


MEMORANDUM

TO: Council, SSC and AP Members
FROM: Chris Oliver 
Executive Director
DATE: February 3, 2005
SUBJECT: Essential Fish Habitat (EFH)

ESTIMATED TIME 12 HOURS

ACTION REQUIRED

- (a) Review changes to the EFH Environmental Impact Statement (EIS)
- (b) Final action on EFH preferred alternatives and EIS

BACKGROUND

Changes to the EFH EIS

NMFS released the Preliminary Final EIS for EFH on January 19, 2005. The Preliminary Final EIS incorporates numerous changes from the Draft EIS in response to public comments. Many of the changes are relatively minor clarifications, updates, and additions to the analysis. These changes were sent to you from the NMFS contractor. Three categories of changes are more substantive and include new information that NMFS will summarize for the Council.

First, the Alaska Fisheries Science Center made substantial revisions to Appendix B, which evaluates the effects of fishing on EFH, in response to public comments as well as an outside peer review by the Center for Independent Experts (CIE). The CIE panel recommended that the analysis not rely so heavily on an assessment as to whether the effects of fishing on EFH would decrease the ability of each stock to remain above its Minimum Stock Size Threshold over the long term. In response, NMFS compiled available information, including spatial and temporal data on length, weight, age, diet, and catch per unit effort, and had agency stock assessment scientists reevaluate whether available evidence suggests that fishing adversely affects EFH in a manner that is more than minimal and not temporary in nature.

Second, NMFS revised two of the alternatives for describing and identifying EFH to incorporate additional information regarding the use of seamounts by managed species, and to identify habitats used by early life stages of certain managed species. Including seamounts in the EFH descriptions is consistent with a request from fishing industry commenters, and would enable the Council to identify the seamounts as HAPCs. The identification of specific areas as EFH for eggs and larvae for a number of species is based on a newly available Alaska Fisheries Science Center atlas of the abundance and distribution of ichthyoplankton.

Third, the Preliminary Final EIS includes analyses of two new options for the Aleutian Islands portion of Alternative 5B for minimizing the effects of fishing on EFH. At its December meeting the Council voted to

include these options in the Final EIS in response to separate requests from Oceana and a group of Aleutian Islands trawlers. All three of the Alternative 5B options would allow bottom trawling to continue in areas that historically have been most important, and would close all other areas to prevent future habitat impacts.

Final Action on EFH Preferred Alternative and EIS

The Council is scheduled to take final action on the EFH EIS and associated FMP amendments. Under the terms of a joint stipulation and court order in the AOC v. Daley case, NMFS must publish the Final EFH EIS by June 1, 2005, issue a record of decision by August 13, 2005, and implement any resulting regulations by August 13, 2006.

The Council amended its five FMPs in 1998 to address the new EFH requirements that were included in the 1996 Sustainable Fisheries Act. NMFS approved those FMP amendments in January 1999. A legal challenge resulted in a September 2000 United States District Court decision that upheld NMFS's approval of the EFH FMP amendments under the Magnuson-Stevens Act, but ruled that the environmental assessment (EA) prepared for the amendments violated the National Environmental Policy Act. The court ordered NMFS to complete a new and thorough environmental analysis. Accordingly, this EIS evaluates alternatives and environmental consequences for three actions: (1) describing and identifying EFH for fisheries managed by the Council; (2) adopting an approach for the Council to identify HAPCs within EFH; and (3) minimizing to the extent practicable the adverse effects of Council-managed fishing on EFH.

The EIS re-examines the effects of fishing on EFH, presents a wider range of alternatives, and provides a more thorough analysis of potential impacts than the EA approved in 1999. The analysis indicates that there are long-term effects of fishing on benthic habitat features off Alaska, and acknowledges that considerable scientific uncertainty remains regarding the consequences of such habitat changes for the sustained productivity of managed species. Nevertheless, based on the best available scientific information, the EIS concludes that the effects on EFH are minimal because the analysis finds no indication that continued fishing activities at the current rate and intensity would alter the capacity of EFH to support healthy populations of managed species over the long term. The analysis concludes that no Council-managed fishing activities have more than minimal and temporary adverse effects on EFH, which is the regulatory standard requiring action to minimize adverse effects under the Magnuson-Stevens Act, but a variety of practicable management actions could be taken as a precautionary measure to provide additional habitat conservation.

At the December 2004 meeting the Council discussed a potential option for a 5-year sunset provision on the management measures associated with Alternative 5B, if adding such an option would not require the Draft EIS to be reissued for public comments. Subsequent staff discussions with NOAA General Counsel suggested that adding a sunset provision at this stage would not be appropriate without a Supplemental Draft EIS. Thus, this sunset provision has not been analyzed in the current analysis.

Groundfish Forum

4241 21st Avenue West, Suite 200
Seattle, WA 98199
(206) 213-5270 Fax (206) 213-5272
www.groundfishforum.org

Ms. Stephanie Madsen
Chair, NPFMC
605 W. 4th Avenue
Anchorage, AK 99501-2252

February 1, 2005

RE: EFH Final Action

Dear Ms. Madsen:

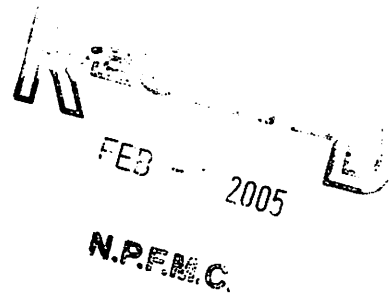
Thank you for the opportunity to provide comments on the Council's selection of final preferred alternatives for Essential Fish Habitat (EFH). The EFH EIS process has made use of extensive public input as well as all relevant scientific data and information to the extent such information was available. For this reason, we are confident that a wide range of alternatives for the designation and minimization of effects on EFH (to the extent practicable) has been thoroughly considered and analyzed.

The Council's selection of final recommendations to the Secretary of Commerce on Essential Fish Habitat and Habitat Areas of Particular Concern (HAPC) is of paramount importance to the members of Groundfish Forum and the fishing industry as a whole. For this reason, we have provided extensive comments on the EFH and HAPC protection alternatives slated for final action in February. For simplicity, however, we have listed our overall recommendations on the EFH and HAPC alternatives as numbered bullets.

Groundfish Forum's overall recommendations for EFH fishing effects minimization measures and HAPC are as follows:

1. For the EFH alternatives to minimize fishing effects (to the extent practicable), the Council should maintain its recommendation for status quo EFH protection measures for the Bering Sea and Gulf of Alaska.
2. For the EFH alternatives to minimize fishing effects (to the extent practicable) in the Aleutian Islands, the Council should modify its recommendation from status quo measures to Option 3 of the Aleutian Islands portion Alternative 5b.
3. For HAPC Action 1 (Seamounts), the Council should select Alternative 3.
4. For HAPC Action 2 (GOA corals), the Council should select Alternative 2 Option 2 (bottom trawl gear) and Alternative 3 Option 1 (all bottom contact gear). For clarity, this combination results in the selection of a particular version of Alternative 4.
5. For HAPC Action 3 (AI corals), the Council should select Alternatives 2, 3, and 4 with Option 2 of Alternative 4 (bottom trawl only). This becomes a particular version of Alternative 5.

EFH EIS Process: During the development of this EIS, the Council and NMFS have received extensive public input and scientific review from NMFS' habitat and fish population assessment experts, the Council's Science and Statistical Committee, and the Center for Independent Experts (CIE). In the final EIS document, NMFS provides its response to the technical and scientific issues raised in the CIE review. The agency should be commended for all the work that went into their thorough evaluation and concise response to these issues. Additionally, since the Council's first consideration of EFH effects of fishing minimization alternatives,



additional analysis of sub-alternatives for the original Aleutian Islands "open area" 5b coral protections alternative has been conducted. Supplemental GIS analysis of the AI 5b alternative (presented to the Council in December 2004) has not yet been incorporated into the EIS. We feel that for the public to fully understand the differences between AI 5b sub-alternatives, this information needs to be brought into the final version of the EIS. Notwithstanding this omission, it is clear that few if any fishery management decisions has been subjected to such an impressive degree of analysis and public process as occurred for the current EFH action.

In our comments below, we provide our reasons why the Council should stay with status quo (no new actions) for EFH fishing effects minimization alternatives for the Bering Sea and Gulf of Alaska. Following that, we provide our rationale for the use of HAPC in lieu of EFH measures for the Bering Sea and GOA. Finally, we explain our reasoning behind the recommendation for a stand-alone 5b Option 3 in the Aleutian Islands and offer extensive rationale for why AI 5b Option 3 is the only "practicable" option within the suite of AI 5b sub-options.

Rationale for status quo (no new EFH protections) in the Bering Sea and Gulf of Alaska: At present, any honest advisor would conclude that the collective scientific understanding of what part of EFH is truly essential is in its infancy. We currently lack very basic information on how different types of habitat affect the productivity of groundfish species and how fishing affects the productivity of these habitat types. For this reason, the case for adopting new EFH protections in the Bering Sea and Gulf ahead of any compelling scientific indication that a problem exists is unnecessary and frankly unwise. The consequences of rash actions to close portions of fishing areas lacking basic scientific information could be to create negative effects that did not exist before. This is because new closures could compress fishing into a smaller area thus increasing the intensity of fishing effects in the area remaining open to trawling relative to status quo.

The Bering Sea and Gulf of Alaska already have extensive no trawl areas. The benefits of these closures remain largely unstudied. These areas were not specifically designed to mitigate effects of fishing on EFH but they undoubtedly serve this purpose to some degree (assuming such mitigation has positive effects on managed species, which still remains unknown). When the Council's EFH committee developed alternatives for additional closures as part of this EIS process, at times it seemed as if some committee members were completely unaware that the Eastern GOA, most of State waters, and various crab protection zones in the Gulf of Alaska were already closed to bottom trawling. Likewise for the Bering Sea, the committee appeared to be fixated on proposing new closure areas when existing no bottom trawl and no-trawl zones cover extensive habitat for critical life stages of important crab species. More importantly, most of the groundfish stocks in the Bering Sea are at all-time high levels of abundance and thus there is no indication that groundfish stocks are experiencing a habitat deficiency. Frankly, at times it felt that the committee was being pushed to invent alternatives for the sake of having new alternatives.

In the Gulf of Alaska, the various versions of the alternative to close the GOA slope to bottom trawling for rockfish would cripple the GOA rockfish fishery with huge downstream effects on the fishing industry and communities. This alternative is embodied in varying formats within EFH fishing effects mitigation Alternatives 3-5. The portion of the GOA slope where bottom trawling for rockfish occurs today is largely the same areas where foreign fishing for POP occurred, save that part that is located in the Eastern GOA which is currently closed to bottom trawling.

Distinctly different from the Eastern Gulf of Alaska, the portion of the GOA slope in the Central and Western GOA where the new closure would occur is comprised mainly of a mixture of soft and rocky substrates with little occurrence of corals. A regulation effectively forcing fishermen to use pelagic trawls on the slope or non-pelagic trawls in gully areas that remain open to bottom trawls under this alternative would focus all rockfish trawl effort on a very small area. This might actually have negative effects on sub-population structure known to

exist in rockfish. A great deal of catch of northern and pelagic shelf rockfish would be forfeited under the closures of the GOA slope because pelagic trawls show little promise for targeting these species. Additionally, the gully areas that are technically not part of the slope are not sufficient to allow for harvesting the TAC for these species. Likewise for POP, there might be unanticipated negative effects on the population. While about 20% of the POP TAC has been taken in some years with pelagic trawls, this has occurred in a limited number of areas where POP tends to school well off the bottom. The bathymetry in these limited areas allows for pelagic trawling without incurring a large risk of damaging the net. We question the wisdom of attempting to harvest the entire POP TAC from these limited locations because sub-structure in the population is known to exist.

The overall effect of closing the GOA slope to bottom trawling would be that in some years, rockfish yields would be only a small fraction of the TAC. On this issue of practicability, we continue to take strong objection to the unfounded assertion in several places in the EIS that pelagic trawl gear or catches with non-pelagic gear in off slope areas (gullies) could make up for some of the on-slope rockfish catches. Only one target rockfish fishery (Pacific Ocean Perch) has ever been fished with pelagic-style trawls in the GOA and this has occurred in a very limited number of areas where POP can be found sufficiently "off bottom" to allow for feasible targeting.

The EFH alternatives for the Bering Sea devised by the EFH Committee are the different versions of the rotational non-pelagic trawling restrictions. Rotational closures were originally conceptualized by a few on the committee as a relatively small-scale controlled experiment to learn about soft bottom invertebrate recovery and groundfish productivity. But as often occurs with committee work, the original vision of a small-scale experiment was lost and soon extensive areas of the Bering Sea were proposed for closure. Some sections of the latest version of the EIS now appear to attempt to sell these rotational closures under a crab protection objective. This fails to recognize that the Council has always considered crab protection measures directly (not through EFH) and that extensive no trawl zones in the Gulf of Alaska and Bering Sea already exist. Furthermore, it appears clear that existing closures such as in the Pribilof Islands and Gulf of Alaska have done nothing to reverse the low population levels of red and blue king crab respectively.

What is clear (but never stated directly) from information in the EIS is that unless all bottom contact fishing is restricted in the areas subjected to the rotations, a controlled experiment is not achieved. So the rotational closures fail to achieve their original scientific research objective. Further, the rotational periods of five and ten years are essentially guesswork for what it would take to allow effects of trawling to be reversed. The paradox here is that the "experiment" itself is actually trying to determine what the recovery period for the different types of invertebrates actually might be.

Most troubling in the reasoning behind the rotational closures is that the species inhabiting these relatively shallow shelf areas are certainly well adapted to disturbance given that storm surge and tidal action scours these areas on a regular basis. Add to this that the flatfish and cod population in this area is at close to peak abundance and showing no signs of any habitat limitations. With high abundance plus the lack of any real experimental design, this alternative holds little promise for improvement in productivity of FMP species or even learning anything about the linkages between habitat and productivity of managed species.

The one part of this alternative that we do, however, continue to support is the measure to require spaced discs on bottom trawl sweeps used for flatfish trawls in the Bering Sea. Given the concerns regarding monitoring and enforcement discussed in the EIS, however, we feel that if the Council still wants to pursue this approach, it would be worthwhile to address this specific gear measure in a trailing EFH action. With better communication between managers, Enforcement, NMFS' gear experts, and trawl skippers/gear manufacturers outside to the EFH committee process, we feel these concerns can be adequately addressed.

Rationale for using HAPC in lieu of EFH minimization of fishing effects and specific HAPC alternative preferences:

In our view, the Council's decision to use HAPCs to protect discrete habitat sites of high vulnerability or relative importance in the Bering Sea and Gulf of Alaska is the best approach and most practicable way to protect EFH in those areas. An example of why this approach is superior can be seen via the HAPC sites proposed for the Gulf of Alaska at Sanak, Albatross, and Middleton Island. This proposed HAPC sites are the result of improvements made to one of the original GOA EFH fishing effects minimization alternatives (GOA Alternative 2). The AGDB et al. HAPC proposal for Sanak, Albatross, and Middleton Island used fishermen's experience and available scientific data to identify the subset of sites within EFH Alternative 2 where there was evidence of linkages to corals and rockfish habitat. This was far better information than the EFH committee's imprecise identifications of "rough" bottom areas. Thus the HAPC process was used to drill down the available scientific information so as to identify the discrete areas that are likely to be the habitat that is most important to the productivity of managed species.

The same HAPC process occurred for the Bering Sea but upon careful review of available information, there was no concrete evidence that any sites met the 2004 priority for HAPC. This is not a failure of the HAPC approach. Much the opposite, it is a confirmation that the HAPC process is rigorous and based on concrete data and information. Once again, the goal should be to do something that makes sense, not just to "do something".

Our support for the specific HAPC sub-options listed in the numbered bullets above is simply based on the recognition that the proposals used relevant data and information to identify sites and took as discrete an approach as the available data warranted. In each case, our preferred sub-option for the management measures associated with the proposed sites followed the intention of the original author of the proposal.

Rationale for a stand-alone 5b Option 3 measure in the Aleutian Islands: From our perspective, the most important development in the EFH EIS process since the release of the draft EIS in September 2003 has been the creation of what we feel is a much-improved sub-alternative for protection of long-lived and vulnerable coral habitat in the Aleutian Islands. That sub-alternative is specifically entitled 5b Option 3 under the EFH fishing effects minimization alternatives for the Aleutian Islands. To arrive at a stand-alone adoption of 5b Option 3, given the manner in which the alternatives are grouped, Council would need to remove all the Gulf of Alaska and Bering Sea measures imbedded in Alternative 5b.

While we strongly support status quo on EFH measures for the Bering Sea and Gulf of Alaska, we feel a different approach for the Aleutian Islands is merited because the case for additional protection of un-impacted areas with fragile deep-water coral reef habitats in the Aleutian Islands was the most important finding of the EFH model.

The Aleutian Islands represents a very unique case for habitat protection and management approaches in Alaska given its apparent high coral abundance and diversity, highly repetitive fishing patterns, and extensive areas that have not been trawled. This is quite distinct from the Bering Sea and Gulf of Alaska where a much larger fraction of the area is trawlable and fish abundance ranges widely over the relatively broad shelf and slope edge. Fish abundance in the Bering Sea and Gulf of Alaska appears to respond more to swings in temperature and feed distribution over the shelf and slope. Target species in the AI have tended to occur in the same areas with consistency, probably in response to consistent patterns in feed abundance via the currents between the rocky passes and shelf upwelling.

Below we consider the separate components of Oceana's 5b sub-options (Options 1 & 2) in contrast to Option 3. In the case where Option 3 does not include such a component, the tradeoffs of having such a component versus not having such a component are discussed.

5b Open Area component: Option 3 for AI 5b captures the original habitat protection intent of Oceana's alternative 5b: restricting non-pelagic trawling in the Aleutian Islands to the areas that have already been trawled. As the Council has seen from the presentations by NMFS' GIS experts, haulback position data from observed tows is problematic for determining where fishing actually occurred. Option 3 of Alternative 5b utilizes trawl tow track and logbook information to delineate the open area where fishing has historically occurred. The Council therefore should rely on what is obviously the best available data for accurately delineating the historically fished area. Doing so avoids incorporating unfished areas into the open area as well as the economic impacts that Oceana's 5b would create through its omission of important historically fished areas.

Oceana's recent insistence that the open area be derived by the "official" (NMFS observed haulback) data is puzzling. This is because in its October 21, 2002 letter to the Council elucidating the AI 5b concept, Oceana stated that the open area would reflect the historically fished areas and that, "These areas would be specific tows recommended by fishing interests and/or areas where NMFS data shows historically high fishing effort...".

Based on the industry's assessment of the degree to which part or all of the established tows fall outside Oceana's open area boxes, we believe that Oceana's open area actually reduces the historically fished area by approximately 30-40% (in terms of geographic area). Under the industry's 5b box, we believe that roughly 95% of the historically fished areas are included (the entire area covered by the tows not just the haulback positions). Oceana's open area would thus create large economic impacts where catches could not be made up in other areas or would actually squeeze fishing effort into a much smaller area, possibly increasing the effects of fishing on habitat. In our view, the EIS does a poor job evaluating the impacts of Oceana's open area because even in the face of contrary evidence from NMFS' GIS experts, the analysis continues to assume that the catches attributed to a haulback position were in fact caught within the area derived from haulback positions.

In addition to our recommendation to adopt AI 5b Option 3 open area in its entirety, we likewise strongly encourage the Council to adopt the sub-option for a sunset to the regulations that restrict bottom trawling to the open area if mapping and other research to assess the overlap of fishing with coral and sponge abundance is not accomplished. Without this provision, little incentive will exist to undertake important habitat mapping and we predict that once the time has expired, we will be resuming what is essentially an uninformed debate on how trawling affects the overall extent of coral habitat in the Aleutian Islands. Despite what has been assumed by environmental advocates, with a sunset provision the industry will continue to support habitat mapping in the Aleutian Islands. This is because we believe that real solutions can only come from an informed debate. If the sunset were to occur and mapping was not undertaken, the industry would once again be faced with the negative ads filled with the "hundreds of truckloads of coral bycatch per day" hyperbole assault tactics from the well-funded environmental advocacy groups. To be more realistic given how long it will likely take to acquire funding and actually carry out mapping work, however, the Council might consider adjusting the sunset to be more than five years past implementation date.

5b TAC reduction component: Option 3 is the only 5b sub-option that does not include a reduction of TAC for any of the fisheries of the Aleutian Islands. In our view, TAC reductions simply do not belong within the basic concept of an open area as we conceive it. While Oceana as an organization may be interested in TAC reductions in the North Pacific for a number of reasons, their proposed TAC reductions within their EFH 5b proposal are linked to the magnitude of reduction of the historically fished area. The area reduction is somehow

designed to be proportionate to part of the "open area" they want closed due to what they feel is high coral bycatch. So the reduction in the open area for coral bycatch determines the percentage in the reduction of the TAC. We feel Oceana's methods for this are non-scientific and essentially arbitrary. The EIS discusses some of the problems associated with using observer samples to extrapolate coral bycatch (page 4-239). We agree with these reasons and concur that extrapolations from small amounts of coral that turned up occasionally in basket samples are essentially meaningless for identifying areas with high coral abundance. This is especially true when extrapolations are done on a spatially-specific basis to identify what proportion of the "open area" should be closed due to coral bycatch. This clearly skews an already biased extrapolation method that should not be attempting to use trawl data as an indicator of coral abundance in the first place.

For all the above reasons, we believe that the proposed TAC reductions are little more than veiled attempts to close down bottom trawl fisheries. When the biomass of the species in question increases or decreases, we concur that the ABC and TAC should be adjusted based on the target exploitation rate and other relevant factors. The fisheries that would be affected by Oceana's proposed TAC reductions under EFH are all currently at relatively high abundance levels. If stocks show signs of lower population levels, then the Council will lower their TACs as they have never failed to do in the past. The TAC reductions proposed under Oceana's 5b however would simply create economic impacts with no real benefits to coral protection.

Coral Bycatch Cap component: As is pointed out in the EIS, bycatch caps for coral and sponge do not fit into the established framework for prohibited species management caps in the North Pacific. For existing prohibited species caps, the cap is set conceptually at a target percentage of the overall population. For corals and sponges, population levels are completely unknown so the cap would have to be set arbitrarily. One suggestion might be to set the cap at current catch levels, but we have no way of knowing whether that would accomplish any resource management objectives because we still do not know what the catch level is in comparison to the populations. Also troubling in this regard is that extrapolations would be needed to scale up the amounts in the samples to an estimate of overall catch in order to set the caps. These would be inherently biased for the reasons discussed above. This would be problematic for both setting coral or sponge caps and for tracking the catch against that cap (see discussion in EIS page 4-239). Also, corals have for many years been grouped in the observer data with bryozoans because observers (like all but a handful of biologists) lack the specific training to distinguish the differences. Thus, to sort out what portion of that catch was actually bryozoans is not available from the data. Additionally, observers are already fully occupied with their assigned duties and the time needed to count and classify corals and sponges would take additional time away from the duties for which observer coverage was intended.

Another troubling aspect of coral and sponge caps is that they would inevitably have to be apportioned between different trawl target fisheries. Every fishery that has some chance of hitting its cap would want to build a buffer into its allowance so that it would be greater than the extrapolated total for that fishery. This would be sought in order to lower the chance of triggering the cap. This, in combination with the risks posed by extrapolating from basket samples (what one skipper deemed "Gorgonian roulette") would make the apportionment scheme a very difficult and contentious process.

The final issue with the coral and sponge bycatch cap issue is the practical aspects of tracking and monitoring the caps. NMFS has expressed concern over its ability to track such caps during the fishing season (EIS page 4-239). Thus, in the open access fisheries of the Aleutian Islands, fishermen in one year might be penalized by the coral or sponge catches of fishermen who fished in the fishery the prior year but opted not to return to the fishery. Additionally, the practical costs of this measure in terms of time spent monitoring for both industry and observers would be astronomical. No one would want to be subject to the vagaries of basket sampling if extrapolation were going to be used to determine the catch toward the cap. So whole haul sampling would be the

only fair way to implement this measure. But that would take far more resources and time than the monitoring for any other prohibited species.

Additionally, practicality would dictate that coral and sponge would have to be put on full retention for all gears fishing in the area fished by bottom trawlers. This is because to throw the coral back in the water might mean that a subsequent tow by the vessel that caught the coral or another vessel might bring the piece of coral to the surface again and again, thereby double and triple counting it. Catches of corals from competing gears such as long lines and pots would also have to be retained so that the trawlers could be assured that those vessels are not placing the coral bycatch from those gears in the areas fished by trawlers.

