don't think we can give it adequate discussion in the time frame that we have to accomplish this task. But if it is the wisdom of this body to examine that cap and try to persuade the Congress to change their mind about the permanent cap, that's an exercise I could support.

Madsen: O.K., any further discussion? Mr. Benson.

Benson: Thank you, Madam Chair. Do I understand based on this discussion that because of Mr. Krygier's motion at the December meeting regarding staying within the cap that we are now bound by that and to do anything different in this motion would require us to go back and reconsider that?

Madsen: No, I explained that the main motion that was laid on the table did not include exceeding the 2 million metric ton cap, which would not conflict with the motion that we passed in December that added an alternative that was explicitly NOT exceed the 2 million metric ton cap. I didn't indicate that it was unreachable, that it wouldn't need reconsideration. What we do here supercedes what we did in December and staff will overlay. . .I just pointed out that this motion did not change anything relative to what we did in December for the OY cap. Mr. Fuglvog.

Fuglvog: Would this be the appropriate time to speak more to my motion, or are we still. . .

Madsen: No, no, no, the main motion is on the table. Mr. Fuglvog.

Fuglvog: Thank you, Madam Chair. I'd just like to speak to a couple parts that have not been addressed. Again, quite a bit is from. . .[unintelligible]. . .language. I spoke to the suboption to exempt the Bering Sea sablefish IFQ fishery and with the pollock allocation now being a. . .[unintelligible]. . .it would be option 1, option 2, and that would be a suboption. And, again, due to the IFQ fisheries it would be very difficult to roll fish back to the sablefish fishery. Just to highlight a couple other things, there is a difference in this motion between the AP and on one point it also makes another policy call I believe the Council should be aware of. And that is, if you compare it to the AP motion on use of 'B' season allocation, the concept of putting a 'B' season allocation in a reserve and permitting reallocation to harvest an amount to another gear group is not contained in this. I do not believe that that is an appropriate policy with comments from staff, they can speak to this a little bit if necessary, but that would be. . .it's a very open-ended and quite vague concept that would need a lot of fleshing out and I think it's much cleaner and much more appropriate that if we choose to make a proportional reduction of TAC that the fish go back to those fisheries which the. . .on a pro-rated basis from which the fisheries they originally came from. So, I just wanted to talk about that a little bit. Also, Madam Chairman, on small vessels, by having two options in there, if provisions are developed in time and we feel are adequate then the provision to allow small vessels to participate in 2005, that option is there and if we're unable to develop a management program, specifically the monitoring/enforcement I think are going to be the difficult parts of that, then we could delay the small boat participation, but we have both options in place there. I think it's appropriate under mandatory vessel activity to have enforcement provide input, staff concurs that they really need to hear from enforcement on that, and . . .[unintelligible]. . .with shoreside monitoring. With the clarifications from the Steller sea lion mitigation committee, the Council members and the Agency, I think the language is pretty well cleared up. I think that this leaves a lot to staff, under staff tasking we're going to again have to have comment about the time line, but we'll do that, I believe, under staff tasking. But I do not believe that we have added a tremendous analytical load; I think we've just slightly modified the AP motion and I think that this is doable with the time lines. We'll have to make that choice later with staff to enable a 2005 fishery as the legislation does not mandate that we allocate, but certainly suggests.

Madsen: Mr. Duffy, then Mr. Bundy.

Duffy: Thank you, Madam Chair. Back to the 2 million metric ton cap, I want to go on record as concurring with Mr. Anderson on this issue. I think that exceeding this cap or considering it associated with initiating a new fishery given the Steller sea lion issues we're facing, and trying to accommodate Congressional direction, the short time frame easily leads me to the conclusion to not cross that bar. If in the future we want to do a greater analysis of that, not associated with an expedited time frame to bring in a new program I would probably be on board with that, but not given what we're facing as a Council. The other issue I have is just a question of clarification of staff on the motion and that is, under the economic development mandate on page 2 of the motion, where it says require an annual report to the Council. That's pretty vague; I don't know if we're going to get anything back in April unless we provide some instruction. My suggestion on that for staff is to take a look at the components of the annual report that the State requires of the CDQ program and I think that would give us a framework where we could work on this issue and determine what an annual report is in April. That would be my suggestion, if that's within the motion, it's just instruction to staff, fine, otherwise I'll amend the motion.

Madsen: Mr. Fuglvog.

Fuglvog: Madam Chairman, I think that's a good suggestion. If that can be done informally with staff, then I'm certainly fine with that, if that is enough for staff.

Madsen: Mr. Bundy.

Bundy: Madam Chair, I'll make a motion to reinsert what is noted as option 1 with regard to the 2 million cap, . . .

Madsen: Well, Mr. Bundy, you're amending the motion. . . because we never deleted it. It was never read into the record as Mr. Fuglvog's motion, so you are amending the motion to include . . .

Bundy: That's correct. And, it's under the heading 'Optimum Yield Cap: an allocation of unutilized Aleutian Island pollock allocation.' So, the option would read, "The pollock allocation of the Aleutian Island fishery would be in addition to the 2 million metric ton cap consistent with the provisions of Section 803(c)."

?: Second.

Madsen: It's been moved and seconded. Mr. Bundy.

Bundy: Madam Chair, I don't need to belabor this, I've already made the statement that I wish to make.

Madsen: Mr. Fuglvog.

Fuglvog: Thank you, Madam Chairman. Well, I do believe there has been an adequate record for our justification for not going over the 2 million OY cap. I have a question of staff, I think it needs to be cleared up. We've heard some assumptions that what this would involve analytically and I think rather than having Council members try to guess, what exactly would an analysis of this include, in your opinion?

