

Supplement to the AI Pollock EA/RIR: Analysis of the Council's April Allocation Size Alternatives

The following discussion will be added to Section 4.2 as a new sub-section 4.2.3. Appropriate text will be added at the front of Section 4.2, telling the reader that this section is there.

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 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 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."

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 +

DFA) 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 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." 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 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."

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 DFA equal to the ABC or 40,000 mt, whichever was less. The wording of Alternative 1.3 made the sum of the ICA and DFA 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 DFA 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 DFA 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 DFA 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 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." 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 (DFA) 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 DFA and allocates 40% of it to the "A" season. The remaining 60% of the DFA 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	DFA	ABC	TAC	ICA	DFA
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 DFA. The “A” season allocation is 40% of the annual DFA; the remainder is rolled back. Under 1.4^C the TAC is 40% of the ABC. Subtracting the ICA leaves the DFA. 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.¹ The rate of adjustment of ABC under the HCR at and below the B₂₀ 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 B₂₀ 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 B₂₀², 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 $\leq B_{20}$ 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 B₂₀). 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

¹50 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.”

²Dr James Ianelli, Personal Communication, May 27, 2004. Alaska Fisheries Science Center, Seattle, WA.

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 B₂₀.

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 DFA, and unused “A” season DFA, 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 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 B₂₀. However, for a combination of Alternatives 1.3^c with 2.5, the maximum DFA (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 DFA 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 DFA equal to 40% of the DFA. 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	DFA w/o 2.5	DFA with 2.5	ABC	TAC	ICA	DFA
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 DFA. The "A" season allocation is 40% of the annual DFA; the remainder is rolled back. Under 1.4^C the TAC is 40% of the ABC. Subtracting the ICA leaves the DFA. 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 DFA). 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.”

The following text would be added to page 286 in Chapter 7 (the RIR) of the EA/RIR document:

As noted above, Alternative 1.4 makes it possible for the Council to allocate somewhat more fish to the corporation (depending on the size of the TAC 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. Using a royalty value of \$304 per metric ton in the “A” season, this could be as much as \$670,000.

Thus Alternative 1.4 may be associated with larger allocations to and revenues to the Aleut Corporation. However, the alternative may be associated with somewhat larger adverse impacts to the BSAI fisheries (Up to 2,200 mt). This potential impact is contingent on the funding decisions the Council would have made under Alternative 1.4. Under Alternative 1.4, the Council could have set a TAC that would create the same allocation for the Aleut Corporation as it would have received from Alternative 1.4^C, given the same ABC level.

Insert the following table at the end of Chapter 6

**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