EFPs to evaluate whether fishing in outside the open area can occur without negative effects on the coral protection objectives of 5b: We support the use of EFPs and other such instruments to evaluate areas outside the initial open area in Option 3 of AI 5b. Research and mapping should be used to evaluate whether re-opening specific parts of the closed area would negatively affect the coral protection objectives of this measure. There simply must be a mechanism to allow access to the closed area because it is possible that the proportion of the target species in the open area may shift due to changes in environmental conditions.

Observer coverage requirements: Page 4-230 of the EIS states that "all three options of Alternative 5b propose expanding observer coverage to 100 percent." This is not accurate because the fishermen and fishing associations that proposed Option 3 never included this element in their proposal. Many cod trawl vessels that participate in the Aleutian Islands fishery are 30% coverage vessels and there is even a handful of "under 60 foot" in the cod CV fleet. Bumping all AI bottom trawl vessels in the AI up to full coverage levels would be prohibitively expensive for most and would hence not be practicable. For this reason, the industry's sub-option (Option 3) has proposed mandatory VMS coverage as a means of monitoring and enforcing the open area regulations. By omitting the coral and sponge bycatch caps from Option 3 (a measure that would probably require 100% coverage on all vessels), the open area regulations of Option 3 can be reliably enforced with VMS and existing observer coverage levels.

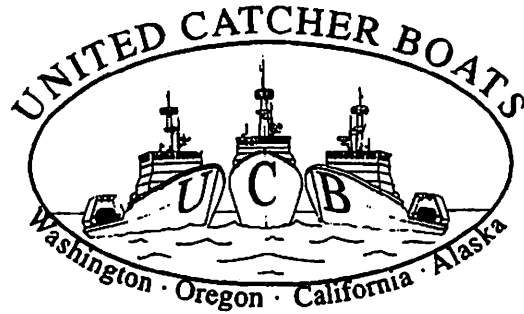
Overall Assessment of the 5b sub-options: Option 3 of Alternative 5b starts with an open area that reflects where trawling has occurred. This avoids the impacts that Oceana's open area would create. We believe that these impacts are greatly underestimated in the EIS analysis because the incorrect assumption is made that observed haulback positions indicate where the catches actually occurred. Another beneficial aspect of Option 3 is that areas that have not been fished historically have not been added to the open area. The contrary is true for 5b Options 1 and 2 due to the imprecision of haulback position data for determining where fishing has historically occurred. Further, Option 3 is superior because it removes the unworkable and impracticable elements of Oceana's 5b proposals: coral bycatch caps, TAC reductions, arbitrary future reductions in the open area, and 100% observer coverage for vessels currently at lower levels of coverage.

Thank you for your consideration of these comments.

Sincerely,



John Gauvin



February 1, 2005

Ms. Stephanie Matsen, Chair
North Pacific Fishery Management Council
605 W. 4th Ave., Suite 306
Anchorage, Alaska 99501

RECEIVED
FEB - 2005
N.P.F.M.C.

RE: Agenda Item C-1, EFH

Dear Ms. Matsen and Council Members,

The members of United Catcher Boats would like to submit the following comments on the Essential Fish Habitat (EFH) agenda item. Our vessel owners primarily participate in the BSAI Pollock and P. cod trawl fisheries with catcher vessels. In general, we would like to commend the NPFMC and NMFS for venturing forth and developing a plan for addressing the concerns stemming from the U.S. District Court's 2003 order. We believe in recommending a final preferred alternative at this meeting the Council has addressed the Court's concerns, including developing an adequate range of alternatives, allowing for extensive public involvement, and using the best available scientific data and information.

1. Status Quo Alternative for Bering Sea and Gulf of Alaska

Our first recommendation is that the Council recommends the Status Quo alternative for EFH protection measures in the Bering Sea and Gulf of Alaska management areas. One reason why we recommend this course of action is that there presently exists many wide-ranging no trawl areas in the Bering Sea and Gulf of Alaska areas. Though these no-trawl closure areas were not specific to EFH, they have served the role of mitigating the effects of fishing on EFH.

Over the years, the Council and NMFS have adopted numerous area closures to protect habitat for fish, crabs, and marine mammals. Together, these closed areas exceed 130,000 square miles. These closures include the Pribilof Islands Habitat Conservation Area, the Bristol Bay Trawl Closure Area, the Red King Crab Savings Area, the Kodiak Trawl Closure Areas, the Southeast Alaska Trawl Prohibition, the Cook Inlet Trawl Closure Area, the Sitka Pinnacles Marine Reserves, the Steller Sea Lion Protection Zones and

Walrus Islands Closure Areas. Seasonal groundfish closure areas, as well as large areas of State of Alaska managed water are also closed to trawling.

In addition, the EIS analyzes and concludes that no Council-managed fishing activities have more than minimal and more than temporary effects on EFH for any of the FMP species in the Bering Sea and the Gulf of Alaska. The analysis concludes the cumulative impact of all fishing activities combined have minimal effects on EFH.

Additional mitigation measures seem unnecessary when there are no overfished groundfish species in the North Pacific. More importantly, most of the groundfish stocks in the Bering Sea are at all-time high levels of abundance and thus there is no evidence that groundfish stocks are experiencing a habitat deficiency. It is likely management measures already imposed in the North Pacific have contributed to the sustainability of the managed species and their habitat. Under the Status Quo Alternative these regulatory measures would remain in place.

2. Recommend a Stand-Alone 5b Option 3 Measure for the Aleutian Islands Area

While we strongly support the Status Quo alternative for the Bering Sea and the Gulf of Alaska, we believe a different approach should be taken for the Aleutian Islands area. This is due to the different benthic habitat structure in the Aleutian Islands relative to the other two management areas.

The Aleutian Islands area is much different than the Bering Sea and the Gulf of Alaska management areas in that this is an area of high amounts of long-lived, slow growing and vulnerable coral habitat. If approved, the 5b option 3 will result in an unprecedented closure of vast amounts of areas of known coral habitat thereby protecting this type of habitat. Protection of un-impacted areas with fragile deep-water coral habitats seems necessary and was also a finding of the EFH model used in the EFH analysis.

However, we have a concern with one element of the final EIS 5b Aleutian Islands option regarding observer coverage levels. The EIS states that all the EFH 5b sub-options propose 100% observer coverage for all vessels (page 4-230). This is not accurate, as the fishing industry's 5b proposal did not include an option for increased observer coverage for the catcher vessel fleet fishing in the Aleutian Islands. We ask that this option be removed. Current levels of observer coverage for the catcher vessel fleet achieve the need for adequate data collection at present. All vessels fishing in the federal groundfish fisheries are required to have an active VMS system on board at all times thus there is no need for an onboard observer to document whether or not the vessel is fishing inside or outside an open area. In addition, increasing observer coverage to the smaller vessels would be cost prohibitive. The NMFS and the Council are presently embarking on a review of the existing observer program and perhaps will restructure coverage level requirements and a different fee payment system at that time.

One point we wish to stress is that the 5b proposal for the Aleutian Islands is not based on any quantitative, thorough benthic mapping research. Rather, it is based on a lot of antidotal and indirect information from the fishing fleet and observer program. A dedicated benthic mapping program is seriously needed if we are to know whether or not this open-closed area approach to EFH management is beneficial or not. Therefore, we ask that this open-closed approach sunset after five years if mapping and other research to assess the effects of fishing on coral and sponge habitat is not initiated.

Thank you for consideration of our comments.

Sincerely,



Brent Paine

February 1, 2005

Ms. Stephanie Madsen
Chair, NPFMC
605 W. 4th Avenue
Anchorage, AK 99501-2252

RECEIVED
FEB - 2005
NPFMC

RE: EFH comments

Dear Ms. Madsen:

The Aleutian Cod Fishermen's Marketing Association generally supports the Council's preferred options with regard to the EFH alternatives. The purpose of this letter is to offer specific comments on Alternative 5B for the Aleutian Island area.

Recommendations:

- We believe that the Council should adopt Option 3 version of Alt. 5B for the Aleutian Islands area only.
- We also encourage the Council to adopt the sub-option for a sunset to the regulations that restrict bottom trawling to the open area if mapping and other research to assess the overlap of fishing with coral and sponge abundance is not accomplished.
- We support the more extensive comments submitted to the Council on EFH and Alt. 5B by Groundfish Forum, however we wish to highlight a number of points in the following comments.

The January 2005 version of the EFH EIS provides the detailed analysis to allow the Council to understand the impacts of Option 3 as applied to the Aleutian Island. Staff presentations made on the record to the Council at the December 2004 meeting also provided supplemental GIS analysis contrasting the AI 5B alternatives, this information needs to be brought into the final version of the EIS.

The Council should adopt a stand-alone Alt. 5B Option 3 measure in the Aleutian Islands, removing all the Gulf of Alaska and Bering Sea measures imbedded in Alternative 5B.

The unique nature of Aleutian Islands habitat and its apparent high coral diversity, highly repetitive fishing patterns, and extensive areas that have not been trawled is quite very different from the Bering Sea and Gulf of Alaska. The EIS analysis justifies status quo for the Bering Sea and Gulf of Alaska, however a different approach for the Aleutian Islands would provide additional protection of un-impacted areas with fragile deep-water coral reef habitats in that area.

Open Area component:

All three options of Alt. 5B close vast amounts of the AI to bottom trawling. However, there are significant differences in which specific blocks are open or closed under each option. Option 3 for AI 5b best captures the original habitat protection intent of the original Alt. 5B which was to constrain the bottom trawl fishery to its historic "footprint."

Option 1 and 2 of Alt. 5B suffer from two problems that cause them to not capture the "footprint of the fishery:

- Haulback position data from observer data only reflects where a haul was retrieved, not necessarily where fishing actually occurred - by contrast Option 3 areas were based on a combination of observer data, VMS data, and plotter/logbook data.
- Only a limited set observer data from recent years were used - by contrast Option 3 used data from 1990 through 2004, thus more realistically capturing the "footprint" of the fishery.

Using the best available data for delineating the historically fished area is important:

- It avoids incorporating un-fished areas into the open area.
- It minimizes the economic impacts that Option 1 and 2 would create through its omission of important historically fished areas.
- It avoids forced redistribution of effort which would have unpredictable consequences.

Extra features of the "Oceana" options:

The Ocean options include a number of "bells and whistles" that we do not support:

1- TAC reduction component:

- The reduction in the open area used to derive the percentage in the reduction of the TAC is fashioned by Oceana in part based on erroneous methods of identifying the portion of the historically fished area that contains high abundance of coral.
- TAC should be adjusted up or down based on fluctuations in the biomass of the species in question and exploitation objectives based on the life history characteristics of the species that supports the fishery.
- The TAC reductions proposed under Oceana's 5b would simply create economic impacts with no benefits to coral or the populations in question

2- Coral Bycatch Cap component:

- Coral and sponge population levels are completely unknown so the cap would have to be set arbitrarily.
- Extrapolations to scale the amounts in the samples to the catch would be inherently biased.
- Setting and tracking coral or sponge cap would be extremely complicated and tracking would demand whole haul sampling. (see discussion in EIS on page 4-239).
- Because corals were grouped in the observer data with bryozoans the data to sort out what portion of that catch was actually bryozoans is not available.
- Additionally, observers are already fully occupied with their assigned duties and the time needed to count and classify corals and sponges would further take time away from the duties for which observer coverage was intended.
- Coral and sponge caps would inevitably have to be apportioned between different trawl target fisheries to prevent one fishery from shutting down another.
- The final issue with the coral and sponge cap alternative is the practical aspects of tracking and monitoring the caps. NMFS has expressed concern over its ability to track such caps during the fishing season (EIS page 4-239).

- Full retention for all gears would be needed to avoid re-counting coral that had been previously discarded.

3- Observer coverage requirements:

The Oceana options include 100% observer coverage, which would impose a significant cost burden on 30% vessels and vessels under 60', but this is not required for Option 3.

- Page 4-230 of the EIS states that "all three options of Alternative 5b propose expanding observer coverage to 100 percent."
- The Council Dec. 2004 newsletter description of Option 3 makes no mention of 100% observer coverage.
- Increasing to full coverage levels on all catcher vessels would be prohibitively expensive for most and would hence not be practicable.
- Option 3 has proposed mandatory VMS coverage as a means of monitoring and enforcing the open area regulations.
- Selecting Option 3 which does not include the most unworkable element of the Oceana option (coral bycatch cap) removes the necessity for whole haul sampling, and thus it can be reliably enforced with VMS and existing observer coverage levels.

Under-estimate of impact of Oceana options:

Pages 4-228 of the EIS discusses the revenues at risk under the various 5B option 1 based on an assumption of a 10% P. Cod TAC reduction of 9,021 mt and a wholesale value of \$1257/mt. On pages 4-233 to 4-237 these assumptions are presumably used to determine the distribution of impacts to catcher vessels, shorebased processors and communities. However, it appears that the analysis of the distribution of impacts is flawed.

- One major error is the statement on page 4-236 that "it is assumed that most of the additional AI Pacific cod catch-at-risk" ...would have been processed in Dutch Harbor." In fact, most shorebased processing of AI cod occurs in Adak, and cod is the primary source of fishing revenue for Adak. As a result the EIS totally misses the community impact on Adak.
- Another error appears to exist with regard to the economic impact of catcher vessels. CV cod catch in the AI has been over 10,000 mt in recent years, with an average ex-vessel price of over \$500/mt. Thus, the status quo revenue from the CV cod fishery is closer to \$5,000,000 - not the \$1,320,000 used for the status quo on page 4-233. Thus the CV cod revenue at risk is probably double or triple the amount in the analysis.
- Finally, there is the inherent problem that more catch may be at risk than recognized under the Oceana options due to the assumption that all catch in a tow comes from the block where the haulback occurs.

Overall Assessment of the 5B options:

Option 3 of Alt. 5B starts with an open area that reflects where trawling has occurred, and thus avoids the impacts that Oceana's open area would create.

The impacts of the Oceana options are greatly underestimated in the EIS analysis because the incorrect assumption is made that observed haulback positions indicate where the catches actually occurred.

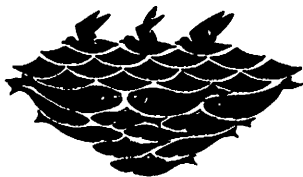
Under Option 3 areas that have not been fished historically have not been added to the open area, while contrary is true for 5b Options 1 and 2 due to the imprecision of haulback position data for determining where fishing has historically occurred.

Option 3 is superior because it removes the unworkable and impracticable elements of Oceana's 5b proposals: coral bycatch caps, TAC reductions, arbitrary future reductions in the open area, and 100% observer coverage for vessels currently at lower levels of coverage.

Thank you for your consideration of these comments.

Sincerely,

dave fraser
Aleutian Cod Fishermen's Marketing Association



Alaska Marine Conservation Council

Box 101145 • Anchorage, Alaska 99510 AGENDA C-1(b-c)
(907) 277-5357 • (fax) 277-5975 FEBRUARY 2005
amcc@akmarine.org • www.akmarine.org

February 1, 2005

Stephanie Madsen, Chair
North Pacific Fishery Management Council
605 W. 4th Avenue, Suite 306
Anchorage, AK 99501-2252

FEB - 2005
AMCC

RE: Agenda Item C-1: **Essential Fish Habitat and Habitat Areas of Particular Concern**

Dear Ms. Madsen:

The Alaska Marine Conservation Council appreciates the significant efforts of the North Pacific Council and National Marine Fisheries Service in the process leading up to the Council's Final Action on Essential Fish Habitat and Habitat Areas of Particular Concern. While AMCC disagrees with the overall conclusion of the EFH EIS, that "no Council managed fishing activities have more than minimal and temporary adverse effects on EFH," the Council clearly has enough information before it to take appropriate precautionary and practicable actions to protect sensitive habitats.

We support the Council in choosing the following alternatives to protect seafloor habitats:

1. Essential Fish Habitat EIS

Action 3: Minimize the Adverse Effects of Fishing on EFH

- Alternative 5B for the Bering Sea.
- Alternative 5B, Option 2 for the Aleutian Islands.
- Alternative 5B for the Gulf of Alaska, without the measure which prohibits bottom trawls targeting GOA slope rockfish on the entire GOA slope (200 to 1,000m). This would prohibit bottom trawls for all groundfish fisheries in 10 designated sites along the slope.

2. Habitat Areas of Particular Concern Environmental Assessment

Action 1: Seamounts

- Alternative 3: Designate 16 named seamounts in the EEZ off Alaska as HAPC and prohibit all bottom contact fishing by Council-managed fisheries on these seamounts.

Action 3: Aleutian Islands Corals

- Alternative 5: A combination of Alternatives 2, 3, and 4.

AMCC supports adoption of Alternative 2: Designate six coral garden sites within the Aleutian Islands as HAPC and prohibit bottom contact gear in the sub-areas. Alternative 3: Designate an area of Bowers Ridge as HAPC and prohibit bottom contact mobile gear, and Alternative 4: Option 1, designate four sites in the Aleutian Islands as HAPC and prohibit all bottom contact mobile fishing gear.

The rationale for our above recommendations are as follows:

Essential Fish Habitat EIS:

The fishing effects analysis found significant impacts to habitat features but not the productivity of managed species. The burden of proof applied by the agency to determine an effect that is “more than minimal and not temporary” was too high. Linking habitat conservation to proof of productivity is impossible. Such a burden of proof is not required in most decisions the Council makes and we feel it is an inappropriate barrier to reasonable conservation solutions.

“The SSC notes that it may not be possible to motivate the protection of rare and fragile habitats... solely on the basis of their linkage to the productivity of managed species.... The SSC believes this a very high standard of evidence and may not be consistent with the Council’s precautionary approach.”¹

“With such an approach it will be extraordinarily difficult to prove productivity effects even in situations where spawning, feeding and/or growth are being systematically reduced. Thus, the conclusion that current fishing activities are having no effect on EFH is premature at best, and potentially dangerous for the long-term sustainability of Alaskan fisheries.”²

“The analysis indicates that there are long-term effects of fishing, particularly bottom trawling, on benthic habitat features off Alaska. Considerable scientific uncertainty remains regarding the consequences of such habitat changes for the sustained productivity of managed species.”³

The principal evaluation of the effects of fishing on EFH is an evaluation of whether fisheries, as they are currently conducted, will affect habitat essential to the production of commercially managed species. The evaluation on the habitat features themselves, found significant and lasting impacts caused by bottom trawls on living substrates, prey, and corals and sponges. For example, despite a projected reduction of 28 percent for hard corals in the Aleutian Islands shallow habitat,⁴ NMFS scientists cannot determine that this habitat loss will result in a decreased productivity of managed species known to utilize these habitats.

The agency set the burden of proof to show an adverse effect that is more than minimal and not temporary at such an extreme level, that it is impossible to conclude an adverse impact in their analysis. As the SSC has acknowledged, however, “...linkages between habitat and productivity of FMP species are virtually impossible to establish experimentally. Based on the NRC trawling effects report and other reviews, the presumption is that mobile-bottom contact gear affects

¹ NPFMC Scientific and Statistical Committee. March 29-31 2004 Draft Minutes, at 5.

² Dr. Paul Snelgrove. July 2004. Center for Independent Experts, Review of the NMFS and NPFMC DEIS for EFH, at 3

³ NMFS, Preliminary Final EFH EIS. January 2005, at ES-9

⁴ NMFS, *supra* note 3, at B-93.

habitat.”⁵ If there was any doubt in the analysis of fishing impacts on managed species, or a competing hypothesis was available, an evaluation of “unknown” impact was given. Because the agency applied this level of proof, unattainable with current scientific information, no evaluation found impacts which were more than minimal and not temporary, but 35% of the evaluations were rated as “unknown”.

A clear example of this can be found in the analysis of fishing impacts on sablefish. The analysis found that, “Intense bottom trawling on the continental shelf may have reduced both biostructure and the ability of juvenile sablefish to compete or otherwise survive to maturity.”⁶ Moreover, the analysis noted that the biomass of sablefish is projected to decrease in the near future and that the current biomass is below what B_{35%} would have been 10 years ago.⁷ Yet despite these findings an evaluation of “unknown” was given because, “There is **no direct evidence** [emphasis added] to attribute these trends to fishing impacts on habitat. Whether the decreasing trend in recruitment is the result of climate conditions or altered benthic habitat is unclear.”

Given this, what would trigger an impact that is more than minimal and not temporary? The agency is requiring “direct evidence” not available with the current scientific understanding of the nexus between habitat and stock productivity. The analysis then makes the dangerous leap of faith from 37 findings of “unknown” impact, to a conclusion that no Council managed fishery has an impact on essential fish habitat.

Recognizing the great uncertainty in the NMFS analysis of fishing impacts, the Council can and should take action to protect essential fish habitats.

The EFH EIS determined that Alternative 5-B has the highest total benefits to habitat features in the Gulf of Alaska, Bering Sea and the Aleutian Islands.⁸ Implementing the habitat conservation measures in Alternative 5-B would provide significant and lasting benefits for sensitive habitat features while maintaining vibrant groundfish fisheries. We see this approach as a practical balance between the precautionary management of sensitive habitats and economically productive fisheries.

Alternative 5-B for the Bering Sea:

In the Bering Sea, areas of the shelf and continental slope would be protected from bottom trawling north and west of the Pribilof Islands. This alternative would have positive benefits for “biostructure” - animals on the seafloor that create living habitat for fish and crab. Additionally, this alternative would have benefits for mature female *opilio* Tanner crab, currently designated as overfished.

The closure areas in the EBS overlap with *opilio* crab EFH areas of concentration. The trawl closure areas may improve habitat and reduce bycatch mortality for *opilio* crab within the closure area by eliminating potential impacts due to bottom

⁵ NPFMC Scientific and Statistical Committee, February 2003.

⁶ NMFS, *supra* note 3, at B-56.

⁷ NMFS, *supra* note 3, at B-57.

⁸ NMFS, *supra* note 3, at Table ES-8

trawling.... The requirement of large bobbins and rollers on trawl gear footropes and sweeps is expected to reduce crab bycatch and unobserved mortality by reducing the amount of gear hitting the bottom.⁹

Figure B.3.2.8-1 in the EFH EIS shows that although concentrations of mature female *opilio* shift over time, the area northwest of the Pribilof Islands and south of St. Mathew Island, is consistently important to mature female *opilio*. This is the area that would receive protection from bottom trawling if alternative 5-B were adopted by the Council.

Alternative 5-B, Option 2 for the Aleutian Islands:

"The Administration encourages all regional fishery management councils to take action, where appropriate, to protect deep-sea corals when developing and implementing regional fishery management plans." - U.S. Ocean Action Plan. December 2004. The Bush Administration Response to the U.S. Commission on Ocean Policy. Pg 21

Alternative 5-B for the Aleutians has been a central focus in the Council's debate over how to protect essential fish habitats from adverse fishing impacts. Paramount to understanding the habitat value of the Aleutians, are scientific findings of the ecological importance and diversity of coldwater corals and sponges. Researchers at NOAA Fisheries found that the Aleutian Islands possibly harbor the greatest diversity and abundance of coldwater corals in the world. The Aleutians are home to at least 69 taxa (species and subspecies) of coral, of which 25 are found no place else on earth. Researchers believe that corals and sponges may be "keystone species," meaning that their presence determines the abundance and diversity of fish and invertebrates. Further, these scientists have found that the Aleutians may be the evolutionary center of origin for some coral species.¹⁰

Alternative 5-B, Option 2, was rated in the EFH EIS as having the highest total benefits for habitats with less than half the costs of 5-B, Option 1.

AMCC supports adoption of the following components found in Alternative 5-B, Option 2:

- Open areas that would allow bottom trawling to continue in the Aleutian Islands where high catches have occurred in the past.
- Pelagic trawls can fish in the area outside of the designated open area, in off-bottom mode.
- TAC reductions for Atka mackerel and rockfish in proportion to the catch attributable to the closed areas.
- 100 percent observer coverage and a vessel monitoring system for vessels fishing for groundfish.
- Formation of a comprehensive research and monitoring plan.

⁹ NMFS, *supra* note 3, at 4-224

¹⁰ Heifetz, J., B.L. Wing, R.P. Stone, P.W. Malecha, and D.L. Courtney. In Press. Corals of the Aleutian Islands.

Our support of Alternative 5-B, Option 2 does not include the coral and sponge bycatch limits that would close specific fisheries and areas if the bycatch limit were reached.

We respect that bottom trawl fishermen and the Groundfish Forum put together an open area alternative for the Aleutians (5-B, Option 3). This alternative opens up 19,302 km² of Aleutian Islands essential fish habitat that would not be open under Option 2. The disparity between the different open areas occurs primarily in the western Aleutians. This is of particular concern for two reasons: 1) The diversity and abundance of corals greatly increases west of about 169°⁰, in the vicinity of Samalga Pass¹¹, 2) Trawl fisheries have been expanding their effort into the western Aleutians¹², which means that more impacts will occur in undisturbed habitats as fisheries move into the larger “open areas” in the western region of Option 3. Further, research using submersible dives have documented coral garden habitat inside of the area designated as open in Option 3. These same areas would be closed under Option 2.