Wilson: Madam Chairman, I'll just take a first cut at that. Sue Salveson addressed that issue, I believe, yesterday, where staff at this point, the Agency, is uncertain what the result of an analysis would be until we do the analysis, but on the surface of it would consider this to be part of a EA process, but we would have to go through the EA process and then see if we arrive at a finding of 'no significant impact'. If we do, if the Agency and staff did arrive at that, then that's where it would stay. But we don't know whether that would occur and if we could not reach a finding of 'no significant impact', then it would trigger the need for a full environmental impact statement. There has been a fair amount of biological assessment of all of the stocks in the Bering Sea/Aleutian Islands area and there's quite a bit of acceptable biological catch in most of these fisheries. Let's just say 40,000 metric tons as a point of argument, which is about two percent of that OY, would be very small and slight in terms of biology. I'm not capable in answering the policy aspects of that, nor do I really fully understand how major changes in Council policy fit in with the National Environmental Policy Act. I don't know. General Counsel could weigh in on this, or not. Ben, you have anything else?

Ben Muse (NMFS staff): I have nothing to add. I think that with respect to the volume of fish we might be looking at, again that's been analyzed; it's analyzed routinely in the specifications documents. With respect to the principle of exceeding the optimal yield, the precedence, I think there might be issues there of some concern.

Madsen: Mr. Austin.

Dennis Austin (Council member): Thank you, Madame Chair. I find these discussions very interesting and I also sense that Congress anticipated them in the language they stuck in this law. We've used the 2 million metric ton as our ecological safeguard when people are considering the implications of our fisheries to other species, competition for these same species. We've used it as a safeguard of the lack of perfect knowledge when we're trying to maintain or sustain yield for the fisheries out of this resource. I think Congress anticipated our possible failure to resolve, which literally is just the tip of an iceberg of what we're now enjoying in this resource, and said, O.K., if you can't do this, you now have the authority to do it yourself, you can manipulate the 2 million metric ton, but if you really fail to solve this issue under it, we're going to allow you to do it for four years and then we're taking it away from you forever. And I think that's a very strong signal and I totally support that signal. I'm very uncomfortable with the discussion we're having, to exceed that 2 million metric ton cap.

Madsen: Dr. Balsiger:

Balsiger: Madam Chair, I think this is pertinent right now. I raised my hand before the motion, but relative to the NEPA process I believe the National Environmental Policy Act requires us to look at all reasonable alternatives and it's probably not enough to say the Council's adopted a policy not to go over 2 million metric tons; that probably isn't sufficient to allow us not to examine that as an alternative. There are three or four reasons why you could rule out something such as not going over the cap, which would be they're impractical or technologically infeasible, or two or three other things which I've forgotten, so should we vote on this and not agree to analyze exceeding the cap, the record for not analyzing that in a NEPA statement. . .[**Change to tape 55**]. . .**Lost remainder of Dr. Balsiger's comments, and beginning of next speaker – unable to identify voice**

Unidentified: Yes, Madam Chair, I think that Mr. Austin's comments are right on and I think if we want to have a discussion of this we ought to put it on an agenda item in the future, and I intend to vote absolutely no on this.

Madsen: Any further discussion about the amendment? Mr. Anderson.

Anderson: Madame Chairman, I'd like to address the motion maker. The potential inconsistency with the modified first paragraph with the. . .looking at this option, and if we were to choose this amendment in our final preferred alternative, the probability of having to go through consultation. . .

Madsen: Mr. Bundy.

Bundy: I think that that's a very good question, and I assume it would come out in the analysis and at whatever point a decision. . .if we approved the motion, at whatever point we were considering going over cap, that exact question would come up and if we felt it was likely to result in a formal reconsultation we wouldn't do it under the rest of our motion.

Madsen: Further discussion on the motion. Mr. Austin.

Austin: Thank you, Madam Chair. In my comments I tried to offer two reasons that we should not exceed the 2 million metric tons, and based on the comments we have in the past that it serves an ecological balance, it serves an ecological value, and the consideration of the entire ecosystem for the North Bering Sea. It also serves a safeguard for the lack of perfect knowledge when in fact we are attempting to maintain sustained yield for this resource. So it's just not arbitrary and capricious, it does in fact serve a very definite purpose and we've repeatedly identified that purpose as we've considered other factors in the management of this resource. It's not done in a vacuum.

Madsen: Further discussion on the amendment. Mr. Fuglvog.

Fuglvog: Thank you, Madam Chair. We're having an excellent discussion about why we would not exceed the OY cap, but given Dr. Balsiger's comment and the motion is actually whether we analyze it, and I think that is a different issue and a consideration here. If we make the choice not to do it we are providing the rationale for that, but we're going to have to provide different rationale for why we don't want to look at it, and I think that those need to be very carefully thought out. I have very mixed feelings about this. I take a lot of deference to the Council members who have been here way before me and I know that even in the language of the Act it states that "the 2 million metric ton cap is one of the longest-standing conservation management measures of the North Pacific Fishery Management Council," and I don't take that lightly, but we are looking at an option to analyze this where Congress has authorized that we may be able to do that, and I'm also very aware of NEPA considerations, so. . .I'm very conflicted at this moment.

Madsen: O.K., any further discussion? Mr. Anderson.

Anderson: Madam Chairman. I fully respect the opinion of our Counsel that brought it to the table, and the Agency. This is a policy call and we need to have reasonable analysis and reasonable input before we can make the call. It's my perception that we have that information before us today. I think if we choose to vote this down and not send it back for analysis, that's not assuming that we haven't analyzed. The only thing that has changed is we have the authorization by Congress to exceed the 2 million metric tons. We had that authorization prior to legislation, when it wasn't mandated by Congress to have a cap, we could choose the cap any time we want. We went through an extensive analysis on a F_{40} report. We understood the implications at that time of what the 2 million metric ton cap was based on, what it wasn't based on. It was the choice of the Council at that time to remain with the 2 million metric ton as exemplified by our TAC-setting that we did in December, and those are some very hard decisions we made in December. So, it is my opinion that we have analyzed this, we do have the information required to make this decision at this time and I'm going to be opposed to the amendment.

Madsen: Thank you, Mr. Anderson. The question's been called for. If we have comments that have not already been made, I will certainly entertain those, but if we're going to start repeating things, I think then maybe we need to kind of think about that and move on. Any further comments? I haven't said anything, so, I guess I'm not going to support the motion. I fully agree with Mr. Anderson. This has been available to us from the time that we instituted it. I am concerned about the relationship. . .as you've probably noticed in my inquiries of the public. . .about the relationship between the programmatic. Yes, that probably could come out in the analysis, but we have some actions before us that are going to be acted upon in different sequence and our PPA (?) holds firm the 2 million metric ton cap. Yes, there are options in programmatic that may allow us to exceed it, but our preliminary preferred alternative includes a bookend for a 2 million metric ton cap. So, I'm not going to repeat, but I would concur with Mr. Anderson's comments as well as Mr. Austin's and Mr. Rasmuson's and Duffy's. Any further discussion? The question is on the amendment to include an option that would exceed the 2 million metric ton cap, consistent with the provisions in Section 803(c) of the legislation. We have a roll call vote, please.

Oliver:	Mr. Anderson:	No
	Mr. Austin:	No
	Dr. Balsiger:	No
	Mr. Benson:	Yes
	Mr. Bundy:	Yes
	Mr. Duffy:	No
	Mr. Fuglvog:	No
	Mr. Hyder:	Yes
	Ms. Nelson:	No
	Mr. Rasmuson:	No
	Ms. Madsen:	No

Oliver: Fails, 8 to 3.

Madsen: Mr. Bundy:

Bundy: Moving on to a different subject. For the record, I wanted to clear it up. I think, Madam Chair, that you referred to a motion made by me at some time in the past that we do an EIS on reopening the Aleutians, and that was not the motion. I mean, actually I think I did use the word EIS and I was corrected by Dr. Balsiger, and the motion that had been approved is that we proceed with a NEPA analysis, whatever the appropriate analysis was. This reminds me of the testimony of Mr. Moore on behalf of the Ocean Conservancy and some questions by Mr. Hyder. Mr. Moore is correct; either the Conservancy or Oceana have been before the Council on occasions before, specifically Janet Searles has come before the Council in Kodiak and told us that they felt very strongly that an EIS is required and we could not open the Aleutians without an EIS and the reasoning is expressed again, I guess, in this letter. I think the answer to that is that we are going to proceed with a NEPA analysis; we have proceeded with a NEPA analysis. If the EA. . .if the analysis at any point indicates that we have to do an EIS, we'll switch over. As I understand it that's the way the process works.

Madsen: Thank you, Mr. Bundy, I stand corrected. It was not an EIS. Any further discussion? The motion before us is the amended main motion. Does everyone understand what the motion is before us? Is there objection? No objection, the motion passes. Mr. Bundy.

Bundy: I would like to ask staff, with regard to the CDQ language in this motion, if you could provide in the analysis some very basic data. One would be pollock allocation per capita under the CDQ program. One would be per community under the CDQ program, and I realize that some CDQ groups have a whole bunch of communities, but I'm aware of at least one CDQ group that has just one community, but CDQ pollock allocations per community, and perhaps a range of populations in the CDQ communities as compared to the population of Adak.

Madsen: Mr. Bundy, I'm struggling with what you're requesting. We've passed this motion, so you're just providing. . .you're asking staff to look at this. . .I guess I'm struggling with where we are in this and what you're asking.

Bundy: All I'm asking is for staff to include this information in the analysis which I think is very simple. I mean. . .and the purpose, of course, is that the floor (?) statement indicates that the Adak pollock allocation is for economic development. CDQ is for economic development, and so we ought to, for purposes of some guidance, whether or not we wish to use it, we should look at the CDQ program.

Madsen: O.K., and that's understood by staff, and you'll include that perspective? O.K. Is there any further action under the Aleutian Islands pollock portion of this agenda item? Mr. Fuglvog.

Fuglvog: Madam Chair, I have a comment I need to make. Although I won't be making a motion about this, I do believe that the Council needs to consider that very likely there will be future demands for fish and I think we must consider a policy that is not just based on pollock, but on all species in the future.

Madsen: Mr. Hyder.

Hyder: Madam Chair, if we're through with this agenda item. . .

Madsen: . . .We're not through, we need to deal with rockfish.

Hyder: I mean, with the pollock portion. . .

Madsen: Yes. I think we are complete with that, yes.

Hyder: I have a motion on the rockfish. Just very simply, I would just like to move the AP recommendation on the Gulf of Alaska rockfish. I'm referring to page 4 of the Draft AP Minutes that are noted in the lower right-hand corner, 'last printed February 7, 2004, 10:37am'.

Madsen: O.K. It's been moved. Is there a second to move the AP recommendations under rockfish. Mr. Rasmuson seconds. Mr. Hyder.

Hyder: Thank you, Madam Chair. I don't feel that I need to speak to this motion. I'll just refer to the AP report and the staff report on this agenda item.

Madsen: Mr. Fuglvog.

Fuglvog: Thank you, Madam Chair. I'd like to amend the motion to remove the second paragraph from the AP motion.

Benson: Second.

Madsen: It's been moved and seconded to amend the motion by deleting the second paragraph. Mr. Fuglvog..

Fuglvog: Thank you, Madam Chair. In response to public testimony and conversations I think many of us have had with industry, I think we agree that we don't want the rockfish pilot program to slow the Gulf rationalization program. There are some problems with the language of aligning the program with the options. . .the options for rockfish under the GOA rationalization. I think that's an exercise right now that industry has asked that they devote their time and energy to putting the rockfish program together and if we would like to see how those align, that might be more appropriate of staff to do at a later date, so I would like to not include that in our motion. . .simply to send it back to the stakeholders, put it on the April agenda.

Madsen: There's a little confusion. Who seconded Mr. Fuglvog's amendment? O.K., Benson, thank you. Sorry. Is there any further discussion on the amendment to the motion? Is there any objection to the amendment to the motion? No objection, motion passes. We're back to the main motion. Any further discussion about Mr. Hyder's motion that we would not take any action and we would schedule this for April. Seeing no further discussion, is there any objection to the motion. No objection, the motion passes.

End of this discussion.

A7. Necessary FMP and regulatory changes

The following information is based on a preliminary review of the 50 CFR 679 and the BSAI FMP for potential changes needed to implement and manage the AI pollock fishery. The majority of the changes are needed because of the inclusion of the AI pollock fishery in AFA regulations, which would no longer apply. Items with question marks need further review. The following information is likely to change significantly before the completion of rulemaking for the AI pollock fishery and should be used only as an initial guide for analytical purposes.