Alternative 5-B for the Gulf of Alaska

AMCC supports the component of Alternative 5-B for the Gulf of Alaska that would close 10 designated sites along the Gulf slope (200m to 1,000m) to all bottom trawl fisheries. We do not support the component of this alternative that would close the entire slope to bottom trawls targeting rockfish. This measure would have added benefits for rockfish habitat along the slope; however, it creates an unusual management loop hole. We are concerned that this measure will encourage rockfish bycatch fisheries to top off their catches along the slope area. Fisheries using bottom trawls may target flatfish or cod and top off their catch with rockfish along the slope, rendering the slope closure ineffective.

The 10 areas in this alternative that would be closed to bottom trawling would provide benefits to rockfish and habitat complexity in these sites. We recognize that these areas have been either lightly trawled or un-trawled and the areas were selected by bottom trawl fishermen for this reason. The EIS effects analysis identified the Gulf of Alaska slope as the habitat feature impacted the most heavily by bottom trawl gear. Adopting these 10 areas along the slope would be a precautionary measure for this habitat area.

Habitat Areas of Particular Concern:

Habitat Areas of Particular Concern are a valuable way to prioritize the designation and management of sensitive habitat areas. The Council’s call for proposals to address seamounts and high relief coral habitat resulted in a number of strong proposals designed to designate and protect specific sites. The HAPC alternatives we support would provide conservation benefits to the habitat and managed species with little to no costs to commercial fisheries.

¹¹ Ibid.

¹² NORPAC Database, Official Tons of Catch in Rockfish, Atka mackerel, and Pacific cod trawl fisheries.

Seamounts:

AMCC supports Alternative 3 under Action 1, which would designate 16 named seamounts in the EEZ and prohibit bottom contact fishing on these sites. Although not all 16 seamounts have been researched, scientists are making new and exciting discoveries about these islands of life that rise up from the abyssal plane. Seamounts are submerged mountains that disrupt ocean current flows and result in mixing of the surface and deep-sea ocean water layers. This creates regions of high biological activity, usually found only in nearshore habitats. Seamounts have been documented to host unique coral and sponge habitats and are known to have a high level of endemic species.¹³

Aleutian Islands Corals:

AMCC supports Alternative 5 for Action 3, Aleutian Islands Corals. Under this alternative, we support the inclusion of the HAPC sites in Alternatives 2, 3 and 4. These alternatives all designate and protect coral and sponge habitats with rockfish associations in relatively unfished areas, which have been identified with submersibles or inferred from bathymetric features. At the local scale of conserving rockfish and coral habitat, these HAPC sites would ensure the conservation of habitat features and provide a refuge for rockfish and other managed species within the HAPC sites.

Coldwater corals can be extremely long-lived; they create structurally complex habitats and are areas of high taxonomic diversity. Researchers have documented that Alaska coldwater corals provide important habitat features for both commercial and non-commercial species.¹⁴ Corals are also highly vulnerable to fishing impacts. An average of 64 metric tons of corals was taken as bycatch in the Bering Sea and Aleutian Islands bottom trawl fisheries annually between 1997 and 2001.¹⁵ While significantly less than in the bottom trawl fisheries, longline fisheries in the BSAI accounted for an average of four metric tons of coral bycatch annually during 1997 – 2001.¹⁶

In comparison to the other Aleutian Islands HAPC proposals, the Bowers Ridge proposal is noticeable different in size. Bowers ridge is located north of Petrel Bank in the Aleutian Islands and is a unique submerged ridgeline that spans depths from as shallow as 11 meters, to greater than 3,700 meters. The proposed area contains essential fish habitat for dusky (*Sebastes ciliatus*), northern (*Sebastes polyspinis*), shortraker (*Sebastes borealis*), roughey (*Sebastes aleutianus*), and thornyhead rockfish (*Sebastolobus alascanus*), plus other FMP species. The complex bathymetric features of Bowers Ridge provide a physically complex habitat that likely supports undisturbed coral gardens and provides important habitat refuge for managed fish species. As described in the HAPC impact review, the Bowers Ridge alternative does not have the potential to affect the revenue of

¹³Guilderson, T. et al. 2002. Cruise report for R/V Atlantis Cruises AT-7-15 & AT-7-16. Gulf Of Alaska Seamount Exploration (GOASEX)

¹⁴Krieger, K.J., and B.L. Wing. 2002. Megafauna associations with deepwater corals (*Primnoa* spp.) in the Gulf of Alaska. *Hydrobiologia* 471: 83-90.

¹⁵NMFS 2004. Final Programmatic Supplemental Environmental Impact Statement. A-4.1-8.

¹⁶Ibid.

any managed fisheries.¹⁷ Consistent with the precautionary approach, this proposal would protect habitats from the potential of exploratory fisheries moving into this relatively undisturbed area.

Thank you for your time and consideration of our comments.

Sincerely,



Ben Enticknap
Fisheries Project Coordinator

¹⁷ HAPC EA-RIR-IRFA. January 2005, at 216.

other handouts
@ Start of Feb 05
mtg.

**Preliminary Final Environmental Impact Statement for
Essential Fish Habitat Identification and Conservation in Alaska**

Amendment 78 to the Fishery Management Plan for the Groundfish Fishery of the Bering Sea/Aleutian Islands Area
Amendment 73 to the Fishery Management Plan for Groundfish of the Gulf of Alaska
Amendment 16 to the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs
Amendment 8 to the Fishery Management Plan for the Scallop Fishery off Alaska
Amendment 7 to the Fishery Management Plan for the Salmon Fisheries in the Exclusive Economic Zone off the Coast of Alaska

January 2005

Lead Agency: National Oceanic and Atmospheric Administration
National Marine Fisheries Service
Alaska Region

Responsible Official: James W. Balsiger, Administrator, Alaska Region

For Further Information Contact: National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668
(907) 586-7636

Abstract: The 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) included new provisions concerning the identification and conservation of Essential Fish Habitat (EFH). The North Pacific Fishery Management Council amended its five fishery management plans (FMPs) in 1998 to address the new EFH requirements, and the National Marine Fisheries Service (NMFS) approved those FMP amendments in January 1999. A legal challenge resulted in a September 2000 United States District Court decision that upheld NMFS' approval of the EFH FMP amendments under the Magnuson-Stevens Act, but ruled that the environmental assessment (EA) prepared for the amendments violated the National Environmental Policy Act. The court ordered NMFS to complete a new and thorough environmental analysis. Accordingly, this environmental impact statement evaluates alternatives and environmental consequences for three actions: (1) describing and identifying EFH for fisheries managed by the Council; (2) adopting an approach for the Council to identify Habitat Areas of Particular Concern within EFH; and (3) minimizing to the extent practicable the adverse effects of Council-managed fishing on EFH. Most of the controversy surrounding the level of protection needed for EFH concerns the effects of fishing activities on sea floor habitats. Substantial differences of opinion exist as to the extent and significance of habitat alteration caused by bottom trawling and other fishing activities. This EIS reexamines the effects of fishing on EFH, presents a wider range of alternatives, and provides a more thorough analysis of potential impacts than the EA approved in 1999. The analysis indicates that there are long-term effects of fishing on benthic habitat features off Alaska and acknowledges that considerable scientific uncertainty remains regarding the consequences of such habitat changes for the sustained productivity of managed species. Nevertheless, based on the best available scientific information, the EIS concludes that the effects on EFH are minimal because the analysis finds no indication that continued fishing activities at the current rate and intensity would alter the capacity of EFH to support healthy populations of managed species over the long term. The analysis concludes that no Council-managed fishing activities have more than minimal and temporary adverse effects on EFH, which is the regulatory standard requiring action to minimize adverse effects under the Magnuson-Stevens Act, but a variety of practicable management actions could be taken as a precautionary measure to provide additional habitat protection.

EXECUTIVE SUMMARY

Introduction

The 1996 amendments to the Magnuson-Stevens Fishery Conservation and Management Act included new provisions concerning the identification and conservation of Essential Fish Habitat (EFH). The Magnuson-Stevens Act defines EFH as "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." The National Marine Fisheries Service (NMFS) and regional Fishery Management Councils (Councils) must describe and identify EFH in fishery management plans (FMPs), minimize to the extent practicable the adverse effects of fishing on EFH, and identify other actions to encourage the conservation and enhancement of EFH. Federal agencies that authorize, fund, or undertake actions that may adversely affect EFH must consult with NMFS, and NMFS must provide conservation recommendations to federal and state agencies regarding actions that would adversely affect EFH. Councils also have the authority to comment on federal or state agency actions that would adversely affect the habitat, including EFH, of managed species.

This environmental impact statement (EIS) evaluates alternatives for three actions: (1) describing EFH for fisheries managed by the North Pacific Fishery Management Council; (2) adopting an approach for the Council to identify Habitat Areas of Particular Concern (HAPCs) within EFH; and (3) minimizing to the extent practicable the adverse effects of Council-managed fishing on EFH. Table ES-1 provides an overview of the environmental consequences of each alternative in terms of the issues and criteria that were used in the evaluation.

Background

The Council amended its five FMPs (Bering Sea/Aleutian Islands [BSAI] Groundfish FMP, Gulf of Alaska [GOA] Groundfish FMP, BSAI Crab FMP, Scallop FMP, and Salmon FMP) in 1998 to address the new EFH requirements. The Secretary of Commerce, acting through NMFS, approved the Council's EFH FMP amendments in January 1999. In the spring of 1999, a coalition of seven environmental groups and two fishermen's associations filed suit in the United States District Court for the District of Columbia to challenge NMFS' approval of EFH FMP amendments prepared by the Gulf of Mexico, Caribbean, New England, North Pacific, and Pacific Fishery Management Councils (*American Oceans Campaign [AOC] et al. v. Daley et al.*, Civil Action No. 99-982-GK). The focus of the *AOC v. Daley* litigation was whether NMFS and the Council had adequately evaluated the effects of fishing on EFH and taken appropriate measures to mitigate adverse effects. In September 2000, the court upheld NMFS' approval of the EFH amendments under the Magnuson-Stevens Act, but ruled that the environmental assessments (EAs) prepared for the amendments violated the National Environmental Policy Act (NEPA). The court ordered NMFS to complete new and thorough NEPA analyses for each EFH amendment in question. This EIS is the curative NEPA analysis for the North Pacific Council's FMPs.

Most of the controversy surrounding the level of protection needed for EFH concerns the effects of fishing activities on sea floor habitats. Substantial differences of opinion exist as to the extent and significance of habitat alteration caused by bottom trawling and other fishing activities. This EIS reexamines the effects of fishing on EFH, presents a wider range of alternatives, and provides a more thorough analysis of potential impacts than the EA approved in 1999. Because the court did not limit its criticism of the 1999 EA solely to the section that considered the effects of fishing on EFH, this EIS also reexamines options for identifying EFH and HAPCs.

The Council used an extensive public process to develop the alternatives for this EIS, including numerous public meetings of the Council and its EFH Committee. In October 2003, the Council

reviewed a preliminary draft of the EIS and selected preliminary preferred alternatives for each of the three actions in the EIS. In January 2004, NMFS released the draft EIS for public comment. This final EIS includes revisions in response to public comments, incorporates some new analysis, and reflects the final preferred alternatives [TO BE ADDED AFTER FINAL COUNCIL ACTION].

The actions the Council and NMFS are taking in association with this EIS will result in new FMP amendments to modify the existing EFH and HAPC designations and to implement additional measures to reduce the effects of fishing on EFH. The new amendments will be Amendment 78 to the FMP for the Groundfish Fishery of the BSAI Area, Amendment 73 to the FMP for Groundfish of the GOA, Amendment 16 to the FMP for BSAI King and Tanner Crabs, Amendment 8 to the FMP for the Scallop Fishery off Alaska, and Amendment 7 to the FMP for the Salmon Fisheries in the Exclusive Economic Zone (EEZ) off the Coast of Alaska.

Relationship of the Three Actions Considered in this EIS

The three actions considered in this EIS are related, but are largely independent. Identification and description of EFH establish the boundaries within which the Council may identify HAPCs and within which the Council must minimize to the extent practicable the adverse effects of fishing. Thus, the Council only may adopt an approach for HAPC identification that would result in specific HAPCs falling within the boundaries of areas it identifies as EFH. Likewise, the Council is required to minimize adverse effects of fishing on habitats only within the boundaries of areas it identifies as EFH. The Council may act to minimize the adverse effects of fishing on other habitats, but is not required to do so.

All of the management areas in federal waters identified in the alternatives for minimizing the effects of fishing on EFH are located within the boundaries of the areas included in Alternatives 2 through 6 for describing and identifying EFH. Alternative 1 for describing and identifying EFH is the no action alternative, so EFH would not be described, and the requirement to minimize effects of fishing on EFH would not apply. Alternative 6 for describing and identifying EFH would result in no EFH designations in state waters (generally from the shore to 3 miles offshore), so the inshore management components of Alternatives 4, 5A, 5B, and 6 would not fall within the boundaries of EFH.

Action 1: Describe and Identify EFH

Alternatives

Alternative 1 (No EFH Descriptions): Under Alternative 1, EFH would not be described and identified for species managed by the Council. The existing EFH descriptions that were approved in 1999 would be rescinded.

Alternative 2 (Status Quo EFH Descriptions): Under Alternative 2, EFH descriptions would remain exactly as they were approved in the Council's EFH FMP Amendments in 1999. EFH would continue to be described as all habitats within a general distribution for a life stage of a species, for all information levels, and under all stock conditions. EFH would be a subset of the geographic range of each life stage, and it would encompass an area containing approximately 95 percent of the population.

Alternative 3 (Revised General Distribution – Preliminary Preferred Alternative): Under Alternative 3, EFH descriptions would be revised using the same basic methodology as Alternative 2, but applying the modified regulatory guidance from the EFH final rule (67 FR 2343, January 17, 2002; codified at 50 CFR 600 Subpart J) and incorporating recent and additional scientific information and improved mapping. In

some cases, the geographic extent of individual EFH descriptions would be narrower than under status quo Alternative 2.

Alternative 4 (Presumed Known Concentration): Under Alternative 4, EFH descriptions would be revised using a narrower interpretation of the best available scientific information for those species and life stages for which sufficient information exists to identify possible areas of higher habitat function. In many cases, the geographic extent of individual EFH descriptions would be reduced compared to Alternatives 2 and 3.

Alternative 5 (Ecoregion Strategy): Under Alternative 5, EFH would be described in eight ecoregions (freshwater, nearshore and estuarine, inner and middle shelf, outer shelf, upper slope, middle slope, lower slope, and basin) by characterizing the species that use each area and the habitat types present. The overall approach would be to identify distinct ecological areas, along with the species that rely upon those habitats.

Alternative 6 (EEZ Only): Under Alternative 6, EFH descriptions would be revised using the updated general distribution information from Alternative 3, but EFH would be limited to waters and substrate within the EEZ. No EFH would be described in freshwater areas, estuaries, or nearshore marine waters under the jurisdiction of the State of Alaska. In other words, Alternative 6 is the same as the EEZ portion of Alternative 3.

Environmental Consequences

Each of the alternatives for describing EFH uses different methodologies and results in different areas being identified as EFH for managed species. Describing and identifying EFH would not, in and of itself, have any direct environmental or economic impacts, but could lead to indirect impacts because EFH designation would trigger Magnuson-Stevens Act requirements to minimize adverse effects of fishing on EFH and to consider the effects of non-fishing actions on EFH. This EIS discusses the effects of each alternative on habitat, target species, the economic and socioeconomic aspects of federally managed fisheries, other fisheries and fishery resources, protected species, ecosystems and biodiversity, and non-fishing activities. Using a qualitative analysis, the EIS characterizes effects on each issue as negative, neutral, positive, or unknown (Table ES-2) and provides a narrative explanation of the anticipated effects. Differences in the environmental consequences of the alternatives are directly related to the areas and habitats encompassed by the resulting EFH descriptions. Different size designations could increase or decrease the efficacy of EFH conservation measures and the effects on other components of the environment.

In summary, Alternative 1 would eliminate EFH descriptions in Alaska, resulting in the loss of potential benefits of EFH protective measures for habitat, target species, and federally managed fisheries, as well as potential ancillary benefits for other fisheries and fishery resources, protected species, and ecosystems. Alternative 1 may have benefits for non-fishing activities because EFH consultations would no longer be required, eliminating an existing procedural step in the review of many proposed actions. Similarly, Alternative 1 could benefit the fishing industry in the short term because it would remove the need to consider new regulations to reduce the effects of fishing on habitat, although potential benefits (from conserving habitats that produce fish the industry harvests) would be lost. Alternative 2 would retain the status quo EFH descriptions and associated effects. The status quo effects would include the costs and benefits of having important fish habitats identified to encourage efforts to minimize adverse effects from fishing and non-fishing activities. Alternative 3 (preliminary preferred alternative) would refine the existing EFH description and identification, but would not lead to substantial changes in environmental effects because the areas identified would not be substantially reduced in size. To the extent that EFH

descriptions for some species would be reduced in geographic scope to reflect essential habitats more precisely, potential benefits for target species might increase slightly because conservation efforts could focus on those more discrete areas to avoid habitat loss or degradation. Alternative 4 would incorporate a narrower interpretation of the best available science, resulting in reduced EFH areas described for many species. As with Alternative 3, to the extent that EFH descriptions for some species would be reduced in geographic scope under Alternative 4, potential benefits for target species might increase because smaller EFH designations would enable managers to focus conservation efforts more effectively. Alternative 5 would use an ecoregion approach, resulting in larger EFH areas and perhaps a greater potential for indirect benefits for resources such as protected species. However, this approach may be less beneficial for target species and federally managed fisheries because it would be harder to distinguish EFH from all potential habitats. Alternative 6 would refine the existing EFH descriptions in the EEZ as in Alternative 3, but would eliminate the EFH descriptions in state waters, as in Alternative 1. Table ES-2 summarizes the effects of the EFH description alternatives for each issue evaluated in the EIS. However, the effects ratings alone do not provide a basis for distinguishing among some of the alternatives.

Table ES-3 compares the alternatives in terms of three summary factors: (1) the relative size of EFH areas, (2) consistency with the Magnuson-Stevens Act and the EFH regulations, and (3) overall efficacy and relative merits. Alternatives 1 and 6 are not consistent with the Magnuson-Stevens Act or the EFH regulations because they would not describe and identify those habitats necessary to managed species for spawning, breeding, feeding, and growth to maturity. Alternative 2 is not consistent with the Magnuson-Stevens Act or the EFH regulations because it does not reflect the best (most recent) scientific information available. Alternatives 3 through 5 are consistent with the Magnuson-Stevens Act and the EFH regulations. Those alternatives contain different approaches that influence their overall efficacy. Alternative 3 is very similar to Alternative 2, but applies more recent information, new analytical tools, and better mapping, resulting in geographically smaller EFH areas for some species. Any actions to conserve EFH could focus on these smaller areas. Alternative 4 is similar to Alternatives 2 and 3, but uses a narrower interpretation of the available scientific information, resulting in smaller EFH areas for many species. Alternative 4 may offer advantages for the conservation of EFH because it focuses EFH descriptions for most species on smaller areas than Alternative 3, allowing the Council, NMFS, other agencies, and the public to concentrate research and management efforts accordingly, but it may exclude some important habitats. Alternative 5 has effects that are similar to Alternatives 2, 3, and 4, but uses a very different approach that results in broader EFH descriptions, making it harder to distinguish EFH from all available habitats.

Action 2: Adopt an Approach for Identifying HAPCs

Alternatives

Alternative 1 (No HAPC Identification): Under Alternative 1, HAPCs would not be identified for species managed by the Council. The existing HAPC identifications that were approved in 1999 would be rescinded.

Alternative 2 (Status Quo HAPC Identification): Under Alternative 2, the existing HAPCs would remain in effect with no changes. Those HAPCs include living substrates in deep water, living substrates in shallow water, and freshwater areas used by anadromous salmon.

Alternative 3 (Site Based Concept – Preliminary Preferred Alternative): Under Alternative 3, the existing HAPC identifications would be rescinded and the Council would adopt an approach that would allow specific sites within EFH, selected to address a particular problem, to be identified as HAPCs in the future.

Alternative 4 (Type/Site Based Concept): Under Alternative 4, the existing HAPC identifications would be rescinded and the Council would adopt an approach that would allow specific sites selected within identified habitat types within EFH to be identified as HAPCs in the future.

Alternative 5 (Species Core Area): Under Alternative 5, the existing HAPC identifications would be rescinded and the Council would adopt an approach that would allow areas within EFH to be identified as HAPCs in the future, based on productivity of the habitat for individual species.

Environmental Consequences

The EFH regulations encourage Councils to identify HAPCs within EFH based on four considerations: ecological importance, sensitivity to environmental degradation, susceptibility to stress from development, and/or rarity. HAPC designation provides a means for the Council and NMFS to highlight areas within EFH as priorities for conservation and management. The HAPC alternatives in the EIS are a range of different methodological approaches, rather than different specific types or areas of habitat to be identified as HAPCs, so the effects of identifying HAPCs cannot be evaluated with specificity in this EIS. The Council decided to establish an approach to HAPC identification first (via this EIS), and then, subsequently, to identify specific HAPCs. Differences in the environmental consequences of the alternatives are, therefore, related to the type of approach that would be used to identify HAPCs and the anticipated effects of HAPCs subsequently identified under each approach.

Identifying HAPCs, like identifying EFH, would not, in and of itself, have any direct environmental or socioeconomic impacts, but could have indirect impacts. The choice of an approach for identifying HAPCs would provide a means for the Council and NMFS to highlight priority areas within EFH for conservation and management. This EIS discusses the anticipated effects of each alternative on habitat, target species, the economic and socioeconomic aspects of federally managed fisheries, other fisheries and fishery resources, protected species, ecosystems and biodiversity, and non-fishing activities. Using a qualitative analysis, the EIS characterizes effects on each issue as negative, neutral, positive, or unknown (Table ES-4) and provides a narrative explanation of the anticipated effects.

In summary, HAPC identification could have benefits for habitat, target species, and federally managed fisheries, as well as ancillary benefits for other fisheries and fishery resources, protected species, and ecosystems. Alternative 1 would rescind the existing HAPCs and provide for no new HAPCs, leading to a loss of potential benefits from identifying HAPCs and implementing any resulting protective measures. Alternative 1 may have benefits for non-fishing activities potentially affecting EFH, insofar as no particular areas within EFH would be highlighted for review during interagency EFH consultations for various development activities. Likewise, Alternative 1 may have short-term benefits for fisheries, insofar as no particular areas within EFH would be highlighted for potential fishing restrictions to protect habitat, although fisheries could lose potential long-term benefits of conservation of especially valuable habitats. Alternative 2 would retain the status quo HAPCs and associated effects. However, the broad and general nature of the existing HAPC designations may limit their efficacy. Alternatives 3 through 5 would rescind the existing HAPCs in favor of other approaches that would allow the Council to identify HAPCs in the future. The resulting indirect effects would depend upon the specific HAPCs implemented in future Council and NMFS actions. Alternatives 3 through 5 would have comparable potential effects on habitat, federally managed fisheries, other fisheries and fishery resources, protected species, ecosystems, and non-fishing activities. Alternative 3 (preliminary preferred alternative) would limit HAPCs to specific sites, rather than permitting HAPCs to be identified for general types of habitat wherever they may be found. Alternative 3 could, thus, be more effective than Alternative 2 by virtue of being more focused. Alternative 4 may offer more potential benefits for target species than the other alternatives because the stepwise process of selecting habitat types and then specific sites could yield a

more rational and structured effort to ensure that HAPCs would focus on the habitats within EFH that are most valuable and/or vulnerable. Alternative 5 would limit the identification of HAPCs to specific sites supporting habitat functions for individual target species. It therefore has the potential to benefit target species more directly than the other alternatives, although scarce scientific information about habitat requirements of individual species could limit the effectiveness of this approach. Table ES-4 summarizes the effects of the HAPC identification alternatives for each topic evaluated in the EIS. Table ES-5 compares the alternatives in terms of three summary factors: (1) the relative size of HAPCs identified, (2) consistency with the EFH regulations, and (3) overall efficacy and relative merits of the approach.

Action 3: Minimize Adverse Effects of Fishing on EFH

Alternatives

Alternative 1 (Status Quo / No Action – Preliminary Preferred Alternative): Under Alternative 1, no additional measures would be taken at this time to minimize the effects of fishing on EFH. No new actions were taken to minimize the effects of fishing as part of the original EFH FMP amendments in 1998, although the Council has adopted a number of measures that protect habitat from potential negative effects of fishing, both before and since that date, and those measures would remain in effect. For reference, existing year-round trawl closures are depicted in Figure ES-1.