Regulations Changes for AI Pollock fishery

679.1 (k). Should the reference to AI be removed?

679.2 Add a definition for the Aleut Corporation. Remove references to AI under AFA definitions.
Area endorsement: Do we need to exclude AI pollock here?
Aleutian Islands area endorsement: Do we need to exclude pollock?
Catcher/processor and catcher vessel designation Should this be changed to include AI pollock?
Designated primary processor: Remove AI pollock reference
Fishery cooperatives or cooperatives Remove AI reference
License limitation groundfish: Add AI pollock as an exception.
Listed AFA catcher/processor: Remove AI reference
Qualified person Will we need one with respect to AI pollock fishing vessel registration?
Unlisted AFA catcher/processor: Remove AI reference
Unlisted AFA inshore processor: exclude AI pollock, is this definition correct ("harvest" instead of "process"?)

679.4 Add authorization requirement that would allow participation in AI pollock fishery, based on authorization from Aleut Corporation. Could add (v) to exemptions under 679.4(k)(2) for AI pollock participants.

679.4(l)(1)(i) Remove references to AI under AFA permit requirements.

679.4(l)(5)(iii) Remove references to AI under single geographic location requirements.

679.4(l)(5)(v) Remove reference to AI ?

679.4(l)(6)(ii)(B) and (C) Remove reference to AI.

679.4(l)(6)(ii)(D)(1)(ii) and (iii) Remove reference to AI. ?

679.4(l)(6)(ii)(D)(2) Remove reference to AI. ?

679.5. R& R. May not need changes to this section. Add reporting requirement for economic development report and annual report of vessels permitted by Aleut to participate (need by Dec. 1?) Need to check with Patsy and figure out what kind of information should be collected. Not sure if this should go here or somewhere else.

679.7 Add BSAI prohibition on pollock fishing in AI unless by vessel authorized for AI pollock fishery. Add prohibited for Aleut Corp from exceeding annual allocation (look at AFA coop prohibitions for model).

679.7(a)(7)(ii) and (iii) Remove AI?

679.7(k)(1)(i) Remove AI references

679.7(k)(3)(iii) and (iv) Remove AI references.

679.7(k)(4)(i) Remove AI references

679.7(k)(5), (6) and (7) Remove AI references

679.20 (a)(5)(i) Remove references to AI.

679.20 (a)(5)(i)(A)(6) and (7) Excessive harvesting and processing share should not apply to AI. Remove reference to (a)(5)(ii).

679.20 (a)(5)(ii) Change (a)(5)(ii)(A) to apply to just Bogoslof

Add **679.20 (a)(5)(ii)(B).** Need to expand to specify allocation of AI pollock to Aleut Corp and by vessel size in 2013. May have to revise (B)(1) to specify Aleut Corp AI pollock seasonal apportionment. Include seasonal apportionments under (B)(1). Use the same text for incidental catch allowance (ICA) and directed fishing allowance (DFA) as under (a)(5)(i).

679.23(e)(2) Either specify Aleut Corp seasonal apportionment or simplify by removing specific groups so it applies to all directed fishing for pollock.

679.28(g)(2) May need to specify CMCPs requirement for Aleut corp processors.

679.30 CDQ regulations: Review and consider similar management measures for the Aleut Corporation. Remove references to AI pollock fishery.

679.31(a)(2). Need to remove CDQ allocation for AI pollock.

679.50 May want observer requirements for vessels under 60 feet. Could postpone this change until later after program restructuring. Jason to review observer regulations for any other possible changes. This could be added to the cumulative effects section of the EA with options for how to collect information from the small vessels.

679.61 (b), (d)(3) and (g) Remove reference to AI pollock.

679.62(a) Remove text about AI subarea pollock allocation in first paragraph and in (iv)(2) and (iv)(3).

679.62(b)(2)(i) and (ii) and (3). Remove references to AI.

<u>FMP Amendments</u>

Consider adding a whole new section (13.4.7.4 now or 3.7.4 by PSEIS amend. version) to address AI pollock fishery with following features:

1. AI pollock allocated exclusively to Aleut Corp.

2. Council to consider allocations to CDQ fisheries to determine appropriate allocation to Aleut Corp. Limit allocation to 40,000 mt

3. Specify how the TAC apportionment to Aleut Corp will be determined within the 2 million mt OY. **We may not want to do this to allow total flexibility each year**.

4. Specify that at least 50 % of the TAC must be allocated to vessels 60 feet or less after 2012 for AI.

Sections needing editing:

10.3.3 <u>Apportionments to Fishery</u>: When the TAC for each target species and the "other species" category is determined, it is reduced by 15% to form the reserve, as described above. The remaining 85% of each TAC is then apportioned to DAP, JVP, and TALFF (in that order) by the Regional Director as described in Section 10.4. **May need to fix this to exclude pollock and fixed gear sablefish, covered by a previous amendment. May not need to do anything to this section under this amendment.**

13.4.1 <u>Permit Requirements</u>
Certain permits are required of participants in the BSAI Groundfish fisheries. Specific requirements are found in regulations implementing the FMP. **May want to clarify this to Permits and Authorizations to capture Aleut Corp authorization requirements.**