Alternative 2 (Gulf Slope Bottom Trawl Closures): Alternative 2 would prohibit the use of bottom trawls for rockfish in designated areas of the GOA upper to intermediate slope (200 to 1,000 m), but would allow vessels endorsed for trawl gear to use fixed gear or pelagic trawl gear to fish for rockfish in these areas. See Figure ES-2.

Alternative 3 (Upper Slope Bottom Trawl Prohibition for GOA Slope Rockfish): Alternative 3 would prohibit the use of bottom trawls for targeting GOA slope rockfish species on the entire upper to intermediate slope area (200 to 1,000 m), but would allow vessels endorsed for trawl gear to use fixed gear or pelagic trawl gear to fish for slope rockfish. See Figure ES-3.

Alternative 4 (Bottom Trawl Closures in All Management Areas): Alternative 4 would prohibit the use of bottom trawls in designated areas of the eastern Bering Sea (EBS), Aleutian Islands (AI), and GOA, as well as requiring trawl gear modifications in the BS area.

Bering Sea: Prohibit the use of bottom trawls for all groundfish fisheries except within a designated “open” area, based on historic bottom trawl effort. Within the open area, there would be rotating closures to bottom trawl gear in five areas to the west, north, and northwest of the Pribilof Islands (Figure ES-4). Each of the five areas would be divided into four blocks, and one block in each area would be closed for 10 years. After 10 years, the closed block would reopen, and a different block would close for 10 years, and so forth. In addition, bottom trawls used in the remaining open areas would be required to have sweeps and footropes equipped with disks/bobbins to reduce contact area and proximity to the seafloor.

Aleutian Islands: Prohibit the use of bottom trawls for all groundfish fisheries in designated areas of the AI: Stalemate Bank, Bowers Ridge, Seguam Foraging Area, and Semisopchnoi Island (Figure ES-5).

Gulf of Alaska: Prohibit the use of bottom trawls for rockfish fisheries in designated sites of the upper to intermediate slope (200 to 1,000 m; see Figure ES-6). Vessels endorsed for trawl gear would be allowed to fish for rockfish with fixed gear or pelagic trawl gear in these areas.

Alternative 5A (Expanded Bottom Trawl Closures in All Management Areas): Alternative 5A would prohibit the use of bottom trawls in larger designated areas of the EBS, AI, and GOA and would require trawl gear modifications in the EBS area.

Bering Sea: Prohibit the use of bottom trawls for all groundfish fisheries except within a designated “open” area, based on historic bottom trawl effort. Within the open area, there would be rotating closures to bottom trawls in five areas to the west, north, and northwest of the Pribilof Islands (Figure ES-7). Each of the five areas would be divided into three blocks, and one block in each area would be closed for 5 years. After 5 years, the closed block would reopen, and a different block would close for 5 years, and so forth. In addition, bottom trawls used in the remaining open areas would be required to have sweeps and footropes equipped with disks/bobbins to reduce contact area and proximity to the seafloor.

Aleutian Islands: Prohibit the use of bottom trawls for all groundfish fisheries in designated areas of the AI: Stalemate Bank, Bowers Ridge, Seguam Foraging Area, Yunaska Island, and Semisopchnoi Island. These closure areas would extend to the northern and southern boundaries of the AI management unit (Figure ES-8).

Gulf of Alaska: Prohibit the use of bottom trawls for all groundfish fisheries in designated sites of the upper to intermediate slope (200 to 1,000 m). Additionally, prohibit the use of bottom trawls for targeting GOA slope rockfish on the GOA upper to intermediate slope (200 to 1,000 m), but allow vessels endorsed for trawl gear to use fixed gear or pelagic trawl gear to fish for rockfish in these areas. See Figure ES-9.

Alternative 5B (Expanded Bottom Trawl Closures in All Management Areas with Sponge and Coral Area Closures in the AI): Alternative 5B would prohibit the use of bottom trawls in designated areas of the EBS, AI, and GOA and would require trawl gear modifications in the EBS area.

Bering Sea: Prohibit the use of bottom trawls for all groundfish fisheries except within a designated “open” area, based on historic bottom trawl effort. Within the open area, there would be rotating closures to bottom trawls in five areas to the west, north, and northwest of the Pribilof Islands (Figure ES-7). Each of the five areas would be divided into three blocks, and one block in each area would be closed for 5 years. After 5 years, the closed block would reopen, and a different block would close for 5 years, and so forth. In addition, bottom trawls used in the remaining open areas would be required to have sweeps and footropes equipped with disks/bobbins to reduce contact area and proximity to the seafloor.

Aleutian Islands: Allow bottom trawling to continue in AI areas that have supported the highest catches in the past, and prohibit bottom trawling in all other portions of the AI management region to prevent future impacts to undisturbed habitats in those areas, in accordance with one of the three options described below. Pelagic trawls could be used outside of the designated open areas, but only in the off-bottom mode. All of the options would include a requirement for 100 percent observer coverage and a vessel monitoring system for vessels fishing for groundfish. All of the options include the intent that a comprehensive plan for research and monitoring would be developed in the AI.

Option 1

1. Open areas would be designated based on areas of higher effort distribution from 1990 through 2001. Open and closed areas designated under this alternative are shown in Figure ES-10.
2. TAC reductions would be made for Pacific cod, Atka mackerel, and rockfish in proportion to the catch attributable to the closed areas.
3. Coral/bryozoan and sponge bycatch limits would be imposed to close specific fisheries and areas if a bycatch limit were reached.

Option 2

1. Open areas would be designated based on the methodology used in Option 1 above, with eight specific modifications based on data analysis and input from fishermen and Aleutian Islands residents, as recommended by Oceana. The specific modifications involve the following areas: Buldir Island, Murray Canyon, South Amchitka, Petrel Bank, Gustly Bay, Kanaga Island, Adak South, and Atka Pass. Open and closed areas designated under this alternative are shown in Figure ES-11.
2. TAC reductions would be made for Atka mackerel and rockfish in proportion to the catch attributable to the closed areas.
3. Coral/bryozoan and sponge bycatch limits would be imposed to close specific fisheries and areas if a bycatch limit were reached.
4. All bottom contact fishing would be prohibited in six coral garden sites located off Semisopchnoi Island, Bobrof Island, Cape Moffet, Great Sitkin Island, Ulak Island, and Adak Canyon, as shown in Figure ES-11.

Option 3

Open areas would be designated based on the methodology used in Option 1 above, with specific modifications based on data analysis and input from trawl fishermen, as recommended by the Groundfish Forum. Open and closed areas designated under this alternative are shown in Figure ES-12.

Gulf of Alaska: Prohibit the use of bottom trawls for all groundfish fisheries in designated sites of the upper to intermediate slope (200 to 1,000 m). Additionally, prohibit the use of bottom trawls for targeting GOA slope rockfish on the GOA upper to intermediate slope (200 to 1,000 m), but allow vessels endorsed for trawl gear to use fixed gear or pelagic trawl gear to fish for rockfish in these areas. See Figure ES-9.

Alternative 6 (Closures to All Bottom-tending Gear in 20 percent of Fishable Waters): Alternative 6 would prohibit the use of all bottom-tending gear (dredges, bottom trawls, and pelagic trawls that contact the bottom, longlines, dinglebars, and pots) for commercial fisheries within approximately 20 percent of the fishable waters (i.e., 20 percent of the waters shallower than 1,000 m) in the GOA, AI, and BS. See Figures ES-13, ES-14, and ES-15.

Environmental Consequences

The alternatives for minimizing the adverse effects of fishing on EFH are a range of specific management options. The alternatives all start with the status quo fishery management regime that includes a variety of measures that help to reduce the potential effects of fishing on habitat (e.g., area closures, gear restrictions, and limitations on fishing effort). Alternatives 2 through 6 would add progressively more restrictive management measures. The short-term economic and socioeconomic effects of the alternatives can be clearly described, at least in qualitative terms: fishery management measures impose costs that can be estimated in terms of revenue at risk or other empirical measures. The ecological effects of the alternatives are more difficult to assess because current scientific information does not provide a clear picture to link habitat conservation measures with specific quantifiable benefits to the growth, reproduction, and survival of managed fish species. Limited information is available to describe the effects on productivity of managed species from habitat alteration caused by fishing. Likewise, there are no proven techniques for quantifying the benefits to target species that may accrue as a result of adopting any of the alternatives to minimize the effects of fishing on EFH (although many studies worldwide have documented the results of implementing various closed areas). In summary, although short-term costs to the industry are relatively easy to identify, the long-term economic and socioeconomic benefits that may accrue from habitat conservation measures are harder to predict with much precision. Nevertheless, the EIS uses the best information available to summarize the effects of fishing on EFH and the consequences of the alternatives.

The EIS evaluates the effects of fishing on habitat by using a quantitative mathematical model developed for this analysis by the NMFS Alaska Fisheries Science Center. The model estimates the proportional reductions in habitat features relative to an unfished state, assuming that fishing will continue at the current intensity and distribution until the alterations to habitat and the recovery of disturbed habitat reach equilibrium. The model provides a tool for bringing together all available information on the effects of fishing on habitat, such as fishing gear types and sizes used in Alaska fisheries, fishing intensity information from observer data, and gear impacts and recovery rates for different habitat types. Due to the uncertainty regarding some input parameters (e.g., recovery rates of different habitat types), the results of the model are displayed as point estimates, as well as a range of potential effects.

After considering the available tools and methodologies for assessing effects of fishing on habitat, NMFS, the Council, and the Council's Scientific and Statistical Committee concluded that the model incorporates the best available scientific information and provides a good approach to understanding the impacts of fishing activities on habitat. The model was also reviewed and supported by an independent panel of outside experts. Nevertheless, the model and its application in this EIS have many limitations. Both the developing state of this new model and the limited quality of available data to estimate input parameters prevent drawing a complete picture of the effects of fishing on EFH. The model incorporates a number of assumptions about habitat effect rates, habitat recovery rates, habitat distribution, and habitat use by managed species. The quantitative outputs of the analysis may convey an impression of rigor and precision, but the results actually are subject to considerable uncertainty.

The analysis indicates that there are long-term effects of fishing, particularly bottom trawling, on benthic habitat features off Alaska. Considerable scientific uncertainty remains regarding the consequences of such habitat changes for the sustained productivity of managed species. If the current pattern of fishing intensity and distribution continues into the future, living habitat features that provide managed species with structure for refuge would be reduced by 0 to 11 percent in each habitat area, with the largest reduction occurring on soft substrates of the Aleutian slope area. Hard corals would be reduced by 0 to 16 percent, with the largest reduction occurring on hard substrates of the Aleutian shallow water area. There would be almost no reduction (0 to 3 percent) in infaunal and epifaunal prey for managed species.

Viewed another way, habitat loss due to fishing off Alaska is relatively small overall, with most of the available habitats unaffected by fishing (infaunal prey are 97 to 100 percent unaffected, epifaunal prey are 97 to 100 percent unaffected, living structure is 89 to 100 percent unaffected, and hard corals are 84 to 98 percent unaffected).

Based on the best available scientific information, the EIS analysis concludes that despite persistent disturbance to certain habitats, the effects on EFH are minimal because the analysis finds no indication that continued fishing activities at the current rate and intensity would alter the capacity of EFH to support healthy populations of managed species over the long term. The EIS concludes that no Council-managed fishing activities have more than minimal and temporary adverse effects on EFH for any FMP species, which is the regulatory standard requiring action to minimize adverse effects under the Magnuson-Stevens Act (50 CFR 600.815(a)(2)(ii)). Additionally, the analysis indicates that all fishing activities combined have minimal, but not necessarily temporary, effects on EFH. These findings suggest that no additional actions are required pursuant to the EFH regulations. However, as noted above, the analysis has many limitations, and the effects of fishing on EFH for some managed species are unknown. Even though the available information does not identify adverse effects of fishing that are more than minimal and temporary in nature, that finding does not necessarily mean that no such effects exist. Thus, appropriate precautionary measures may be warranted.

The EIS discusses the effects of each alternative on habitat, target species, the economic and socioeconomic aspects of federally managed fisheries, other fisheries and fishery resources, protected species, and ecosystems and biodiversity. Using a qualitative analysis, the EIS characterizes effects on each issue as negative, neutral, positive, or unknown (Table ES-6) and provides a narrative explanation of the anticipated effects (Table ES-7). Alternative 1 (preliminary preferred alternative) would add no new fishery management measures and would have no effects relative to the status quo. Alternative 2 would have no substantial effects on habitat, target species, communities, protected species, or ecosystems. It would have relatively limited costs (economic costs of the alternatives are discussed in more detail below) and would provide slight positive effects for GOA deep-water Tanner crabs and golden king crabs. Alternative 3 would have positive effects on epibenthic structures and coral on the GOA slope, impose higher economic costs, and cause marginal reductions in safety for the fishing fleet. Its effects are otherwise similar to those of Alternative 2. Alternative 4 would have positive effects on coral in the AI area, benefits for epibenthic structures in the EBS due to trawl gear modifications, and modest benefits for GOA slope rockfish habitats. Costs to the fishing industry would be more than twice as high as in Alternative 3, and there would be additional adverse consequences for safety. Alternative 5A would benefit coral substantially in the AI, have positive effects on epibenthic structures and coral in the GOA, and benefit epibenthic structures in the EBS due to trawl gear modifications. However, Alternative 5A would double industry costs again relative to Alternative 4, and would have additional consequences for safety and for western GOA communities. Alternative 5B would have the same effects as Alternative 5A in the GOA and the EBS. In the AI it would provide considerably more protection of coral and sponge habitats, although the specific habitats that would be closed to fishing vary amongst the three management options. Economic costs to the industry and monitoring and enforcement costs would be higher for Options 1 and 2, and costs for Option 3 would be comparable to Alternative 5A. Alternative 5B might have slight adverse effects for Steller sea lion foraging success in the AI. Alternative 6 would have moderately positive effects on epibenthic structures in all areas and would benefit coral habitats in the GOA and AI. Costs to the fishing industry and communities would be dramatically higher and would extend to state-managed fisheries if corresponding measures were adopted in state waters. Additionally, Alternative 6 might cause adverse effects on Steller sea lions in portions of the AI due to the displacement of fishing effort from other areas, possibly resulting in more sea lion interactions with vessels or gear, or the concentrated removal of sea lion prey.

This EIS also compares each of the alternatives for minimizing the effects of fishing on EFH to a pre-status quo scenario to provide additional context. Over the years, the Council has implemented numerous measures to protect habitat. The pre-status quo scenario reflects conditions (environment, stock size, etc.) absent all area closures, effort reduction, gear measures, and rationalization programs. By comparing each of the alternatives to the pre-status quo scenario, the comparative summary illustrates that all seven of the alternatives start with a common suite of management measures that already provide a substantial degree of habitat protection. The status quo alternative (Alternative 1) includes only those existing management measures, whereas all of the other alternatives include the existing management measures plus additional measures.

Practicability Analysis

To assist in determining whether additional management measures are practicable, the EIS considers the long- and short-term costs and benefits of the potential management measures to EFH, associated fisheries, and the nation. A summary of the relative habitat conservation benefits and costs associated with each alternative appears in Table ES-8. Given the apparent limited adverse effects on EFH, and the costs and benefits of the alternatives, most alternatives would be practicable to implement, with the exception of Alternative 6, which would have substantially greater adverse effects on fishermen, communities, and associated industries than attributable benefits.

Relative to Alternative 1 (status quo), Alternatives 2 and 3 would provide very little habitat conservation benefit because the closure areas would reduce the effects of fishing only slightly, and only on the GOA slope area. Alternative 4 would provide some degree of additional habitat conservation for all three regions (EBS, AI, and GOA) through the use of specific bottom-trawl closures, as well as bottom-trawl gear modifications for vessels fishing in the EBS. Alternative 5A would increase the amount of protection further by expanding the size of the bottom trawl closures in the EBS and AI and closing areas of the GOA slope to all bottom trawling. Alternative 5B would further minimize the effects of fishing by closing additional areas in the AI (including areas with high incidental catch rates of corals and sponges), and under Options 1 and 2, reducing catch and setting bycatch limits for bryozoans/corals and sponges. Alternative 6 would reduce the effects of fishing because approximately 20 percent of the available habitats would be left virtually undisturbed by fishing and would be allowed to recover to an unfished state. However, a large amount of fishing effort could be redistributed from areas of effort concentration to previously unfished or lightly fished areas, negating some potential benefits of this alternative.

There are also economic and socioeconomic costs associated with the alternatives to minimize the effects of fishing on habitat. Alternative 2 would have relatively minimal costs (gross revenue at risk \$0.9 million). Alternatives 3, 4, and 5A would involve moderate costs to the fishing fleets (gross revenue at risk \$2.7 million to \$7.9 million). Alternative 5B would involve higher costs to the fleet (gross revenue at risk of \$7.5 million to \$28.1 million depending on which AI management option is selected), as well as negative effects on shoreside support industries and western GOA communities. Alternative 6 would have very high relative costs to the fleet (gross revenue at risk of \$237 million) and negative effects on shoreside support industries and coastal fishing communities.

From a practical standpoint, the alternatives differ in the habitat areas closed and the resulting amount of habitat conservation, as well as the economic and socioeconomic effects. Some areas considered for bottom trawl closures would provide habitat conservation benefits at almost no additional cost. For example, the closure area on the lower slope and basin would restrict future fisheries but would not have direct economic costs to the current fishing industry. Likewise, limiting fishing to areas where it has occurred historically, and closing areas that are relatively undisturbed, as in the EBS and AI portions of

Alternative 5B, would protect habitats from potential future disturbance without incurring significant short-term costs.

Table ES-2. Comparative Summary of Effects of EFH Description Alternatives

Category of Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6
Habitat						
Prey species	E-	Ø	E+	E+	E+	E+/E-
Benthic biodiversity	E-	Ø	E+	E+	E+	E+/E-
Habitat complexity	E-	Ø	E+	E+	E+	E+/E-
Target Species						
Fishing mortality	Ø	Ø	Ø	Ø	Ø	Ø
Spatial/temporal concentration of catch	E+	Ø	E-	E-	E-	E-
Productivity	E-	Ø	E+	E+	E+	E+/E-
Prey availability	E-	Ø	E+	E+	E+	E+/E-
Growth to maturity	E-	Ø	E+	E+	E+	E+/E-
Economic and Socioeconomic Aspects of Federally Managed Fisheries						
Passive use	E-	Ø	E+	E+	E+	E+/E-
Gross revenue	U	Ø	U	U	U	U
Operating costs	E+/E-	Ø	E-	E-	E-	E-
Costs to consumers	U	Ø	U	U	U	U
Safety	Ø	Ø	Ø	Ø	Ø	Ø
Socioeconomic effects on fishing communities	E+/E-	Ø	E-	E-	E-	E-
Effects on regulatory and enforcement programs	E+	Ø	E-	E-	E-	E-
Other Fisheries and Fishery Resources						
Halibut, state-managed groundfish, state-managed crab, herring, salmon, forage fish, and other species	E-	Ø	E+	E+	E+	E+
Protected Resources						
ESA-listed salmon, marine mammals, and seabirds; other marine mammals; and other seabirds	E-	Ø	E+	E+	E+	E+
Ecosystems and Biodiversity						
Predator-prey relationships	U	Ø	U	U	U	U
Energy flow and balance	Ø	Ø	Ø	Ø	Ø	Ø
Biodiversity	Ø	Ø	Ø	Ø	Ø	Ø
Non-fishing Activities						
Costs to federal and state agencies	E+	Ø	E-	E-	E-	E+/E-
Costs to non-fishing industries or other proponents of affected activities	E+	Ø	E-	E-	E-	E+/E-

E- = Effect negative, Ø = No effect, E+ = Effect positive, U = Unknown

Table ES-3. Comparison of EFH Description Alternatives

Summary Factor	Alternative 1: No Action (no EFH description)	Alternative 2: Status Quo/ General Distribution	Alternative 3: Revised General Distribution	Alternative 4: Presumed Known Concentration	Alternative 5: Ecoregion Strategy	Alternative 6: EEZ Only
Relative size of EFH areas	No EFH descriptions at all.	Existing EFH relatively broad.	Somewhat smaller EFH for many species, representing the areas that comprise approximately 95% of the population.	Smaller EFH for most species, representing the areas that comprise approximately 75% of the population.	Broadest EFH of all the alternatives.	Smallest EFH description of all the alternatives.
Consistency with the Magnuson-Stevens Act and the EFH regulations (50 CFR 600.815(a)(1))	Not consistent; fails to describe and identify EFH.	Not consistent; relatively broad and risk averse approach, but does not use the most recent scientific information available.	Consistent; relatively broad and risk averse approach; includes more recent information than Alternative 2.	Consistent; narrower approach that more rigorously distinguishes habitat areas with the highest relative abundance of managed species.	Consistent; describes EFH based on assemblages of species that use similar habitat complexes.	Not consistent; fails to describe EFH in nearshore waters and rivers that are necessary for critical life stages of managed species.
Overall efficacy and relative merits	Not responsive to statutory and regulatory requirements.	Retains existing EFH; no change from the status quo.	Very similar to Alternative 2; applies more recent information and better mapping, resulting in geographically smaller EFH descriptions for some species; any actions to conserve EFH could focus on these smaller areas.	Similar to Alternatives 2 and 3 but uses a narrower interpretation of the available scientific information, resulting in smaller EFH for many species; any actions to conserve EFH could focus on these smaller areas.	Similar to the effects of Alternatives 2, 3, and 4, but uses a very different approach and results in broader EFH, making it harder to distinguish EFH from all potential habitats.	Identical to Alternative 3 for offshore waters; fails to describe EFH in nearshore waters and rivers, so not responsive to statutory and regulatory requirements.

Table ES-4. Comparative Summary of Effects for HAPC Identification Alternatives

Category of Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Habitat	E-	Ø	E+	E+	E+
Prey species					
Benthic biodiversity					
Habitat complexity					
Target Species	E-	Ø	E+	E+	E+
Fishing mortality					
Spatial/temporal concentration of catch					
Productivity					
Prey availability					
Growth to maturity					
Economic and Socioeconomic Aspects of Federally Managed Fisheries	E+/E-	Ø	E+/E-	E+/E-	E+/E-
Passive use					
Gross revenue					
Operating costs					
Costs to consumers					
Safety					
Socioeconomic effects on fishing communities					
Effects on regulatory and enforcement programs					
Other Fisheries and Fishery Resources	E-	Ø	E+	E+	E+
Halibut, state-managed groundfish, state-managed crab, herring, salmon, forage fish, and other species					
Protected Resources	E-	Ø	E+	E+	E+
ESA-listed salmon, marine mammals, and seabirds; other marine mammals; and other seabirds					
Ecosystems and Biodiversity	E-	Ø	E+	E+	E+
Predator-prey relationships					
Energy flow and balance					
Biodiversity					
Non-Fishing Activities					
Costs to federal and state agencies	E+	Ø	E-	E-	E-
Costs to non-fishing industries or other proponents of affected activities					

E- = Effect negative, Ø = No effect, E+ = Effect positive, U = Unknown

Table ES-5. Comparison of Alternative Approaches for Identifying HAPCs

Summary Factor	Alternative 1: No Action (no HAPC identified)	Alternative 2: Status Quo HAPC Designations	Alternative 3: Site-based Concept	Alternative 4: Type/Site-based Concept	Alternative 5: Species Core Area
Relative size of HAPC	No HAPC identification at all.	Quite broad: living substrates in shallow waters, living substrates in deep waters, and freshwater areas that support anadromous salmon.	Size depends upon future Council action.	Size depends upon future Council action.	Size depends upon future Council action.
Consistency with the EFH regulations (50 CFR 600.815(a)(8))	Consistent; does not lead to HAPC identification, but HAPCs are not a required component of FMPs.	Consistent; regulations allow identification of specific types of habitat within EFH as HAPCs.	Consistent; regulations allow identification of specific areas of habitat within EFH as HAPCs.	Consistent; regulations allow identification of specific areas of habitat within EFH as HAPCs.	Consistent; regulations allow identification of specific areas of habitat within EFH as HAPCs.
Overall efficacy and relative merits	Fails to take advantage of a tool available to the Council to highlight particularly valuable and/or vulnerable habitats within EFH.	Retains existing approach to HAPC identification; however, the broad and general nature of the existing HAPCs may limit their efficacy.	Limits approach to HAPC identification to specific sites, rather than permitting HAPC designations for general types of habitat wherever they may be found; could be more effective than Alternative 2 by virtue of being more focused.	May offer more potential benefits for target species than the other alternatives because the stepwise process of selecting habitat types and then specific sites could yield a more rational and structured effort to ensure that HAPCs focus on the habitats within EFH that are most valuable and/or vulnerable.	Limits HAPC identification to specific sites supporting habitat functions for individual target species; has the potential to benefit target species more directly than the other alternatives, although the paucity of scientific information about habitat requirements of individual species could limit the effectiveness of this approach.

Table ES-6. Comparative Summary of Alternatives to Minimize the Adverse Effects of Fishing on EFH

Category of Effect	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5A	Alt. 5B	Alt. 6
Habitat							
Prey species	Ø	Ø	Ø	Ø	Ø	Ø	Ø
Benthic biodiversity	Ø	Ø	E+	E+	E+	E+	E+
Habitat complexity	Ø	Ø	E+	Ø	E+	E+	E+
Target Species							
Groundfish	Ø/U	Ø/U	Ø/U	Ø/U	Ø/U	Ø/U	Ø/U
Salmon	Ø	Ø	Ø	Ø	Ø	Ø	Ø
Crabs	Ø	Ø	Ø	Ø/E+	Ø/E+	Ø/E+	Ø/E-/E+
Scallops	Ø/U	Ø	Ø	Ø	Ø	Ø	Ø/E-
Economic and Socioeconomic Aspects of Federally Managed Fisheries							
Passive use	Ø	E+	E+	E+	E+	E+	E+
Gross revenue	Ø	Ø	E-	E-	E-	E-	E-
Operating costs	Ø	E-	E-	E-	E-	E-	E-
Cost to consumers	Ø	E-	E-	E-	E-	E-	E-
Safety	Ø	E-	E-	E-	Ø	E-	E-
Related fisheries	Ø	Ø	E-	Ø	E-	E-	E-
Shoreside industries	Ø	Ø	Ø	Ø	Ø	Ø/E-	E-
Communities	Ø	Ø	Ø	Ø	Ø/E-	Ø/E-	E-
Management and enforcement	Ø	E-	E-	E-	E-	E-	E-
Other Fisheries							
State-managed groundfish	Ø	Ø	Ø	Ø	Ø	Ø	E-
State-managed crab	Ø	Ø	E+	Ø	Ø/E+	Ø/E+	E-
Herring	Ø	Ø	Ø	Ø	Ø	Ø	Ø
Halibut	Ø	Ø	Ø	Ø	Ø	Ø	E-
Protected Species							
ESA-listed mammals	Ø	Ø	Ø	Ø	Ø	E-	Ø/E-/U
Other mammals	Ø	Ø	Ø	Ø	Ø	Ø	Ø
ESA-listed salmon	Ø	Ø	Ø	Ø	Ø	Ø	Ø
ESA-listed seabirds	Ø	Ø	Ø	Ø	Ø	Ø	Ø
Other seabirds	Ø	Ø	Ø	Ø	Ø	Ø	Ø
Ecosystems							
Predator-prey relationships	Ø	Ø	Ø	Ø	Ø	Ø	Ø
Energy flow and balance	Ø	Ø	Ø	Ø	Ø	Ø	Ø
Diversity	Ø	Ø	E+	E+	E+	E+	E+

E- = Effect negative, Ø = No effect, E+ = Effect positive, U = Unknown

Table ES-7. Summary Comparison of Environmental Effects of the Alternatives to Minimize the Adverse Effects of Fishing on EFH

Category of Effect	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5A	Alternative 5B	Alternative 6
Habitat	No substantial adverse effects would be anticipated. Fishing activities would not affect EFH in a manner that is more than minimal and temporary in nature.	Small trawl closures to rockfish on GOA slope would have no substantial effects on habitat.	Closure of GOA slope to rockfish trawling would have positive effects on epibenthic structures and coral on GOA slope.	Bottom trawl closures would have positive effects on protection of coral in the AI area. Gear modifications may have a positive effect on epibenthic structures in BS. Small trawl closures on GOA slope to rockfish fishing would have no substantial effects on habitat.	Bottom trawl closures would have positive effects on epibenthic structure and coral in GOA; substantially improved protection of coral in the AI would occur. Gear modifications may have a positive effect on epibenthic structures in BS.	Same effects as Alternative 5A in GOA and BS would occur. The substantially larger closures in AI would provide more protection of coral and epibenthic structures. The closures would be largest under Option 2, slightly smaller under Option 1, and smaller yet under Option 3.	Closures to bottom tending gear would have moderately positive effects on epibenthic structures in all areas and positive effects on the protection of coral on the AI and GOA slope areas.
Target Species	No substantial effects would be anticipated.	No substantial effects would be anticipated.	No substantial effects would be anticipated.	No substantial effects would be anticipated. Bering Sea closures may benefit growth of snow crabs.	Same effects as Alternative 4 would occur.	Same effects as Alternative 4 would occur.	For most species, no substantial effects would be anticipated. Negative effects would be anticipated for scallops and some crabs.

Table ES-7. Summary Comparison of Environmental Effects of the Alternatives to Minimize the Adverse Effects of Fishing on EFH (continued)

Category of Effect	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5A	Alternative 5B	Alternative 6
Economic and Socioeconomic Aspects of Federally Managed Fisheries	No substantial effects would be anticipated.	Gross revenue at risk would be <\$1 million. Slight increases in costs (operating, consumer, management, enforcement) expected. No effects on communities would be expected.	Gross revenue at risk would be \$2.6 million. More increases in costs and reduction in safety would be expected. No effects on communities would be expected.	Gross revenue at risk would be \$3.5 million. Even more increases in costs and reduction in safety would be expected. No effects on communities would be expected.	Gross revenue at risk would be \$7.9 million. Even more increases in costs and reduction in safety would be expected. Negative effects on western GOA communities would be expected.	Gross revenue at risk would be \$28.1 million under Option 1, \$13.0 million under Option 2, and \$7.5 million under Option 3, including TAC reduction values of \$15.2 million under Option 1 and \$3.8 million under Option 2. Even more increases in costs and reduction in safety would be expected. In particular, monitoring and enforcement costs would increase greatly. Negative effects on Western GOA communities would be expected.	Gross revenue at risk would be \$236 million. Increases in costs and a reduction in safety of smaller fixed-gear vessels would be expected. Negative effects on Alaska coastal communities dependent on fishing would be expected.

Table ES-7. Summary Comparison of Environmental Effects of the Alternatives to Minimize the Adverse Effects of Fishing on EFH (continued)

Category of Effect	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5A	Alternative 5B	Alternative 6
Other Fisheries	No substantial effects would be anticipated.	Some slight positive effects to GOA deepwater Tanner crabs and golden king crabs would be expected.	Would be the same as Alternative 2, but slightly more benefits would be expected.	Would be the same as Alternative 2.	Would be the same as Alternative 3.	Would be the same as Alternative 3.	Would reduce revenue of halibut and state groundfish and crab fisheries.
Protected Species	No substantial effects would be anticipated.	No substantial effects would be anticipated.	No substantial effects would be anticipated.	No substantial effects would be anticipated.	No substantial effects would be anticipated.	Steller sea lion foraging success in AI may be impacted by spatial and temporal concentrations of fishing effort in nearshore areas.	Steller sea lion foraging success in AI may be impacted by spatial and temporal concentrations of fishing effort in nearshore areas.
Ecosystems	No substantial effects would be anticipated.	No substantial effects would be anticipated.	Trawl closure areas may have a positive effect on diversity in GOA.	Positive effects on diversity are expected in GOA, BS, and AI areas.	Alternative 5A would have slightly more benefits to diversity than Alternative 4 due to larger closure areas.	Would be similar to Alternative 5A, but slightly more benefits would occur in the AI area.	Closures to bottom tending gear would have positive effects in GOA, BS, and AI areas.

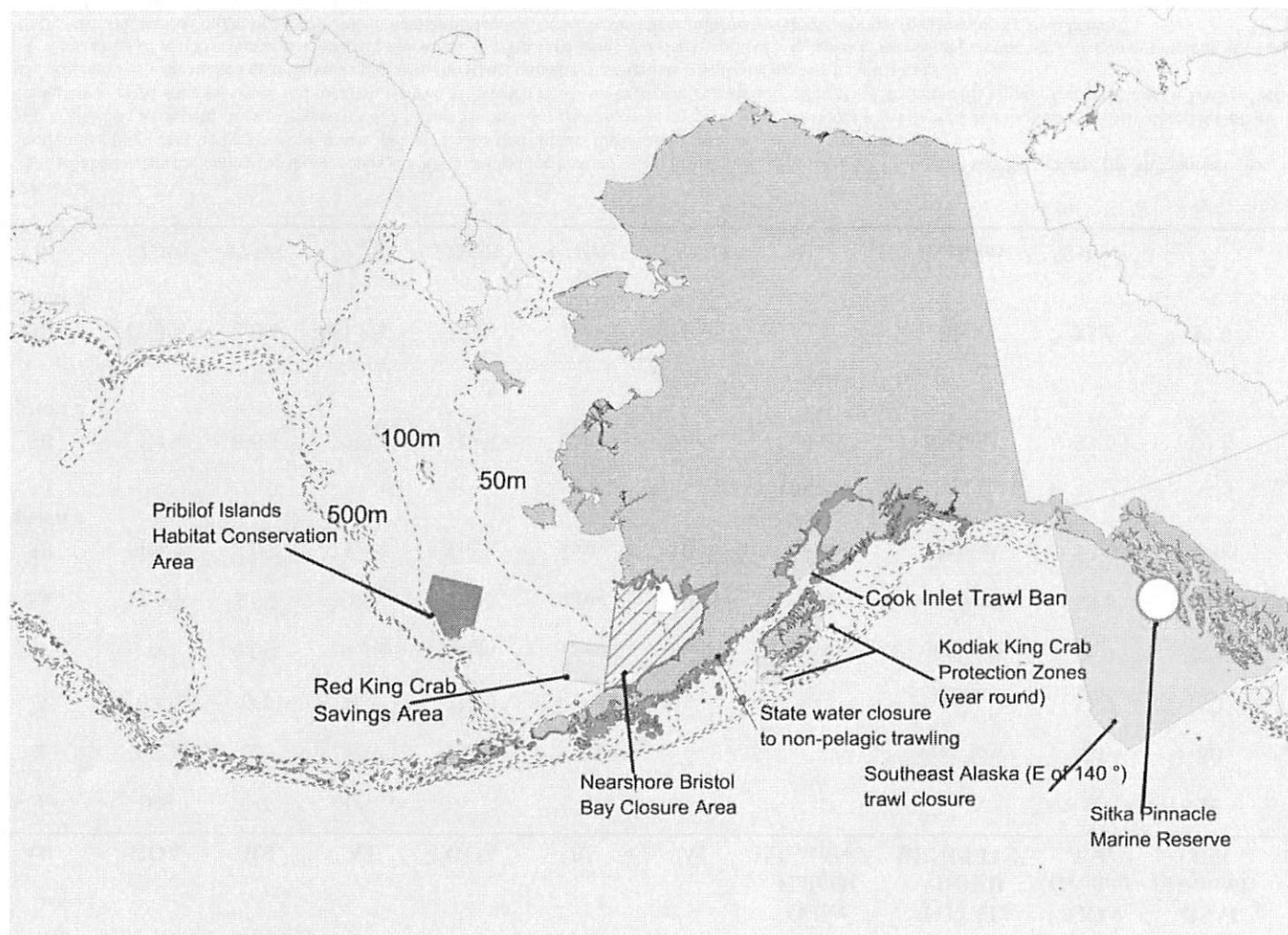
Table ES-8. Synopsis of Habitat Benefits and Economic Costs of Alternatives to Minimize the Adverse Effects of Fishing on EFH

Alt.	Percentage of Fishable Waters Closed ¹ (in addition to existing closures)			Relative Sensitivity of Protected Habitats (Based on LEI Scores)			Other Habitat Measures ²	TOTAL ADDED BENEFITS ³	Annual Revenue At Risk (in millions)					TOTAL COSTS ⁴
	GOA	BS	AI	GOA	BS	AI			GOA Ground-fish	BSAI Ground-fish	Crab	Scallop	Halibut	
1	0%	0%	0%	-	-	-	-	-	\$0	\$0	\$0	\$0	\$0	\$0
2	3.6%	0%	0%	High	-	-	-	very low	\$1	\$0	\$0	\$0	\$0	\$1
3	10.4%	0%	0%	High	-	-	-	low	\$2.7	\$0	\$0	\$0	\$0	\$2.7
4	3.6%	6.0%	19.7%	High	Low	High	gear	medium	\$0.9	\$2.6	\$0	\$0	\$0	\$3.5
5A	11.4%	8.0%	30.6%	High	Low	High	gear	med/high	\$3.6	\$4.3	\$0	\$0	\$0	\$7.9
5B Option 1	11.4%	8.0%	71.1%	High	Low	High	gear TAC bycatch	highest	\$3.6	\$24.5	\$0	\$0	\$0	\$28.1
5B Option 2	11.4%	8.0%	72.9%	High	Low	High	gear TAC bycatch	highest	\$3.6	\$9.4	\$0	\$0	\$0	\$13.0
5B Option 3	11.4%	8.0%	61.8%	High	Low	High	gear	high	\$3.6	\$3.9	\$0	\$0	\$0	\$7.5
6	17.4%	17.0%	19.7%	L/M/H ⁵	L/M/H	L/M/H	-	medium	\$163.8	⁶	\$34.1	\$1	\$38.3	\$237.2

NOTES:

1. Fishable waters are defined as those waters < 1000 m within the historic effort distribution. Closures are for bottom trawling, except for Alternative 6, which closes areas to all bottom tending gear (dredges, bottom trawls, pelagic trawls that contact the bottom, longlines, dinglebars, and pots).
2. In addition to closure areas, Alternatives 4, 5A, and 5B include restrictions on configuration of bottom trawl sweeps and footropes. Alternative 5B Options 1 and 2 also include TAC reductions for AI Atka mackerel and rockfish, as well as bycatch limits for bryozoans/corals and sponges. Alternative 5B Option 1 also includes a TAC reduction for AI Pacific cod.
3. Alternatives were ranked qualitatively relative to the status quo and the alternative with the highest benefits to EFH.
4. Total costs (direct loss and at-risk loss to gross revenue) reflect the long- and short-term costs to assist in assessing practicability, but do not include any long-term benefits of increased catches that might be attributable to habitat protection, because sufficient information does not exist to estimate any such benefits.
5. L/M/H: L = low; M = medium; H = high
6. BSAI groundfish revenue at risk included with GOA

Figure ES-1. Areas Closed Year-round to Bottom Trawling



NOTE: Very limited state-managed bottom trawling occurs in some of the depicted areas. Beam trawling for shrimp is allowed in southeast Alaska, Prince William Sound, and the Kodiak area, although effort is extremely low.

Figure ES-2. Alternative 2: Gulf Slope Bottom Trawl Closures

EFH Mitigation Alternative 2 Gulf of Alaska. Prohibit the use of bottom trawl gear targeting GOA slope rockfish within 11 designated sites of the GOA slope (200-1,000m)

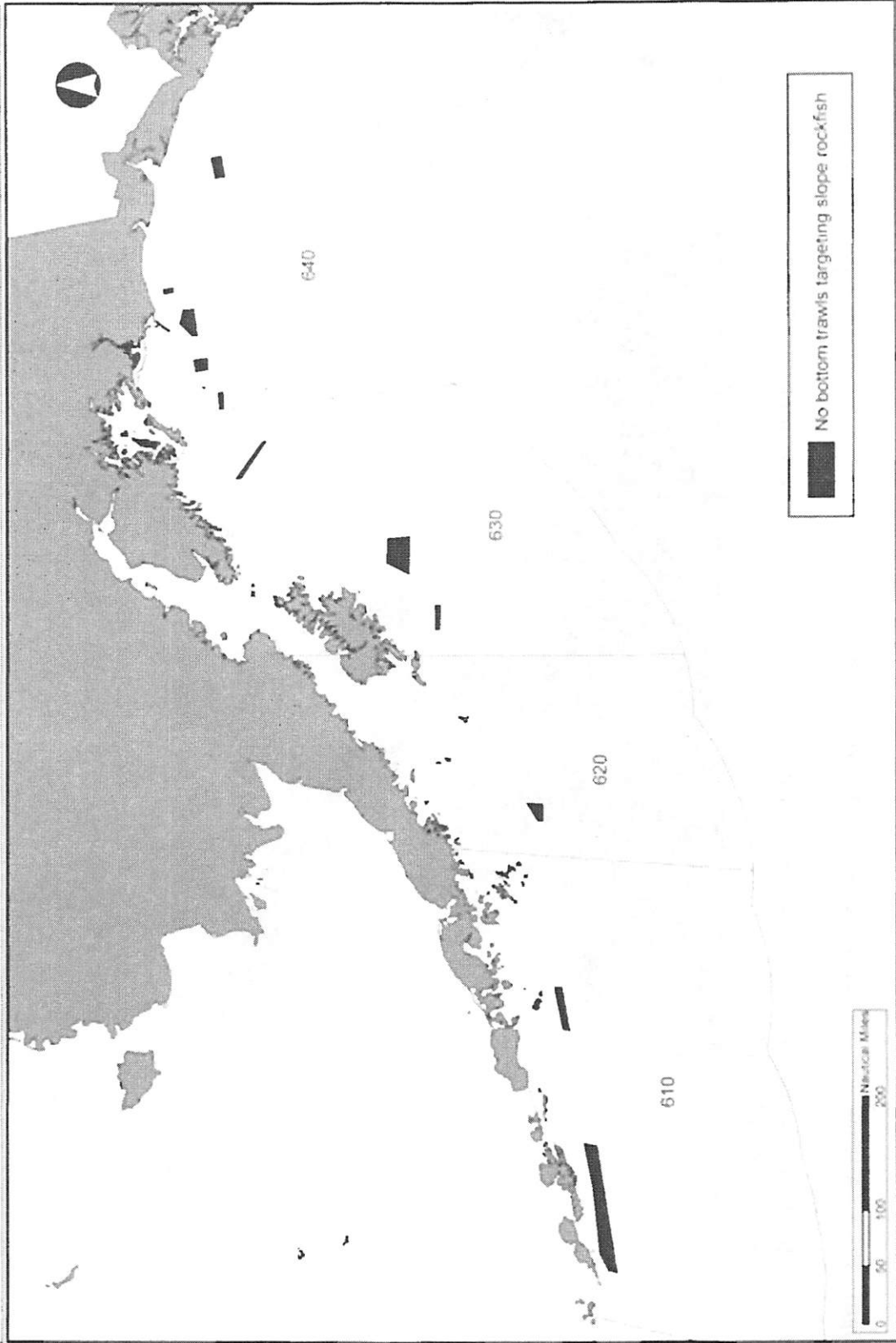


Figure ES-3. Alternative 3: Upper Slope Bottom Trawl Closures

EFH Mitigation Alternative 3 Gulf of Alaska: Prohibit the use of bottom trawl gear targeting GOA slope rockfish on the GOA slope (200-1,000m)