Section 13.4.7.3.4: <u>Pollock CDQ Allocation</u>

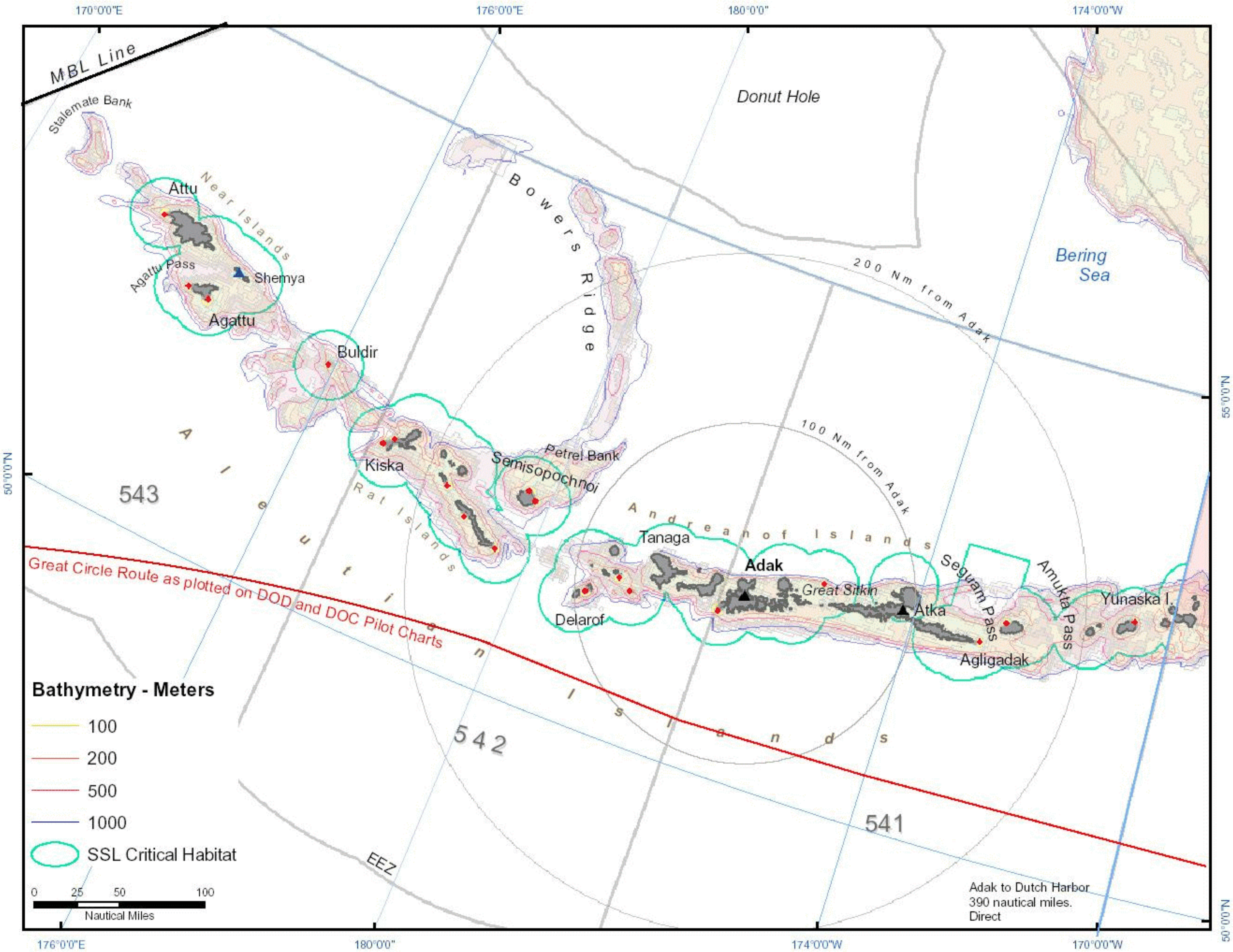
For a Western Alaska Community Quota, 50% of the **BSAI** pollock reserve as prescribed in the FMP will be held annually. This held reserve shall be released to communities on the Bering Sea Coast which submit a plan, approved by the Governor of Alaska, for the wise and appropriate use of the released reserve. (**This paragraph was revised by Amendment 61 to provide for 10 % BSAI pollock. Need to remove reference to AI.)**

13.4.11 <u>American Fisheries Act (AFA) management measures</u> **Need to remove all references to AI in this section in the appropriate places. Need to check with attorneys as to whether all provisions of the AFA no longer apply to AI pollock based on Section 803. Add a sentence about Section 803 superceding AFA coverage for AI pollock harvest.**

A8. Reading bar heights in the maps

Many of the maps in this EA/RIR show the location of catch with vertical bars. The bars provide a measure of the absolute volume of target species catch taken in a location. A higher bar means that a larger volume of pollock was taken from that location during the period covered by the map. A legend on the left hand side of each map makes it possible to obtain a rough estimate of the volume of the target species catch indicated by any specific bar. The legend contains a bar of a certain length, with a number to the left of its base. The bars and numbers in the legend provide a scale with which to measure the metric tonnage represented by the bars in the map. A hypothetical legend bar may have a height of an inch and the number 1,000 to the left of its base. This means that a distance of an inch, measured against any of the bars in the map, represents a catch volume of 1,000 mt. A bar on the map that was two inches high would represent a catch of 2,000 mt; a bar of a half inch would represent a catch of 500 mt. These bars perform the same function for volume of catch that a normal distance scale (for example 100 miles per inch) performs for distance on a map. The program that generates the maps creates a unique volume scale for the legend of each map. The program finds the tallest bar on the map (representing the largest volume of catch). This bar becomes the standard for the legend. The program draws a bar in the legend equal in distance to half the height of the tallest bar. The number to the left of the base of the legend bar is set equal to half the volume represented by this tallest bar.

A9. Map of Adak area in the Aleutian Islands.



A10. April 2004 Council motion

North Pacific Fishery Management Council
166th Plenary Session

Agenda Item C-3
Aleutian Islands Pollock - Aleut Corporation
April 2, 2004

(The Council's "motion" on this issue was actually five motions.)

Motion 1

Add the following additional alternative under Decision 1 (allocation size):

1.3 The Council shall allocate a combined Aleutian Islands ICA and DFA equal to the lesser of the ABC or 40,000 mt. This allocation shall be subject to the 40% "A" season, 60% "B" season allocation required by the SSL protection measures.