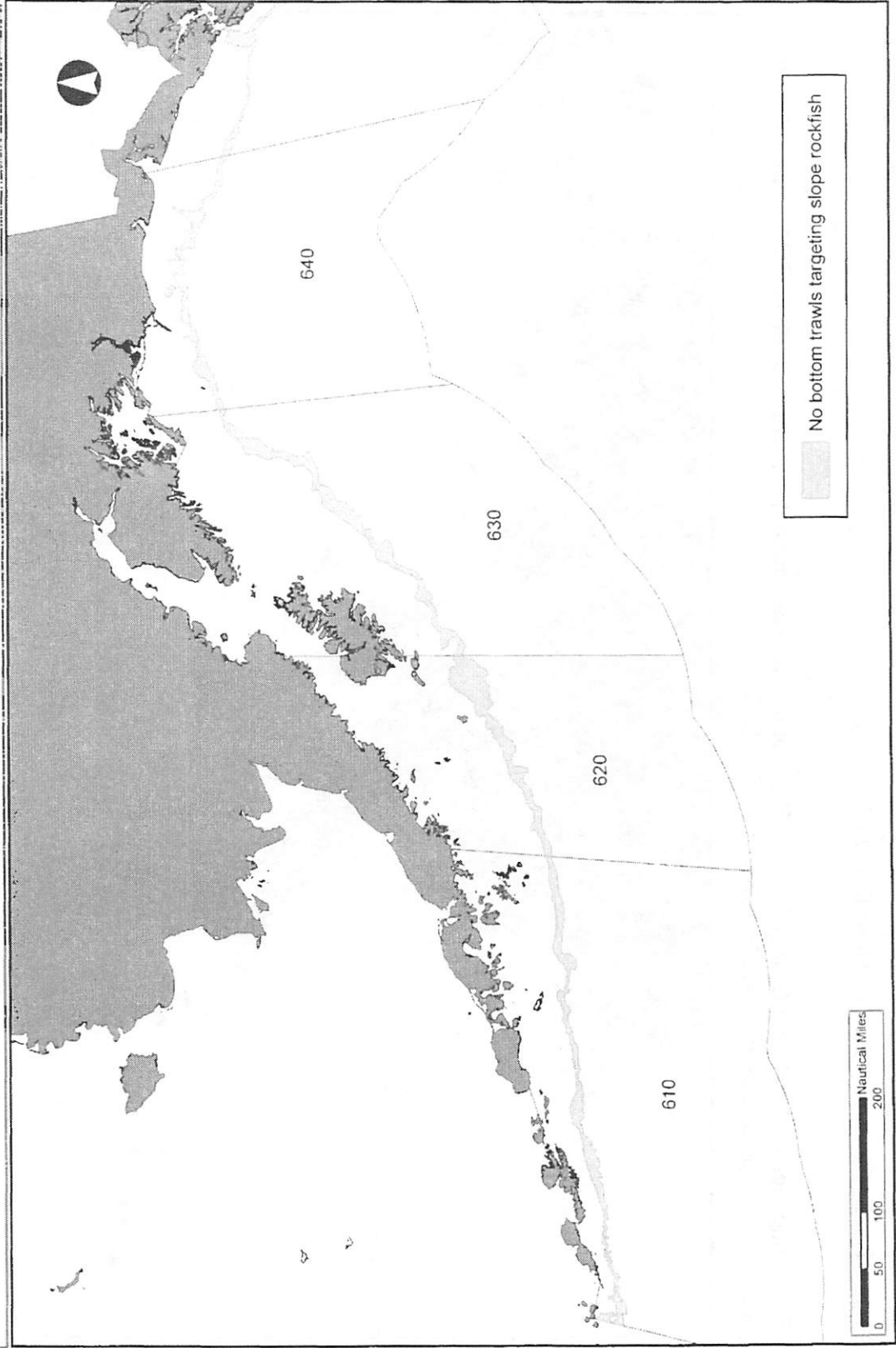


Figure ES-4. Alternative 4: Bering Sea Open/Closed Areas

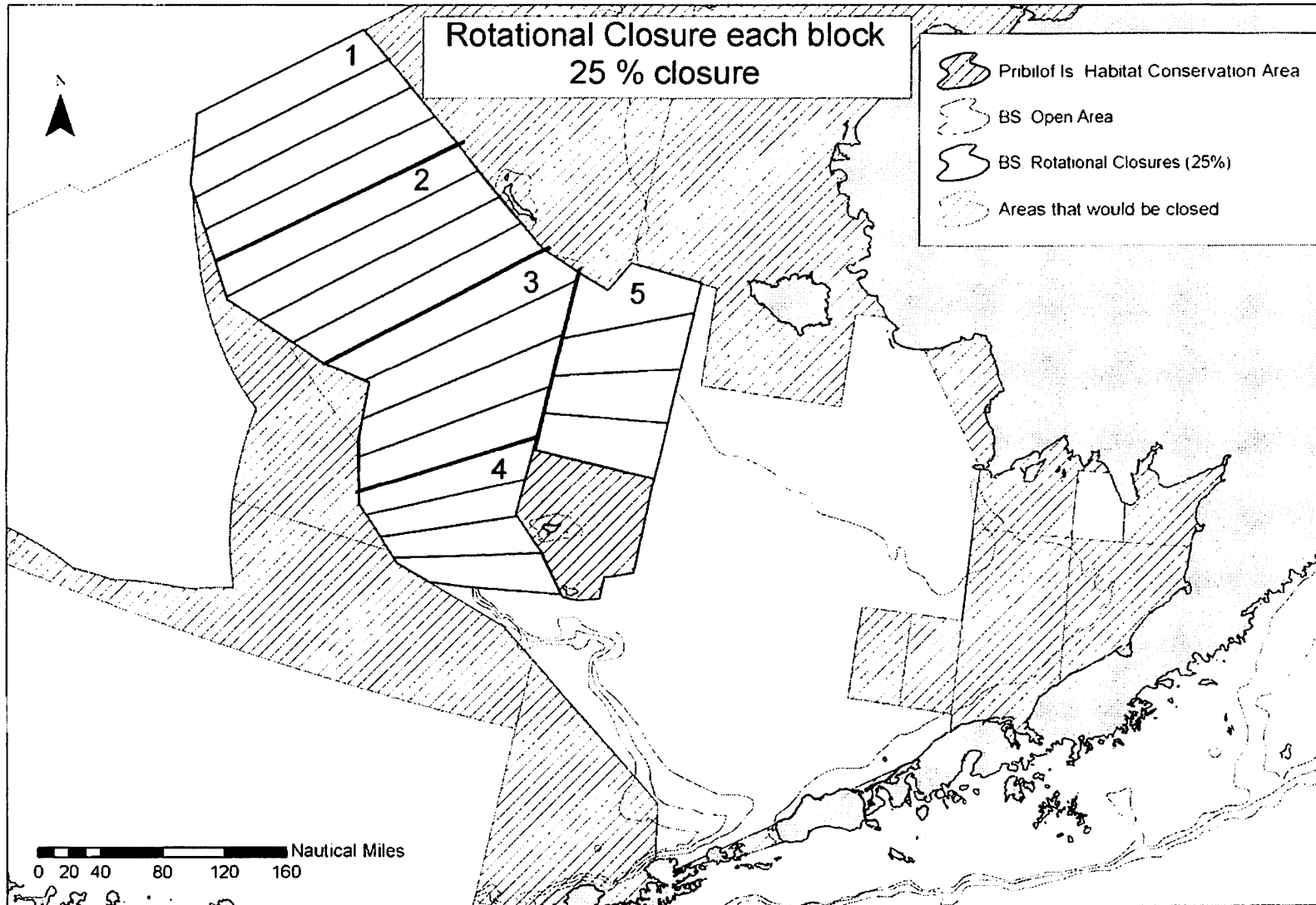


Figure ES-5. Alternative 4: Aleutian Islands Closure Areas

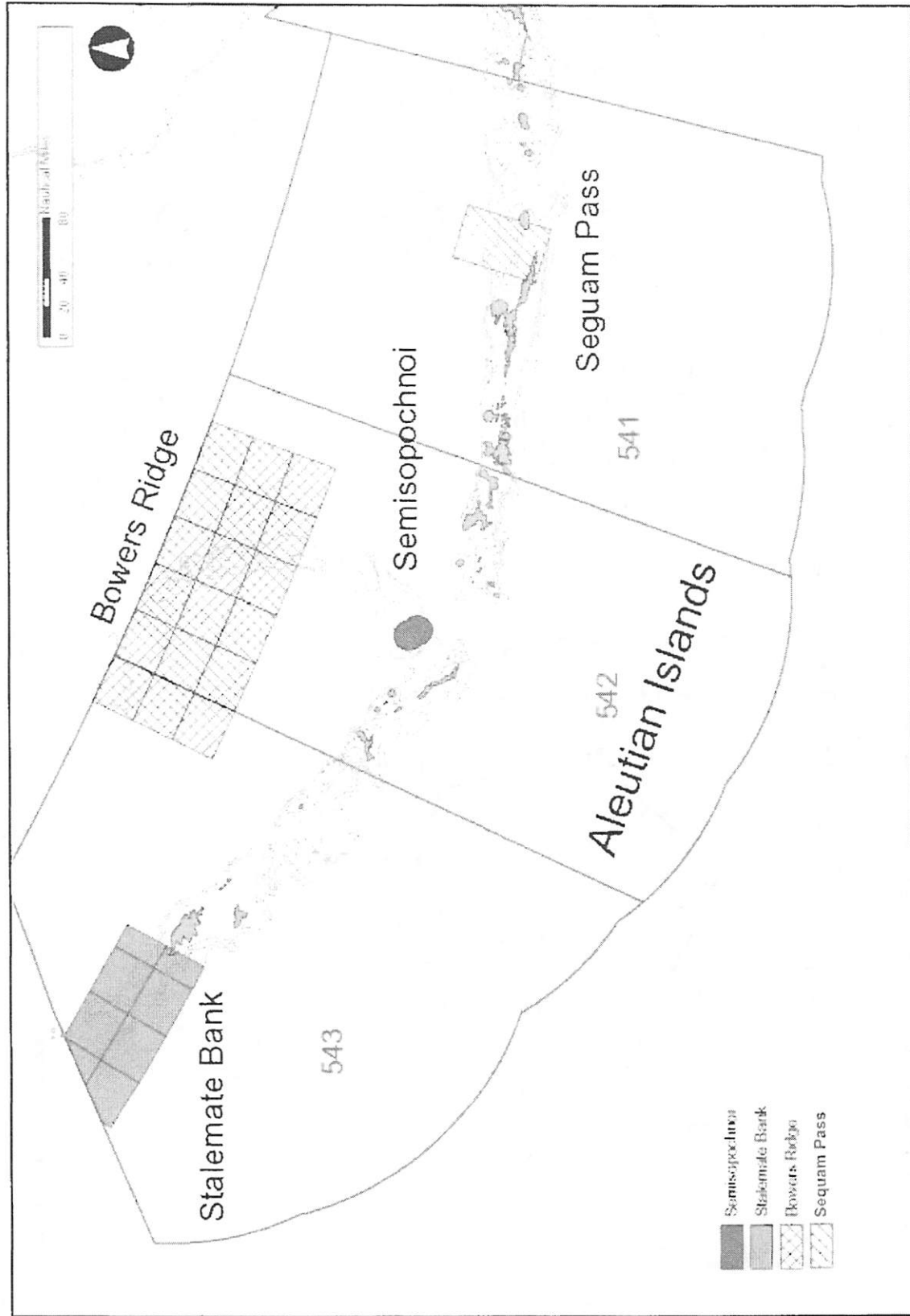


Figure ES-6. Alternative 4: GOA Closure Areas

EFH Mitigation Alternative 4 Gulf of Alaska: Prohibit the use of bottom trawl gear targeting GOA slope rockfish within 11 designated sites of the GOA slope (200-1,000m)

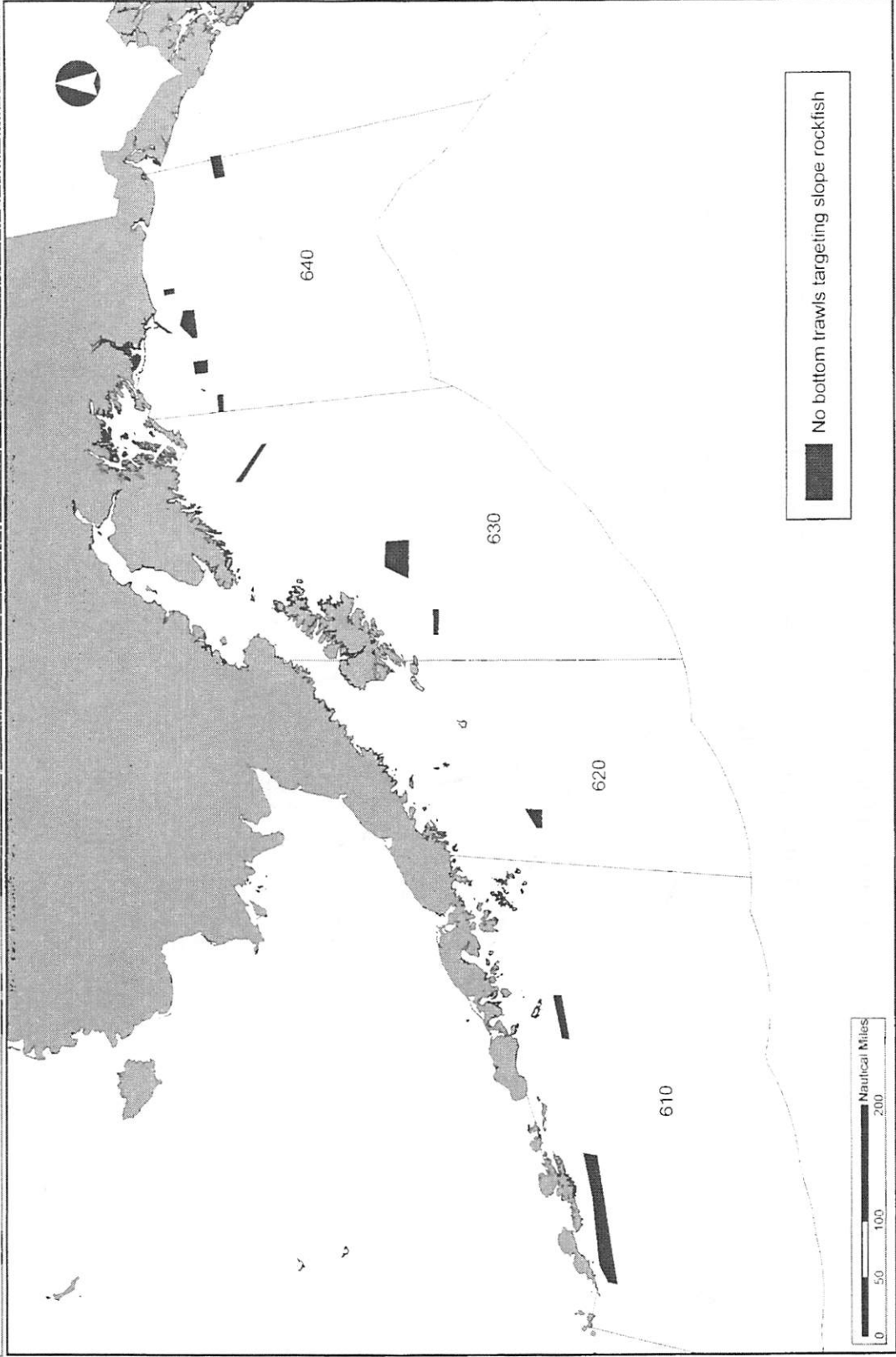


Figure ES-7. Alternatives 5A and 5B: Bering Sea Closure Areas

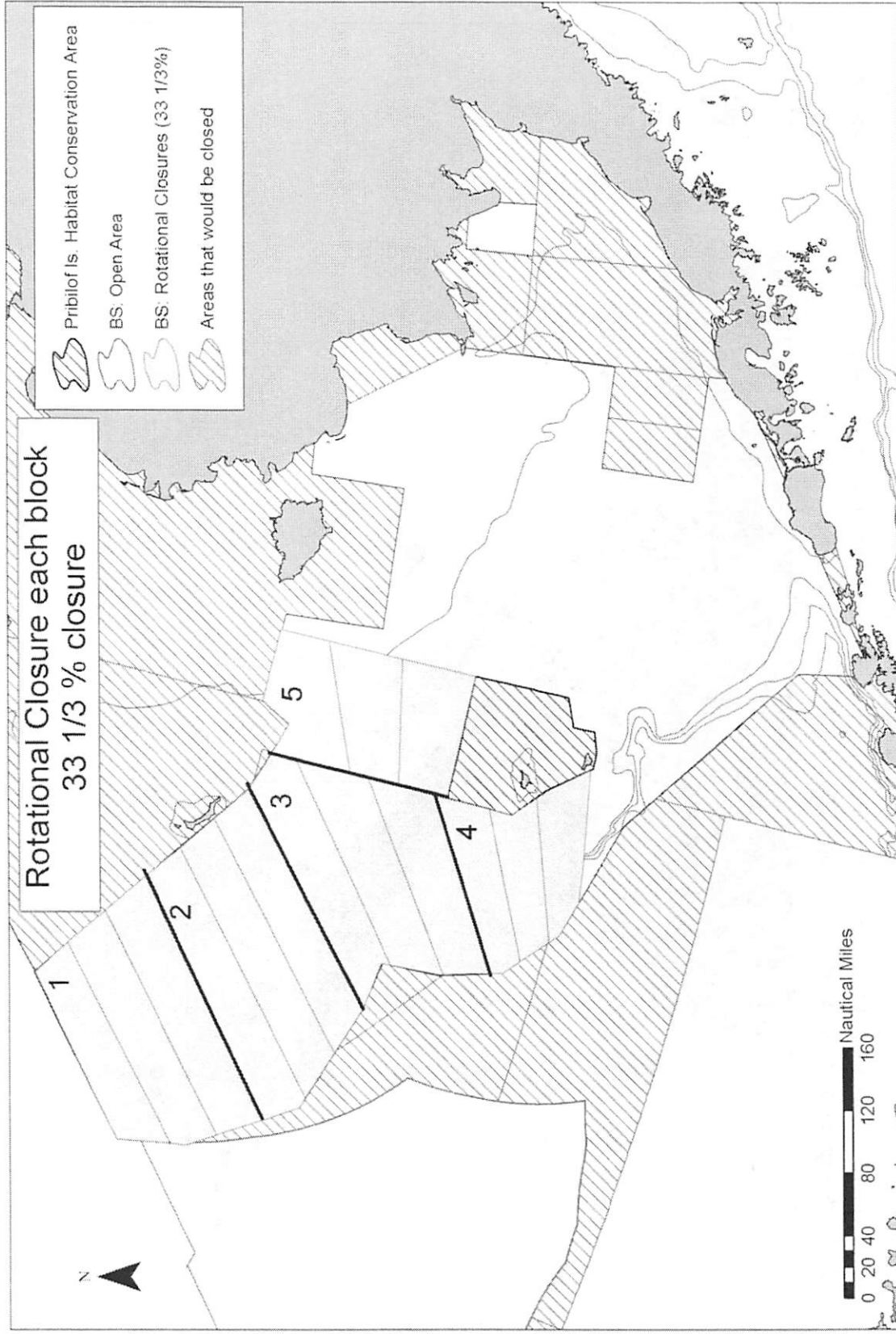


Figure ES-8. Alternative 5A: Aleutian Islands Closure Areas

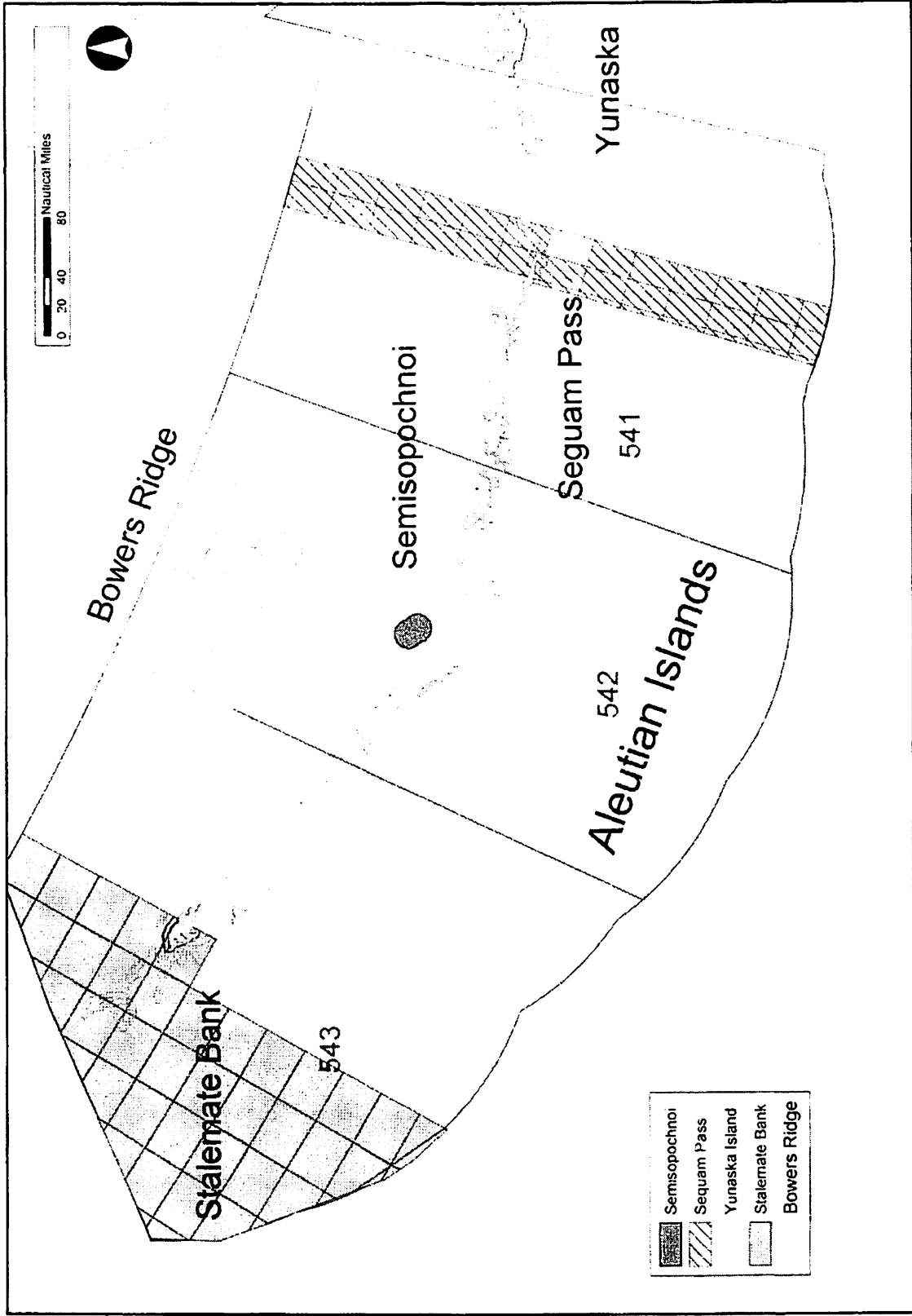


Figure ES-9. Alternatives 5A and 5B: Gulf of Alaska Open/Closed Areas

EFH Mitigation Alternative 5 Gulf of Alaska: Prohibit the use of bottom trawl gear for all groundfish fisheries on 10 designated sites of the GOA slope (200-1,000m). Additionally, prohibit the use of bottom trawls for targeting GOA slope rockfish on the GOA slope (200-1,000m)