Add the following additional alternative under Decision 2 (funding and roll back):

2.5 If possible, the Aleutian Islands DFA is to be funded from the difference between the sum of BSAI species TACs and the BSAI OY cap. No allocation to the Aleutian Islands DFA shall be made from a species TAC unless the difference between the sum of the species TACs and the OY cap is not large enough to fund the Aleutian Islands DFA. If this difference is not large enough to fund the Aleutian Islands DFA, 10% of the allocation to the Aleutian Islands pollock DFA shall be taken from the BSAI rock sole ITAC, 10% from the BSAI yellowfin sole ITAC, and 80% from the EBS pollock ITAC. No later than June 10 (start of the "B" season), unused Aleutian Islands "A" season pollock DFA, and the entire Aleutian Islands "B" season DFA, shall be rolled back to the EBS pollock fishery.

(Note: a spreadsheet illustrating how the allocation [1.3] and funding [2.5] alternatives would work, based on 2004 ABCs, was provided to the Council.)

Motion 2

Add the following additional alternatives 1.4 and 5.4:

1.4 Beginning in 2005, and until changed, the annual Aleutian Island pollock TAC shall be the lesser of 15,000 mt or 40% of the AI pollock ABC. One hundred percent of the Directed Fishing Allowance (DFA) shall be available for harvest in the pollock "A" season. (Alternative 5.4 follows) At its 2006 June meeting, the Council shall review the AI pollock fishery, e.g., harvest success, development of a small boat fleet, progress towards the completion of pollock processing capacity to see if further adjustments to the AI pollock TAC are appropriate, in light of Section 803 and Senator Stevens' floor language.

Motion 3

Add an alternative that provides that Chinook salmon bycatch in an AI pollock fishery would not count toward the Chinook salmon bycatch cap in the BSAI.

Motion 4

Incorporate into the EA/RIR bullet 5 of the AP motion on this agenda item: Add a qualitative discussion of what effect, if any, an allocation to the Aleut Corporation would have on the repayment of loans to the government on pollock as mandated under the AFA.

Motion 5

Add the language in the AP motion for alternatives 2.2 and 2.3. (This adds "...if necessary to remain under the 2.0 million mt OY cap." at the end of the first sentence of each alternative. The intent of the motion is to fund the AI pollock TAC from the difference between the sum of all groundfish fishery TACs and the OY cap, if there is a difference.)

A11. Minutes of the Steller Sea Lion Mitigation Committee's meeting, April 26, 2004.

The Steller Sea Lion Mitigation Committee (SSLMC) convened April 26, 2004 at the Alaska Fisheries Science Center in Seattle. Some members of the Committee and the public tied in to this meeting via telephone. Chairman Larry Cotter reviewed the agenda (attached). Bill Wilson reviewed the Council's charge to this committee: review SSL protection measures in the Aleutian Islands region to determine whether changes can be made in SSL protection measures to allow small pollock trawlers to operate more safely and efficiently. Wilson noted that the Council explicitly does not want to take any action that would result in reinitiation of formal Endangered Species Act Section 7 consultation.

Members attending this meeting were: Chairman Larry Cotter and members Dave Benson, Julie Bonney, Shane Capron, Tony DeGange, Doug DeMaster, John Gauvin, Terry Leitzell, Chuck McCallum, Matt Moir, Farron Wallace, and John Winther. Bill Wilson attended as NPFMC staff. Brandee Gerke attended from NMFS Protected Resources Division.

SSL Research Update

Doug DeMaster reviewed the status of several research projects under way that focus on fishery interactions with SSLs.

1. 2004 is a normal SSL count year. The Southwest Fisheries Science Center, National Marine Mammal Laboratory (NMML), and ADF&G will use a new photogrammetric technique for counting pup and non-pup SSLs in June and July 2004. Large format cameras will take vertical, high resolution photos of rookeries and haulouts, and animal counts will be made from these photos. In the past, oblique photos were used; scientists believe they possess adequate data to calibrate the photogrammetric count method so that these counts can be directly compared with past counts made using oblique photography.

2. Killer whale surveys will occur in several regions of Alaska in 2004. The Alaska Sea Life Center and the North Pacific Universities Marine Mammal Research Consortium both have killer whale projects under way for 2004. The NMML will conduct killer whale surveys in the western Alaska Peninsula and eastern AI region, focusing on photo identification and collection of biopsy samples for genetic studies and to determine transient or resident ecotype. The Alaska Fisheries Development Foundation will deploy remote cameras at some SSL rookeries to document SSL reactions to killer whale presence. John Winter reported that AFDF plans to deploy hydrophones on one of his vessels to collect acoustic information on killer whale vocalization during their depredation of longline catch.

3. The NMFS fishery interaction studies have experienced large budget cuts, although the AFSC plans to continue in 2004, at a reduced level, the Pacific cod studies in the AI region, the pollock studies near Kodiak, and the Atka mackerel studies in the Aleutians. During August and early September, the AFSC will survey

distribution of pollock before and after a fishing event in Barnabas Trough and in an unfished control site in Chiniak Trough. The Pacific cod study will continue in 2004 (March/April, September) and 2005 (January and March/April) to examine relative change in cod CPUE (measured by pot fishing off a chartered research vessel) before and after fishing in sites where commercial trawling was prohibited (control) and allowed (impacted). The Atka mackerel study will occur in the Seguam Pass, Amchitka Island, and Tanaga Pass areas where previously-tagged Atka mackerel will be recovered to help identify their abundance, distribution, and movement patterns with respect to SSL trawl exclusion zones.

<u>Status of Council's EA/RIR on Aleut Corporation Pollock Fishery</u>

Wilson provided an update on the alternatives being analyzed in the EA for a proposed Fishery Management Plan amendment that provides for a directed Aleutian Islands pollock fishery by the Aleut Corporation. The Council made some changes in the alternatives during their April meeting. These changes include two additional methods for determining allocation size, one additional alternative for "funding" the allocation, and an additional alternative for providing an economic report on the fishery. The Council also added a sixth decision element with two alternatives that address whether or not Chinook salmon bycatch in the AI pollock fishery would count against the BSAI pollock fishery Chinook salmon bycatch cap and savings areas. Wilson also noted some modifications made by the EA team, based on NOAA Enforcement and US Coast Guard input, to one of the fishery monitoring alternatives. The revised decision elements and alternatives are attached.

<u>Proposed Changes to SSL Protection Measures in the Adak Area</u>

Proposal Presentation: Terry Leitzell, on behalf of the Aleut Corporation and Icicle Seafoods, Inc. (the Aleut Corporation's partner and designated agent for the proposed AI pollock fishery), presented a draft proposal for changes in the pollock and Pacific cod closed areas in the Adak area (see attached). Leitzell reported that his group considered two main criteria in developing this proposal: 1) to increase fishing opportunity close to Adak for improved safety for small vessels and to enhance good product quality, and 2) to provide fishing opportunity in an area where historic pollock catches were high. Leitzell acknowledged assistance provided by Dave Fraser who has fishing experience in the area.

Leitzell proposes that the Council approve opening two areas for directed pollock fishing by AFA-qualified vessels <125 feet LOA and /or <60 foot LOA vessels during the A season. To offset the amount of area to be opened, the proposal includes a complementary closure of another area to Pacific cod fishing. Details of the proposal are included in the attached materials. To summarize:

1. Two new open areas:

> a) Reduce the size of the pollock fishery closures in Kanaga Sound. This will involve reducing the size of closed areas around three SSL haulouts to 3 n mi (Kanaga/North Cape, Kanaga/Ship Rock, and Bobrof Island), and opening an area within the 20 n mi closure around the Adak/Lake Point-Cape Yakak rookery.
>
> b) Reduce the pollock closure at the Atka/North Cape SSL haulout from 20 n mi to 3 n mi.

2. One new closure:

> Enlarge the Pacific cod trawl fishery closure at the Atka/North Cape SSL haulout from 3 to 10 n mi.

Leitzell noted that the proposal recognizes the potential impacts of the new open areas and the new closed area on SSLs. The proposal considered SSL diet data, SSL pup and non-pup counts in the area and in the region, and data on SSL prey fields (specifically information on the stock status for Atka mackerel, Pacific cod, and pollock).

The SSLMC discussed various elements of the proposal including the anticipated number of vessels likely to participate, how the proposed new open areas might be affected if a Habitat Area of Particular Concern is designated in the area, how the proposal might affect cod fishing in the area proposed for closure, and the proposed restrictions on size of vessels allowed to participate in terms of pollock removal rates. The Committee also discussed whether this proposal might trigger a formal ESA Section 7 consultation.

NMFS Initial Review: Shane Capron provided some information relevant to considering this proposal and its potential effects on SSLs (see attached). Capron indicated the proposal contained a good presentation of the suggested changes and a good review of data to support the proposal. Capron noted that NMFS, Division of Protected Resources, has only been able to provide a general review of the proposal. A more thorough review by PR is necessary to provide a conclusion on the potential effects of this proposal on SSLs.

Capron noted that the western SSL DPS continues to decline in parts of its range, particularly in the western Aleutian Islands area. The decline seems to be occurring in a gradient, with the rate of decline increasing from east to west. Capron reviewed available SSL diet data, noting that geographic and seasonal diet composition is still not well understood and the data are inconclusive. But it appears that in some areas, pollock are important, and in some other areas pollock occur with lower frequency in SSL diets. For example, scat sampling indicate pollock occur at around 1.6% in SSL diets in the central AI, but at 62% in the eastern AI area. Capron suggested that one interpretation for the reduced decline in the eastern AI is the higher prevalence of pollock in the diet of SSLs in this region. (Note: the data reported in the Leitzell proposal, cited from Sinclair and Zeppelin 2002, are for the period 1990-1998.)

New SSL diet data not previously published were provided in Table 4 of Capron's handout. Data from SSL scat samples are provided for Adak, Amlia, and Kasatochi. Pollock occur at a higher frequency in SSLs from Adak and Amlia Islands. Capron also noted the uncertainty in pollock stock composition in the Aleutian Islands, and referenced the review of the AI pollock stock as contained in the Council's AI pollock fishery EA. Pollock stock assessment biologists may suggest a break at 174 degrees W and define available harvest biomass in two areas, east and west of 174 degrees. Both of the proposed new open areas are west of 174 and may be affected by any changes the Plan Team might recommend regarding the pollock stock structure in the AI area. Capron also noted that both proposed open areas are essentially the same high harvest areas considered in the previous Biological Opinion and closure of these and other areas was part of the process in developing the current SSL protection measures.

Capron concluded that PR would require more time to give a thoughtful response to this proposal. Discussions could continue on an informal basis to further explore available data on SSL diet and potential impacts of prey removals in the AI region, and perhaps fine tune or revise this proposal such that it ultimately would not result in a jeopardy or adverse modification finding. The Committee should further explore some of the data that suggest a change in prey composition around the Adak area; west of Adak, SSLs tend to have a higher proportion of Atka mackerel and less pollock in their diets, while east of Adak pollock are more prominent and Atka mackerel less; to what extent might this be related to SSL population trends in smaller subareas of the wSSL DPS? More data are needed to explore these kinds of relationships, and more time is required for discussions between the SSLMC, NMFS, and PR. Capron recommended discussions continue along this path on an informal basis and see what might evolve from this process.

Capron also noted that the 6-year closure of the Aleutian Islands to pollock fishing (1999 - 2004) has set up an experiment along the lines of the experimental approach suggested by the National Research council's recommendations. This closure has established part of an experiment from which data might be evaluated to test hypotheses about fishing effects on SSLs. To what degree has the AI pollock stock biomass changed over this time period? How might any changes in prey fields have affected SSLs during this time period? Since SSL scat samples are available for both prior to and during this closure, we have an opportunity to explore possible effects of a large closure on the pollock stock and SSL diet. Capron suggested we take advantage of this to further the scientific understanding of potential fishery effects on SSL populations.