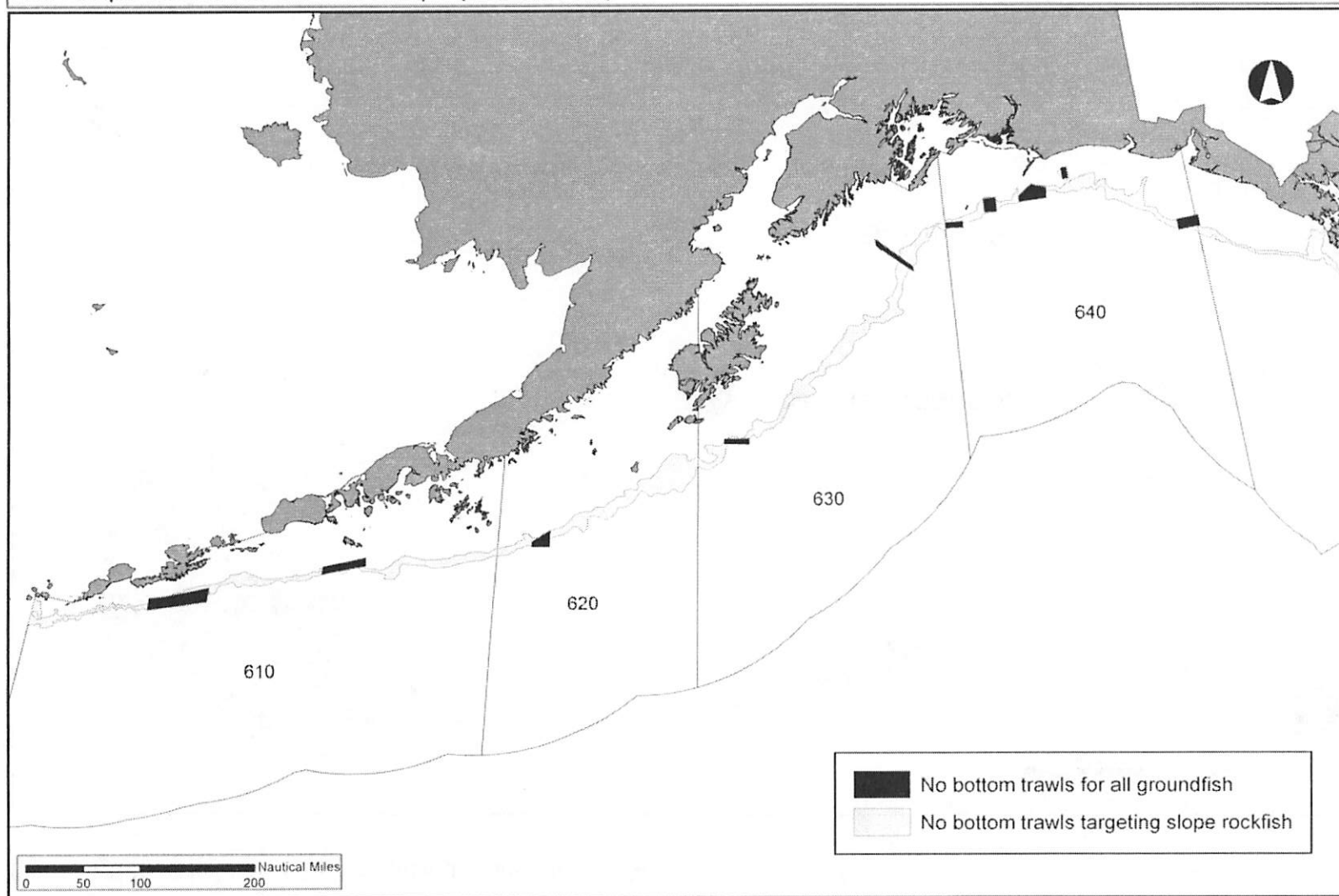


Figure ES-10. Alternative 5B. Option 1

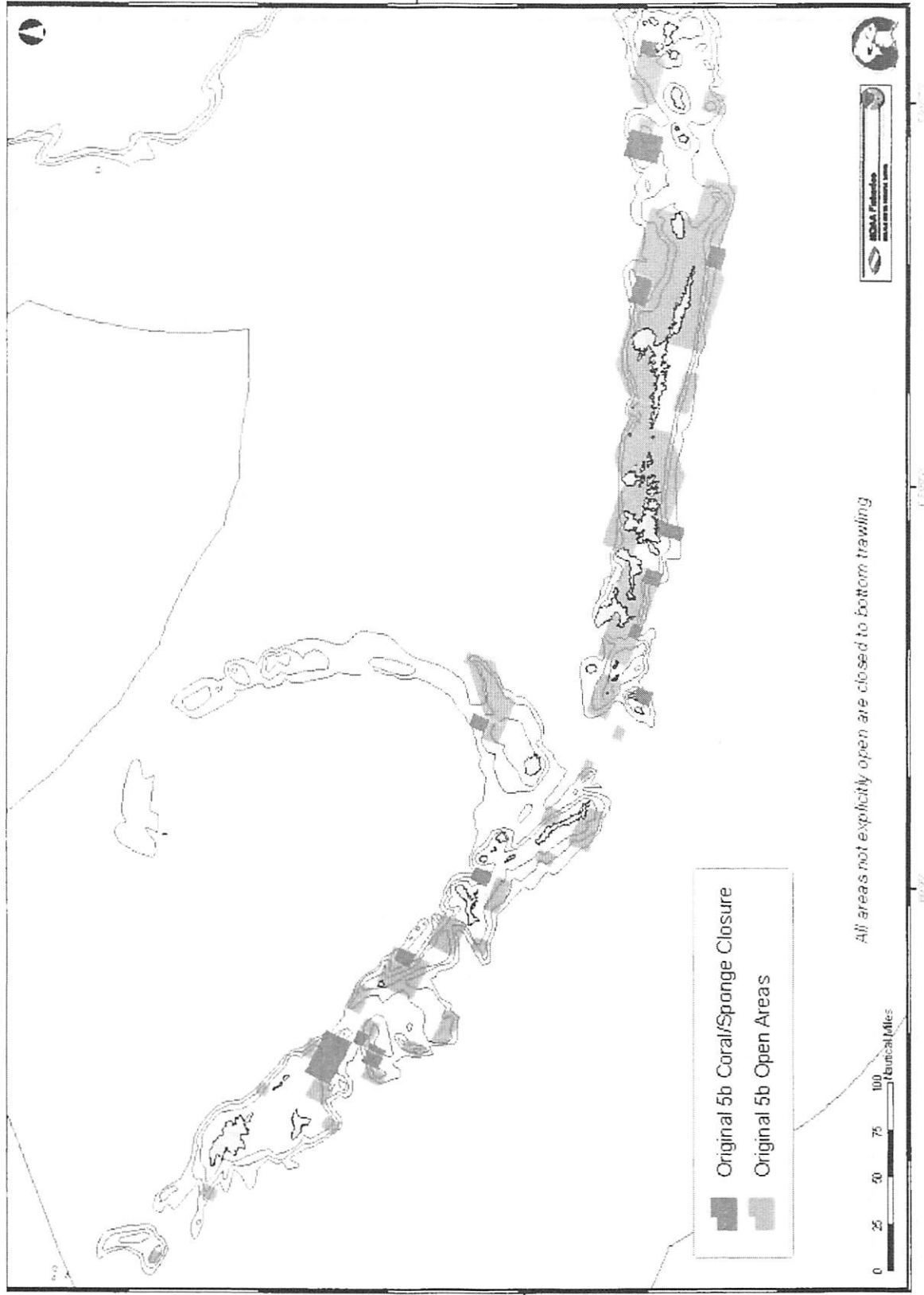


Figure ES-11. Alternative 5B, Option 2

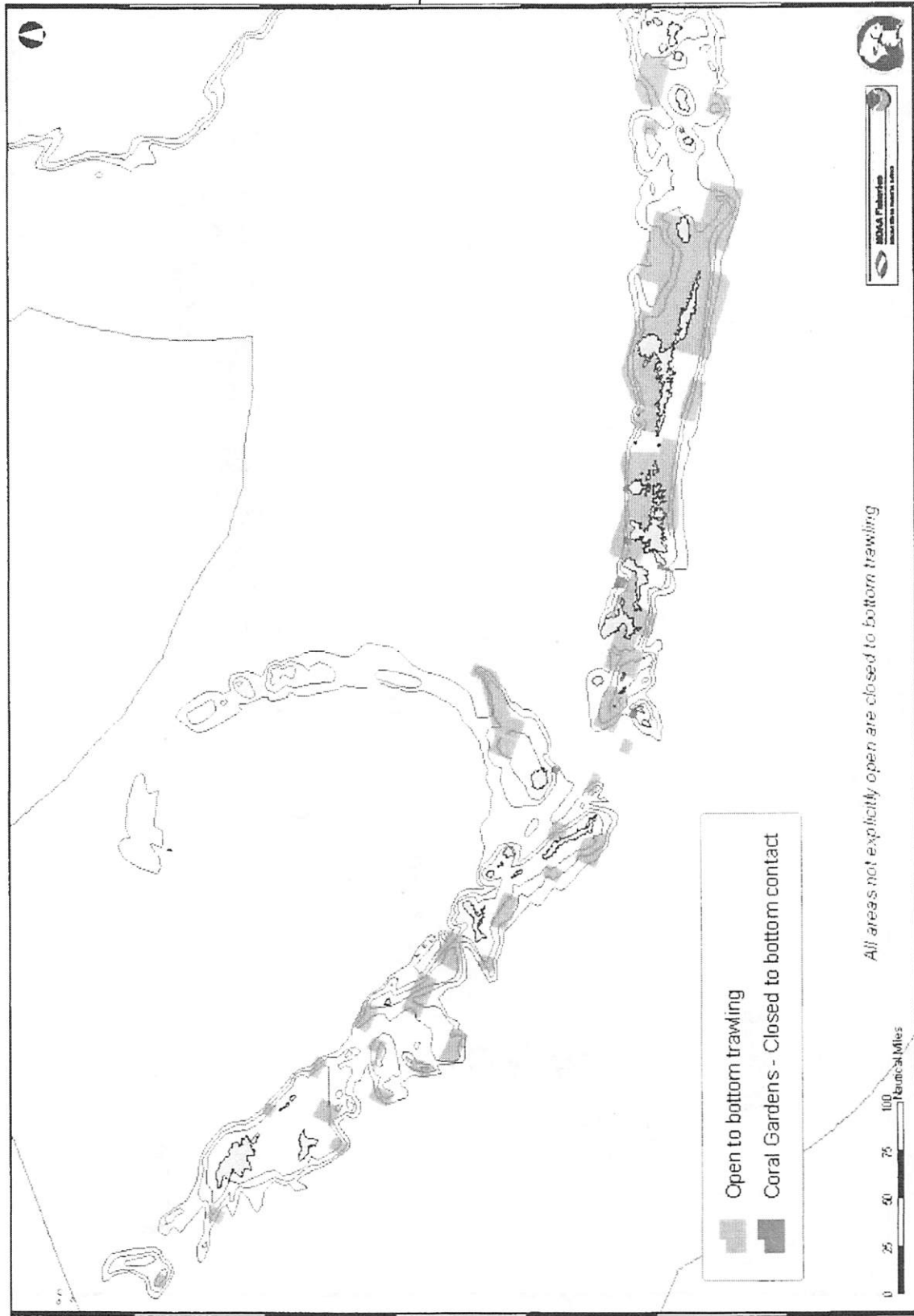


Figure ES-12. Alternative 5B, Option 3



Figure ES-13. Alternative 6: Closure Areas (Gulf of Alaska)

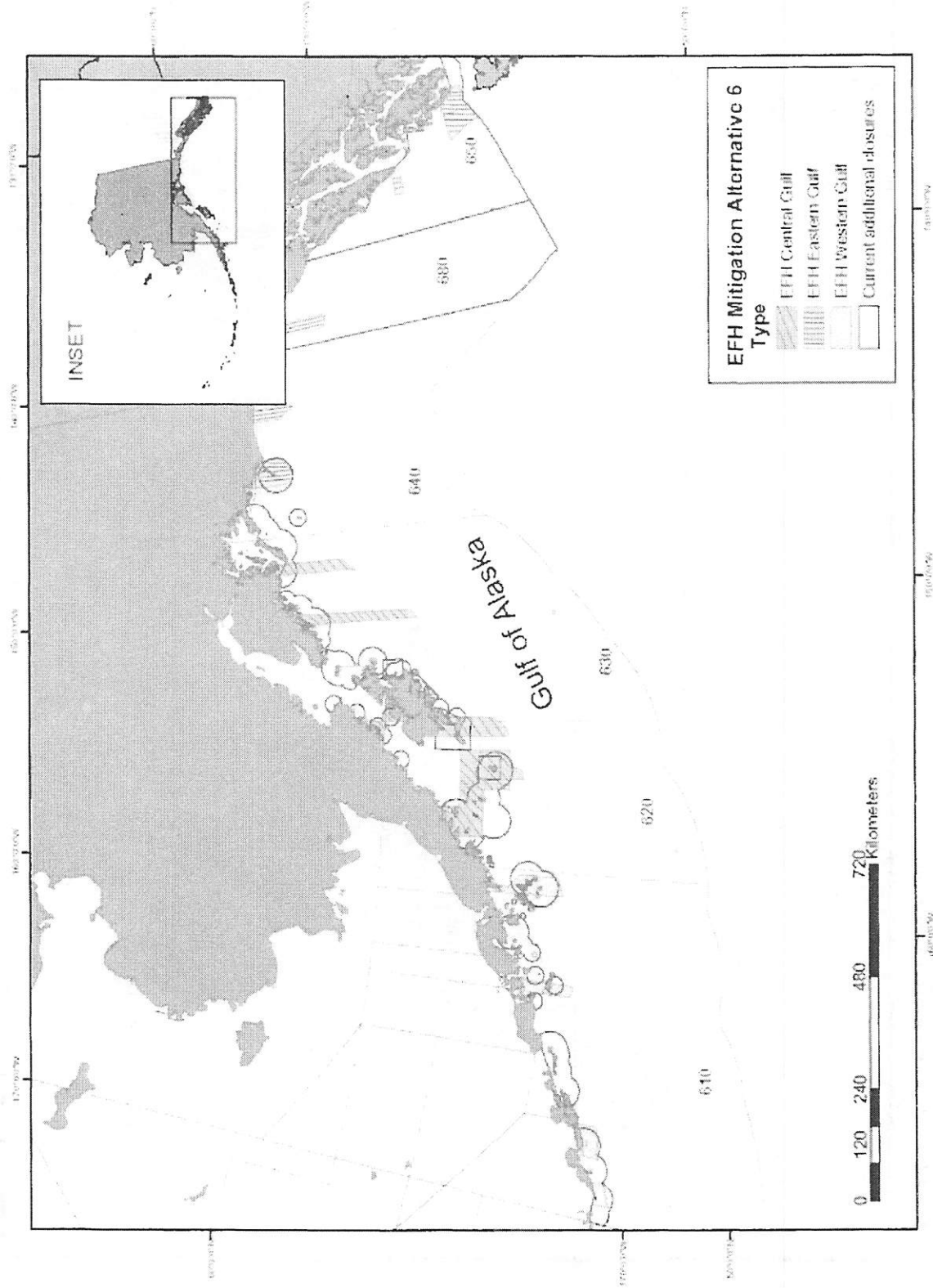


Figure ES-14. Alternative 6: Closure Areas (Aleutian Islands)

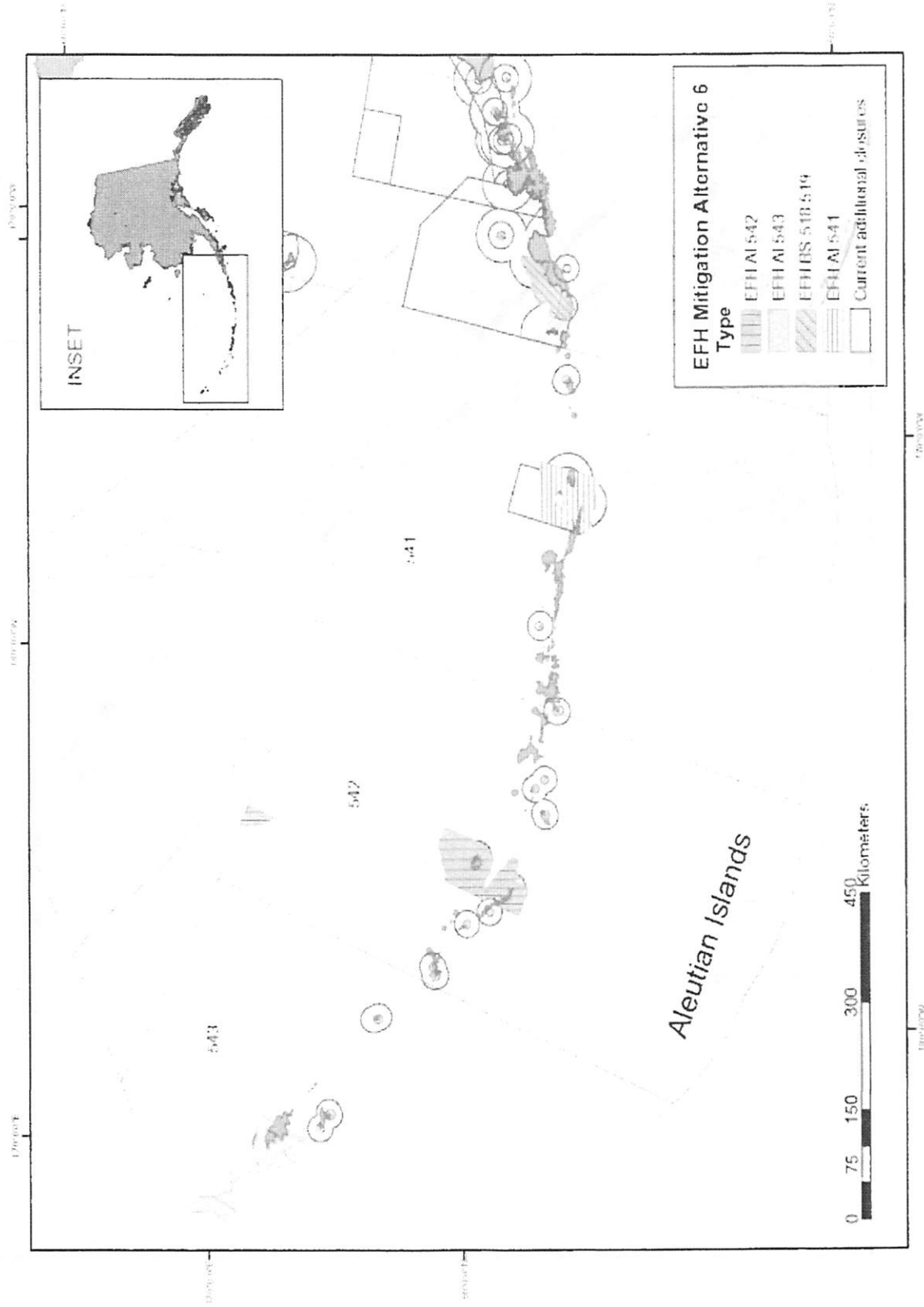
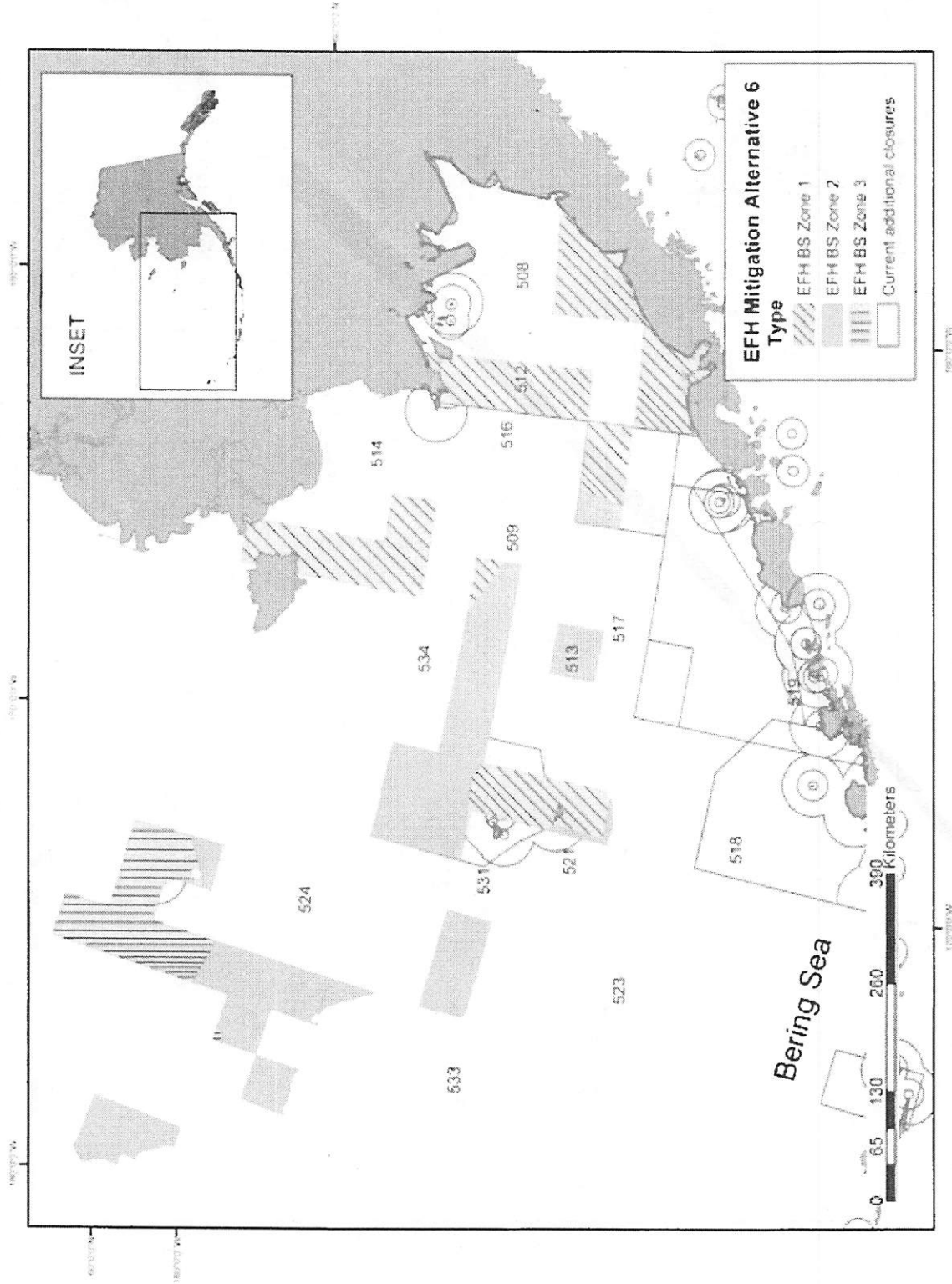


Figure ES-15. Alternative 6: Closure Areas (Bering Sea)



Agenda C-31 Supple.
February 2005

no before mtg.

ALASKA LONGLINE FISHERMEN'S ASSOCIATION
403 Lincoln Street, Ste. 237 Sitka, AK 99835

February 4, 2005

Dear Members of the Council,

On behalf of the Alaska Longline Fishermen's Association (ALFA), I would like to submit the following testimony on Agenda item C-3: EFH and HAPC.

ALFA has a long-standing commitment to habitat protection, and has participated fully in the EFH/HAPC process. Along with other members of the industry, the conservation community, and the Agency, ALFA members worked hard to develop a meaningful and comprehensive document. In the end, we were satisfied with the EFH EIS, believing it contained a wealth of information and an adequate range of alternatives for both designation and protection of habitat.

Along with a host of others, we were then highly disappointed by the Agency and the Council's selection of status quo as the preferred mitigation alternative. As you heard from the Center for Independent Experts (CIE), the EFH EIS contains ample evidence of habitat destruction associated with bottom trawling and the importance of mitigating the impact of this gear type. All fishing gear does not have an equal impact on benthic habitat, as both Dr. Rose's model and a growing body of literature indicate. The Council and the Agency have a responsibility to the long-term health of the North Pacific ecosystem to adopt an alternative that mitigates the highest impact fisheries in the most sensitive areas. As we stated in comments following the Agency's release of the document, ALFA maintains that **at the very least the Council should urge the Agency to adopt an alternative that mitigates the impact of the Gulf rockfish trawl fishery and protects coral gardens in the Aleutian Islands.**

The failure of the Council and the Agency to take meaningful steps to mitigate bottom trawling makes it extremely difficult for the fixed gear industry to support the proposed southeast HAPC closures to all bottom fishing. The EFH EIS does not support treating all gear types equally. Again, the EFH EIS identifies bottom trawling as the gear type most damaging to habitat. To quote Dr. Ken Drinkwater from his testimony before the Council in Sitka: "the model looked at longline and traps, but [their effects] appeared to be negligible. The real question is trawl." ALFA members believe the Council should address the most significant problems before closing areas to gear types that cause little damage.

Additionally, ALFA members find little rationale in the EFH or HAPC documents to support treating southeast HAPC differently from HAPC in other parts of the Gulf. The HAPC identified for the central and western Gulf include closures to bottom trawl only; fixed gear is not, and should not be excluded from these areas. For consistency and for the reasons stated above, the southeast HAPC should be closed only to bottom trawl gear. The fixed gear fleet should not be excluded.

In closing, ALFA urges the Council and the Agency to adopt a mitigation alternative that addresses the impacts of bottom trawling in sensitive habitat. Until the habitat damage associated with bottom trawling is addressed, ALFA members can not support HAPC closures to all fishing. To be consistent with the EFH EIS and the published literature, all proposed Gulf HAPC should be closed to bottom trawl gear only; fixed gear should not be excluded from these areas. ALFA members find little rationale in the literature or Council documents to support treating the southeast HAPC differently from the HAPC in other parts of the Gulf.

Thank you for the opportunity to comment.

Sincerely,



Linda Behnken
(Director, ALFA)

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF PROJECT MANAGEMENT AND PERMITTING
ALASKA COASTAL MANAGEMENT PROGRAM

□ SOUTHCENTRAL REGIONAL OFFICE
550 W 7th AVENUE SUITE 1680
ANCHORAGE, ALASKA 99501
PH: (907) 269-7470 FAX: (907) 269-3891

■ CENTRAL OFFICE
302 GOLD STREET, SUITE 202
JUNEAU, ALASKA 99801
PH: (907) 465-3562 FAX: (907) 465-3075

□ PIPELINE COORDINATOR'S OFFICE
411 WEST 4th AVENUE, SUITE 2C
ANCHORAGE, ALASKA 99501
PH: (907) 2857-1351 FAX: (907) 272-3829

HO Before Mtg.
C-φ Supplemental
February 2005
FRANK H. MURKOWSKI, GOVERNOR

February 4, 2005

Stephanie Madsen
Chair
North Pacific Fishery Management Council
605 W 4th Avenue, Suite 306
Anchorage, Alaska 99501-2252

RE: National Marine Fisheries Service Preliminary Final Environmental Impact Statement
for Essential Fish Habitat Identification and Conservation in Alaska

Dear Ms. Madsen:

The State of Alaska (State) has reviewed the Preliminary Final Environmental Impact Statement (PFEIS) for Essential Fish Habitat (EFH) Identification and Conservation in Alaska that was released in January 2005. Within the PFEIS, the National Marine Fisheries Service (NMFS) evaluated the alternatives and environmental consequences for three actions: (1) describing and identifying EFH for fisheries managed by the North Pacific Fishery Management Council (Council); (2) adopting an approach for the Council to identify Habitat Areas of Particular Concern within EFH; and (3) minimizing to the extent practicable the adverse effects of Council-managed fishing on EFH.

The State has closely followed the NMFS process in meeting the EFH mandate of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), has participated in meetings and discussions, and has commented on several previous occasions regarding the proposed identification and conservation of EFH. In addition, the State, through the Department of Fish and Game (ADF&G), has been an active participant in the EFH process through the Council, including participation in the Council's EFH Committee and the Council's Scientific and Statistical Committee.

The State remains deeply concerned about the inland reach of EFH and the scope and mechanics of consultation envisioned under the Magnuson-Stevens Act, especially with respect to activities proposed in State waters (and/or adjacent uplands) inhabited by anadromous salmon. The State expressed these concerns in its April 15, 2004 letter to NMFS on the Draft Environmental Impact Statement (DEIS) for EFH Identification and Conservation in Alaska. NMFS, in its response to public comments on the DEIS, rejected the State's preference for Alternative 6 (EEZ only) of Action 1 by concluding that "... limiting EFH descriptions to the EEZ would not comply with the Magnuson-Stevens Act." While the State understands NMFS position regarding this alternative, the

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State believes that Alternative 6 is consistent with the basic policy objectives presented in the DEIS and the PFEIS, and was included in the NEPA analysis of those documents because it is a legitimate alternative that would address the purpose and need of the proposed action.

The State offers its consolidated response and support for the following actions as proposed in the PFEIS for EFH:

- Action 1: Describe and Identify EFH – Alternative 6 (EEZ Only)
- Action 2: Adopt an Approach for Identifying HAPC's – Alternative 3 (Site Based Concept)
- Action 3: Minimize Adverse Effect of Fishing on EFH – Alternative 1 (Status Quo / No Action)

In its letter to NMFS dated April 15, 2004, the State submitted comments on the Draft Environmental Impact Statement (DEIS) for Essential Fish Habitat Identification and Conservation in Alaska that was released in January 2004 supporting the same alternatives and providing rationale for such. That support and rationale remains the same. In addition, the State also provided suggestions and needed edits to the text of the DEIS, particularly to Appendix G addressing non-fishing activities.

The State has numerous effective statutory and regulatory programs and requirements that manage fisheries habitat and water quality in all state waters and riparian uplands. These programs and requirements include (but are not limited to) Non-Point Source Pollution Control Program (16 U.S.C. 1455b), Alaska's water quality standards (18 AAC 70), Forest Resources and Practices Act (AS 41.17), Alaska Coastal Management Program (16 U.S.C. 1451-1465, AS 46.39 and AS 46.40), the Anadromous Fish Act and Fishways Act (AS 41.14.840 and AS 41.14.870), and various additional legal requirements under the Departments of Fish and Game, Environmental Conservation, and Natural Resources. In addition, there are existing federal and local government agency programs and requirements that activities and projects are subjected to, which include (but are not limited to) those of the Environmental Protection Agency, U.S. Army Corps of Engineers, U.S. Coast Guard, U.S. Fish and Wildlife, and municipal planning and zoning powers of Alaska communities with AS Title 29 powers. These programs and requirements are networked to provide Alaska with the strongest state statutory protections for anadromous fish habitat in the United States, and provide protection for the defined EFH in State waters and uplands by prohibiting the degradation of habitat and water quality in a water body necessary for the growth and propagation of fish, shellfish, other aquatic life, and wildlife.

The requirement for EFH consultation for activities and projects occurring within State waters and uplands is a duplication of existing protections and processes in which the State is currently engaged. The EFH consultation does not provide enhanced protection for those identified habitats. In fact, the consultation with and review by NOAA is additional work for the state and federal resource agencies, as well as for the applicant proposing activities and projects within the State. It increases the cost of securing the necessary permits, and it may result in the loss of resource development opportunity and economic benefit to the State without any additional habitat protection or gain beyond those required under existing State, municipal, and Federal laws.