The SSLMC also suggested looking at this issue with some alternative openings/closures that might provide the same or similar benefit to small pollock trawlers yet not impact P cod fisheries. The Committee also suggested evaluating historic pollock CPUE data for an indication of total removals per unit of time; is the removal rate in a specific geographic area an issue RE: SSL recovery? Capron noted that removal volumes is a concern, and that some CPUE data sets are spotty and may not lend insights; however, further exploration of such issues will be necessary. John Gauvin noted that the historic AI fishery was somewhat opportunistic in nature, and a directed fishery as contemplated for the future might be prosecuted differently.
Conclusion: The SSLMC proposes to continue informal consultations with NMFS PR to explore the Aleut Corporation proposal and possible alternative actions that might provide the desired benefit (increased pollock trawling opportunity near Adak) and yet minimize impacts on SSLs and remain under the jeopardy bar. This will likely be an iterative process involving a give and take process of sharing data and exploring options. NMFS PR recommends continuing in this fashion. The SSLMC will likely meet at least once over the next several months, after NMFS has the opportunity to complete their technical review. The SSLMC will report the results of the informal consultations on this proposal to the Council at their October 2004 meeting. The SSLMC will not suggest any action that would trigger reinitiation of formal ESA Section 7 consultation on SSL protection measures.

Analytical Tools

Cotter recounted the need for some kind of tool or analytical model that would help the SSLMC evaluate the effects of a proposed action on SSLs. The SSLMC had requested that NMFS develop such a tool, if possible, during their June 2003 meeting; at that meeting NMFS reported that the BUMP model would not be acceptable to the SSC and that another approach would be necessary.

Doug DeMaster reported that NMFS has been working on another "tool" that the SSLMC and NMFS might use to evaluate proposed changes in fishing practices that might affect SSLs. DeMaster provided the Committee with some conceptual information on two different models (see attached). Model 1 consists of the following elements:

1) Western SSL rookery trend counts for 1991-2000 and 1991-2002 to characterize three main patterns of trajectories

2) Assumes that one of 5 possible population trajectories will apply to a given rookery through 2006 absent a change in fishing practices.

3) Allows for the trajectory of a given rookery to change (improve or worsen) depending on the change in fishing practices

4) Evaluates the overall impact of fishing practice changes by a) comparing the estimated SSL population size in 2006 assuming no change in fishing practices to b) the estimated population size in 2006 under a set of new fishing practices.

Model 2 consists of the following elements:

1) Considers the most recent SSL survey data from haulouts and rookeries

2) Assigns to each rookery or haulout a determination as to whether the animals are present or absent in the breeding season and outside the breeding season

3) Identifies classes of fishing practices, and assigns a relative weight to each in terms of potential impacts on SSLs based on average prey removal rates

4) Evaluates overall impact as the sum of all the changes that would lessen SSL protection measures minus the sum of all changes that would increase SSL protection measures. This is done by multiplying the number

of SSLs potentially impacted in a given season by the relative weight assigned to a class of fishing practice change (changes that worsen protection are positive, changes that lessen protection are negative).

The SSLMC noted that both model approaches involve summing of numerical scores and indexing fishing practices, SSL count trends, etc. and suggested that the models be discussed with the SSC at their June 2004 meeting. If the SSC believes either or both models have merit in evaluating potential changes in SSL protection measures, they be further developed and brought back to the SSC and Council at their October meeting and then used by the SSLMC in future evaluations. The SSLMC noted that it is important to develop a tool for evaluating various proposals for SSL protection measure changes such that alternatives may be evaluated so that no net loss can be clearly measured. The Committee is very supportive of the NMFS model approaches discussed at this meeting and urge the SSC and Council to support their further development.

A12. Summary of SSC Minutes from June 2004 Council meeting

The Council's SSC reviewed the EA/RIR in June and concluded that the document was comprehensive and contained careful descriptions of the alternatives, issues, information sources, and analyses. The SSC also suggested that the Council consider several issues when making a final decision on the AI pollock fishery:

5. Consider maintaining observer coverage in the AI pollock fishery at least at the same level as required in other Alaskan EEZ fisheries. The SSC also cautioned that if an appreciable portion of the AI pollock allocation is harvested by small vessels < 60 ft LOA, then it will be necessary to have at least 30 % observer coverage of this sector of the AI pollock fishing fleet.
6. When setting TAC for the AI pollock fishery, regardless how the TAC is "funded", the Council should ensure that TAC remains below ABC.
7. Evaluate the precision of bycatch estimation for Chinook salmon harvested incidentally in the AI pollock fishery.
8. The Council should not consider the allocation alternative 1.3c that sets TAC equal to ABC. The SSC also felt that alternative 1.4c would be problematic because it calls for TAC as a fixed function of ABC (although this is less of a concern because under this alternative TAC would be set much lower than ABC). The SSC recommended that the Council retain maximum flexibility in setting TAC for this fishery and not set a precedent for tying TAC to ABC, which has not been done for any other fishery under the Council's jurisdiction. The Council should maintain its ability to set TAC based on uncertainty and risk, particularly in the AI given the current level of uncertainty in the region's pollock stock assessment.
9. The Council should recommend improved surveys of the AI pollock stock, in particular the off-bottom portion of that stock, so as to provide a better estimate of total pollock biomass in this region.
10. The SSC noted that resumption of an AI pollock fishery may change the nature of spatial pollock removals compared with pre-1999 pollock removal patterns. The rationale for determining the significance of pollock removals in the AI region is unclear. The SSC noted that while there may not be concerns over removals of, say, 15,000 mt per year in the AI region, there may be spatial concerns over pollock removals at higher levels, for example at 40,000 mt. Implied is the suggestion for continued monitoring of the pollock stock as this fishery progresses.
11. Finally, the SSC suggested that a closely integrated, interdisciplinary research program be established once the AI pollock fishery commences. This research should investigate the impacts of fishery removals on various components of the ecosystem, particularly upper trophic level pollock predators. The SSC recommended including in this research program studies of how changing the rate of pollock removals may influence local distribution and abundance of adult pollock (local depletion hypothesis); the abundance, pupping rate, and foraging distribution of Steller sea lions (prey depletion hypothesis); the reproductive success of seabirds (index abundance of forage fish – the prey quality hypothesis); and the distribution and abundance of forage fish, including age-0 and age-1 pollock. The SSC also recommended a research component that looks at bottom-up effects of the fishery including studies of physical processes, nutrient availability, and standing stocks of plankton. This study program should continue for a minimum of five years so as to sample under a variety of environmental conditions and interannual climatic variability.