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While it is evident that the PFEIS has been amended to address some of the State's comments that were submitted in the letter dated April 14, 2004, it is clear that many of the State's substantive concerns were not addressed. In particular, Appendix G addresses many non-fishing impacts on upland activities. It is important to note that the State supports Alternative 6 of Action 1 that limits EFH to waters and substrate within the EEZ, which would render much of this appendix mute if adopted.

The State has followed the process for implementing the recommended conservation measures for protecting EFH for non-fishing activities. Unfortunately, this process has further proven the State's point regarding the duplication of existing protections and processes, the lack of enhanced protection for those identified habitats, the additional work for the state and federal resource agencies, as well as for the applicant, and the increased cost of securing the necessary permits, all described above.

For example, Appendix G of the PFEIS describes non-fishing activities that may have adverse effects on EFH and identifies actions to encourage the conservation and enhancement of EFH. As evidenced in Dr. James W. Balsiger's letter to you dated December 1, 2004, the "conservation recommendations contained in Appendix G are rather general and may overlap with certain existing standards for specific development activities." As further characterized in that letter, Dr. Balsiger states that "... NMFS strives to provide reasonable and scientifically based recommendations..."

Many of the conservation recommendations that are included in Appendix G of the PFEIS are duplicative with existing state and federal programs and protections. However, many of those conservation recommendations included in Appendix G were developed specific to a state or federal program or lands unrelated to EFH, yet are included by NMFS as appropriate EFH conservation measures to be applied broadly to projects potentially affecting EFH. The expansion of the conservation measures to be broadly applicable throughout the state is obviously duplicative with existing protections, and does not appear to have been well evaluated nor based on sound science.

The State believes that scientific evidence should be the premise upon which any EFH conservation measure should be based. While the State appreciates Dr. Balsiger's statements, as included above, it is clear that there is no regulatory requirement or internal directive for NMFS that these conservation measures be based on science, nor even be reasonable. In fact, though there are several recommended conservation measures that are proposed to address each of the various non-fishing activities that may affect EFH, the list of measures is neither exhaustive nor inclusive, and NMFS staff may propose additional and/or alternative conservation measures on a project-by-project basis.

Without clear regulatory guidance and scientific justification, the general approach currently taken by NMFS and proposed within Appendix G of the PFEIS for the conservation measures is unacceptable to the State, as it does not create an objective, nor predictable, review process for non-fishing activities, and may increase the cost of securing the necessary permits, resulting in the loss of resource development opportunity and economic benefit to the State without any additional habitat protection or gain beyond those required under existing State, municipal, and Federal laws.

The dichotomous approach to scientific evidence is further characterized in the EFH consultation provisions of 50 C.F.R. 600. Though EFH conservation recommendations are not binding and

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simply represent options to avoid, minimize, or compensate for adverse impacts to EFH, a federal agency aggrieved by the recommended conservation measure for EFH may issue a response to NMFS that is inconsistent with the NMFS recommended conservation measure, as provided for at 50 C.F.R. 920(k), but must "... must explain its reasons for not following the recommendations, including the scientific justification for any disagreements with NMFS over the anticipated effects of the action and the measures needed to avoid, minimize, mitigate, or offset such effects." Though the NMFS recommendations need not be based on scientific evidence, a federal agency refuting NMFS' recommendation must base that "appeal" on scientific evidence. Based on the discussion above regarding the lack scientific merit in the NMFS recommendations for conservation measures, this process for "appeal" effectively sets forth the NMFS recommended conservation measures as de facto regulations, without NMFS having to go through the formal process of developing these as "regulations."

For these reasons, the State strongly disagrees with this incorporation and application of the recommended conservations measures as currently proposed in Appendix G of the PFEIS, and recommends that the North Pacific Fishery Management Council take the following actions:

- Not adopt the recommended conservation measures included in Appendix G of the PFEIS

The State appreciates that the conservation measures may be useful for federal agencies undertaking EFH consultations, especially in preparing the EFH assessments that are a required part of interagency consultation, as well as guidance for NMFS staff on proposing EFH conservation measures. However, as described above, the lack of clear linkage between the recommended conservation measure and the protection sought, and the lack of rigorous science as a baseline process for inclusion of the conservation measures, makes this an appropriate action for consideration by the NPFMC.

The State encourages NMFS to redraft the recommended conservation measures, and address the shortfalls identified. The State is willing to work with NMFS to further refine the recommended conservation measures, and to assist in the preparation of an amended Appendix G for further consideration by the NPFMC.

The State of Alaska appreciates the opportunity to comment on these important regulations. If you have any questions, please do not hesitate to contact me by phone at (907) 465-8797 or by email at randy_bates@dnr.state.ak.us.

Sincerely yours,



Randall W. Bates
Deputy Director

cc: Michael Menge, Special Assistant, Office of the Governor
Becky Hultberg, Special Assistant, Office of the Governor

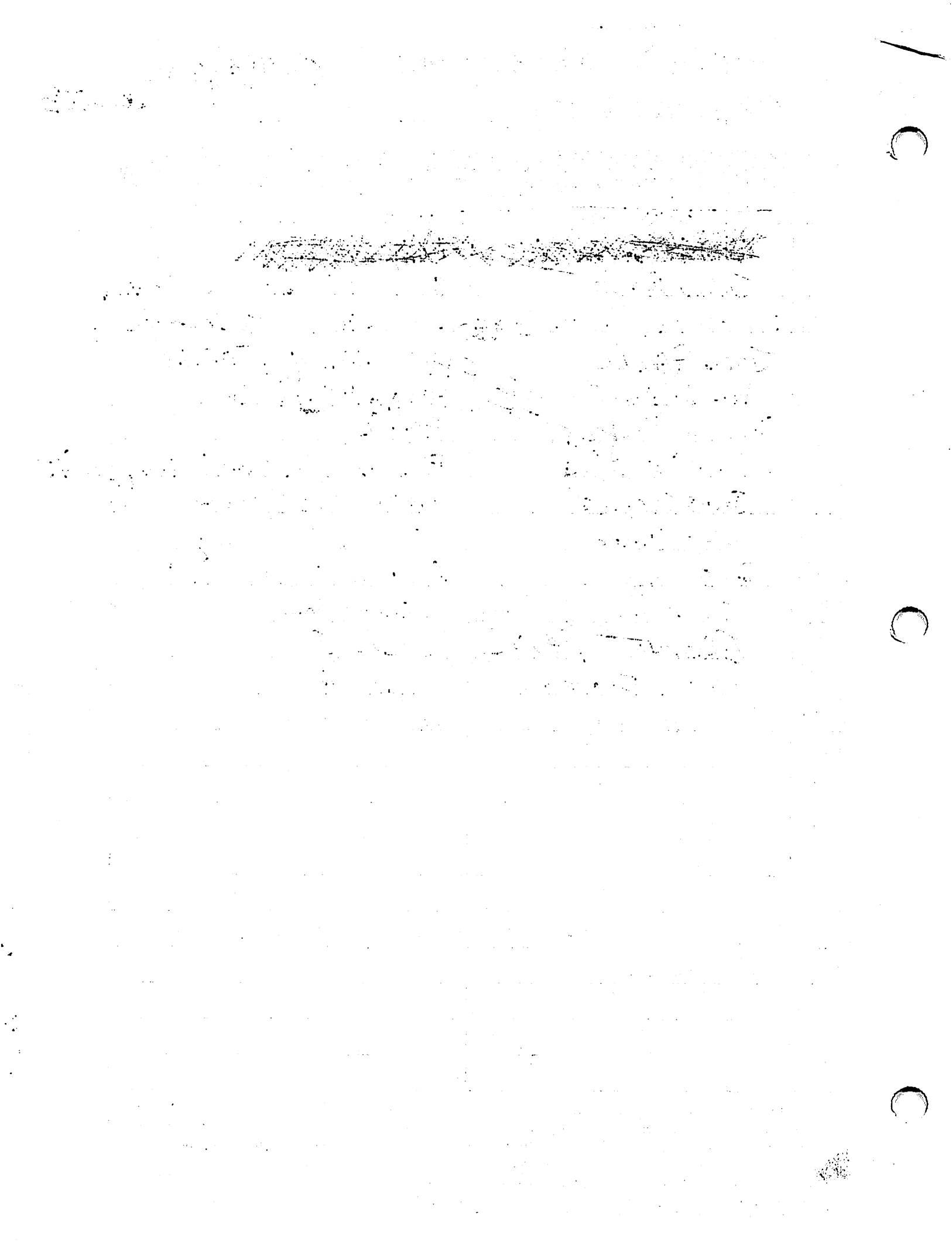
Ms. Stephanie Madsen
February 4, 2005

Alan Austerman, Fisheries Policy Advisor, Office of the Governor
John Katz, Director and Special Counsel, Office of the Governor
Tom Irwin, Commissioner, DNR
Kurt Fredriksson, Acting Commissioner, ADEC
Wayne Regelin, Acting Commissioner, ADFG
Bill Jeffress, Director, OPMP/ADNR
Dick LeFebvre, Deputy Commissioner, DNR
Marty Rutherford, Deputy Commissioner, DNR
Kerry Howard, Director, OHMP/ADNR
Marty Freeman, Forest Resources Program Manager, DOF/DNR
David Bedford, Deputy Commissioner, DFG
Sue Asplund, Federal Management Research Coordinator, DFG
Gordy Williams, Special Assistant, DFG
Doug Mecum, Director, Division of Commercial Fisheries, DFG
Doug Woodby, Fisheries Scientist, ADFG
Dick Mylius, Deputy Director, DMLW/DNR
Earl Krygier, Extended Jurisdiction Program Manager, DFG
Dr. James W. Balsiger, Alaska Regional Administrator, NMFS

Public Testimony Sign-Up Sheet

and

**Handouts Received During the
Meeting on this Agenda Item**



AP minutes handout
2-9-05 1:10 pm
DRAFT
(my only copy)

North Pacific Fishery Management Council
Advisory Panel Minutes
Seattle, Washington
February 7-11, 2005

The following members were present for all or part of the meeting:

- | | |
|-------------------|------------------|
| John Bruce | Bob Jacobson |
| Al Burch | Kent Leslie |
| Joe Childers | Matt Moir |
| Cora Crome | John Moller |
| Craig Cross | Jeb Morrow |
| Tom Enlow | Eric Olson |
| Duncan Fields | Ed Poulsen |
| Dave Fraser | Jim Preston |
| John Henderschedt | Michelle Ridgway |
| Jan Jacobs | Jeff Stephan |

The AP unanimously approved the minutes from the previous meeting.

Election of New Officers

The AP moved to postpone election of officers until Wednesday morning (February 9). One addition to the agenda was made under D2 (issue of unfished IFQ), and a decision to receive a sea lion presentation on Monday at 4:00 was made.

C-2 GOA Groundfish Rationalization

C-2(a) Gulf Rationalization Committee Report

The AP received the Gulf Rationalization Community Committee report from Nicole Kimball, staff, and public testimony from seven persons. The AP recommends to the council that Gulf Rationalization Community Committee's the recommendations from be adopted with the following changes:

1. Strike paragraph 2 in section C 2 on page 5 (Community Purchase Program).
2. Add an Option 3 in C 1.2 (Board Representation of the Administrative Entity)

Option 3. Membership on the administrative entity to be based on an evaluation of community population, location of the resource, and regionalization, which could either stand alone or be in combination.

Motion passed 18/0

The AP further recommends that the Gulf Rationalization Community Committee be reconvened to address these issues as well as ownership /lease issues in Section 1.7, opting in or out of the administrative entity, and whether or not individual use caps are inclusive of regular gulf quota (non-community quota).

Motion Passed 8/0

C-2(b) Crab/salmon bycatch data .

The AP received the staff presentation of the "Salmon and Crab Bycatch Measures for GOA Groundfish Fisheries" discussion paper and recommends that the paper be sent back to staff for further work, paying attention to the problem areas, graphs, and charts identified, to revisit the king crab closures to ascertain to what extent they are applicable or working, and to express the salmon bycatch in per metric tons of groundfish, (as currently done in the BSAI).

The AP further recommends:

Alternative 2 under Chinook Salmon be revised by replacing the words "for the remainder of the year" in the second line with the word "seasonally" followed by "(could be for an extended period of time);"

The Chinook salmon bycatch be broken out by individual year (2000-2004) in figures 3 through 6;

An analysis of the possible effects of other closed areas on salmon bycatch be included.

Drop "Other king crab" and "Other Salmon" from the analyses.

Motion passed 10-9.

The following are the draft alternatives as recommended:

Chinook Salmon

Alternative 1: Status Quo (no bycatch controls).

Alternative 2: Trigger bycatch limits for salmon. Specific areas with high bycatch (or high bycatch rates) are closed seasonally (could be for an extended period of time.) ~~for the remainder of the year if or when a trigger limit is reached by the pollock fishery.~~

Alternative 3: Seasonal closure to all trawl fishing in areas with high bycatch or high bycatch rates.

Alternative 4: Voluntary bycatch coop for hotspot management.

Other Salmon

Alternative 1: Status Quo (no bycatch controls).

~~Alternative 2: Trigger bycatch limits for other salmon. Specific areas with high bycatch (or high bycatch rates) are closed for the remainder of the year if or when a trigger limit is reached by the pollock trawl fishery (and potentially additional areas for flatfish trawling).~~

~~Alternative 3: Seasonal closure to all trawl fishing in areas with high bycatch or high bycatch rates.~~

~~Alternative 4: Voluntary bycatch coop for hotspot management.~~

Tanner Crab

Include in staff analysis a discussion of the AMCC Tanner Crab proposed trawl closure areas, including mapping of all currently closed/restricted areas (e.g., Stellar sea lion closures, BOF trawl closures, etc). (Council motion 10/04)

- Alternative 1: Status Quo (no bycatch controls).
- Alternative 2: Trigger bycatch limits for Tanner crab. Specific areas with high bycatch (or high bycatch rates) are closed to flatfish trawling for the remainder of the year if or when a trigger limit is reached by the flatfish fishery.
- Alternative 3: Year-round bottom trawl closure in areas with high bycatch or high bycatch rates of Tanner crab.
- Alternative 4: Voluntary bycatch coop for hotspot management.

Red King Crab

- Alternative 1: Status Quo (no bycatch controls).
- Alternative 2: Trigger bycatch limits for red king crab. Specific areas with high bycatch (or high bycatch rates) are closed to flatfish trawling (and potentially other areas for P. cod longline and pot gear) for the remainder of the year if or when a trigger limit is reached by the fishery.
- Alternative 3: Year-round bottom trawl closure in areas with high bycatch or high bycatch rates of red king crab.
- Alternative 4: Voluntary bycatch coop for hotspot management.

Other King Crab

- Alternative 1: Status Quo (no bycatch controls).
- ~~Alternative 2: Trigger bycatch limits for other king crab. Specific areas with high bycatch (or high bycatch rates) are closed to flatfish trawling (and potentially other areas for P. cod longline and pot gear) for the remainder of the year if or when a trigger limit is reached by the fishery.~~
- ~~Alternative 3: Year-round bottom trawl closure in areas with high bycatch or high bycatch rates of other king crab.~~
- ~~Alternative 4: Voluntary bycatch coop for hotspot management.~~

C-1(b) Essential Fish Habitat

The AP received a presentation of changes to the EFH Environmental Impact Statement from Jon Kurland (NMFS) and the testimony from seven members of the public.

The AP recommends that the Council adopt :

Under Action 1: Describe and Identify EFH

Alternative 3 (Revised General Distribution – Preliminary Preferred Alternative)
Passed 19/0

Under Action 2: Adoption of an Approach for Identifying HAPs

Alternative 3, (Site Based Concept – Preliminary Preferred Alternative)
Passed 19/0

Under Action 3: Minimize Adverse Effects of Fishing on EFH

Alternative 1 (Status Quo / No action – Preliminary Preferred Alternative) for the Gulf and Bering Sea and the adoption of Alternative 5b, Option 3, not including an increase in observer coverage for the Aleutians Islands . Passed 18/1

C-1(c) HAPC**Action 1: Seamounts**

The AP recommends that the Council adopt Alternative 3 as follows:

Alternative 3: Designate sixteen named seamounts in the EEZ off Alaska as HAPC and prohibit all bottom contact fishing by Council-managed fisheries on these seamounts.

Motion Passed 17/0

Action 2: GOA Corals

The AP recommends that the Council adopt Alternative 2, as modified, and Option 2:

Alternative 2: Designate three sites along the continental slope (in the vicinity of Sanak Island, Albatross, and Middleton Island) as HAPC ~~and prohibit bottom trawling or all bottom contact mobile gear (BCMG) within these areas for five years.~~

Option 2: Close the sites to bottom trawling for 5 years. During the five years, these sites would be prioritized for undersea mapping. Area with high-relief coral would stay closed to bottom trawling and the remaining areas would be reopened.

The AP further recommends that the Council adopt Alternative 3, as modified, and Option 2:

Alternative 3: Designate three areas in Southeast Alaska (in the vicinity of Cape Ommaney, Fairweather grounds NW, and Fairweather grounds SW) as HAPC ~~and prohibit bottom contact gear or bottom trawl gear in several subareas within the HAPC designated areas.~~

Option 2: Prohibit bottom trawl gear within five areas inside the HAPCs, while designating the remainder of each of the three HAPCs in this alternative as priority areas for hook and line gear impact research.

Motion passed 19/0

Action 3: AI Corals

The AP recommends that the Council adopt Alternative 2, modified, and Alternative 3, modified:

Alternative 2: Designate the six coral garden sites within the Aleutian Islands as HAPC. These areas are in the vicinity of Adak Canyon, Cape Moffett, Brobof Island, Semisopochnoi Island, Great Sitka and Ulak Island. ~~Bottom contact trawl gear~~ would be prohibited in several subareas within the HAPC designated areas.

Alternative 3: Designate an area of Bowers Ridge as HAPC ~~and prohibit bottom trawl gear. mobile fishing gear that contacts the bottom.~~

Motion passed 16/2/1.

SSC Minutes
handout 2-9-05
2:20 pm

DRAFT SSC Comments on C-1 EFH

C-1 EFH

The SSC received reports summarizing three substantive changes made to Essential Fish Habitat including:

- a) a re-evaluation on the effects of fishing contained in Appendix B of the Preliminary Final EIS for Essential Fish Habitat,
- b) a revision of two alternatives for describing and identifying EFH on seamounts, and
- c) analyses of two new options for Aleutian Islands Alternative 5b to minimize effects of fishing on EFH.

Presentations were made by Jon Kurland (NMFS, Juneau), Dan Ito (AFSC), Matt Eagleton (NMFS), and John Olson (NMFS). Dr. Craig Rose (AFSC) presented results from a validation study of the fishing effects model. Ben Entiknap (Alaska Marine Conservation Council), Whit Sheard (Ocean Conservancy), Jon Warrenchuk (Oceana), John Gauvin (Groundfish Forum), and Paul MacGregor (At Sea Processors Association) gave public comment.

The SSC provided extensive comment on EFH issues in its minutes of previous meetings, especially in March, October, and December 2004.

Appendix B Evaluation of Fishing Effects

Substantial revisions and additions were made to the analyses, and evaluations resulting from the fishing effects model. The SSC commends authors and contributors for their responsiveness to our concerns and requests, particularly given the short time frame since completion of SAFE documents in December. Evaluations were greatly expanded to consider habitat effects with respect to distribution, spawning/breeding, growth, condition (weight at length), feeding, and stock trends. Results were not significantly changed and there were no findings of more than minimal and not temporary effects. The number of unknown designations increased by three. **The SSC notes that some evaluations found that fishing effects on habitat might have had detrimental effects on managed species but the analyses were unable to conclude an effect of fishing due to insufficient information (e.g., Atka mackerel, sablefish, Pacific ocean perch, and other rockfish).** In the POP example, the evaluation recognizes that "a reduction in living structure may jeopardize these fishes' ability to grow to maturity" (page B-101). However, analysts note that the extent of the association with sponges is unknown and therefore evaluation for effects on growth to maturity was "unknown." In the case of sablefish, a decreasing trend in biomass and MSY levels is taken as indication that "the level of MSY has been impaired," but it is not possible to distinguish between fishing effects and climate change, and the resulting evaluations of fishing effects on growth and feeding are given as "unknown."

The analysis found no evidence that Council-managed fishing activities have more than minimal and temporary effects on EFH for any FMP species. Yet, the CIE committee and the SSC notes that a significant proportion of the ratings (36%) for fishing effects were classified as "U" or unknown. **Given this result, application of the precautionary approach is warranted, as mentioned in the SSC's October 2004 meeting minutes.**

The SSC suggests that an analysis of fishing effects on EFH would have been more robust if it analyzed probabilities and consequences both Type 1 and Type 2 errors. In simple terms, "Type 1" errors are those in which the null hypothesis (H_0 : No effect) is rejected when, in fact, the null hypothesis is true. In this case, this would mean that we conclude that there are fishing

effects when, in fact, there are actually none. On the other hand, "Type 2" errors are those in which the null hypothesis is accepted when, in fact, it is false. Again, in our case, this means we would have concluded no fishing effects when, in fact, they actually existed.

Regarding the need for precaution, the SSC recommends that corals deserve special mention. Page B-137 of the EFH EIS states that "While few evaluators cited coral as specifically linked to life history function, in some areas it may be an important component of the living structure that is potentially linked to growth to maturity for some of these species. Because of their slow recovery, corals warrant particular consideration for protection ..." The National Research Council committee (NRC 2002) on the effects of trawling and dredging on seafloor habitats also singled out corals as needing special protection from the effects of mobile bottom-contact gear owing to their vulnerability to impact and the millennia that may be required for recovery. **The SSC agrees with these assessments.**

The validation study conducted by Dr. Rose was in response to requests by both the CIE review panel and the SSC, and the SSC commends Dr. Rose for completing this study in a very limited time frame. Conclusions from this effort were that (1) the model is inadequate as a predictor of annual changes in living structures, (2) predictions of long term equilibria are not possible due to the lack of information on the original unfished habitat condition, and (3) nonetheless, the model is still the best available tool for assessing the spatial distribution of relative fishing effects on habitat. As the full report of this work was not yet available, the SSC withholds further comment, except to reiterate our prior comments (October, 2004) encouraging further validation of the long term effects, using, for example, data from other regions, provided that initial habitat condition is known or can be estimated.

Aleutian Islands Alternative 5b Options

Two new options for Alternative 5b for the Aleutian Islands are under consideration, bringing the total options to three for this alternative, which seeks to protect deep-water coral and sponge habitat by restricting non-pelagic trawling to areas that have already been trawled. The three options vary in several respects, including the boundaries for areas to remain open to bottom trawling. **The SSC is concerned that considerable uncertainty remains as to the appropriateness of the boundaries for the 3 options, such that it is not clear if the locations of proposed open areas optimally protect existing coral and sponge habitat.** In the case of options 1 and option 2, proposed by Oceana, the use of haulback endpoints (rather than the actual trawl track locations) may result in considerable error in the identification of fished areas. In the case of option 3, put forth by the fishing industry, confidentiality concerns limit the ability for public review of the trawl location data. Given the need for the Council to select a preferred alternative at this meeting, there appears to be little time for further analysis and boundary development. **The SSC suggests that the final result, if one of these options is selected, could be improved by allowing for flexibility in final designation of open area boundaries, based on future improved mapping of the actual fishing location data.**



Marine Conservation Alliance

promoting sustainable fisheries to feed the world

C-1 handout
Dave Benton
P O Box 20676
Juneau, AK 99802
(907) 523-0731
(907) 523-0732 fax
2-9-05 22pm

- Alyeska Seafoods
- Alaska Driggers Association
- Alaska Groundfish Data Bank
- Alaskan Leader Fisheries
- Alaska Pacific Seafoods
- Aleutian Islands Brown Crab Coalition
- Aleutian Pribilof Island Community Development Association
Akutan, Alka, False Pass, Nelson Lagoon, Nikolski, St. George
- At-Sea Processors Association
- Bristol Bay Economic Development Corp.
Aksnagik, Clark's Point, Ollingham, Egegik, Ekwok, King Salmon, Leveick, Manokotak, Naknek, Pilot Point, Port Heiden, Portage Creek, South Naknek, Topak, Twin Hills, Ugashik
- Central Bering Sea Fishermen's Association
St. Paul
- City of Unalaska
- Coastal Villages Region Fund
Chetanaak, Chewak, Ekik, Goodnews Bay, Hooper Bay, Kipruak, Kongiganak, Kwillingok, Mekoryuk, Napaskiak, Newtok, Nightmute, Oscarville, Platinum, Quinhagak, Scammon Bay, Toksook Bay, Tututuliak, Tununak
- Groundfish Forum
- High Seas Catchers Cooperative
- Icicle Seafoods
- McCarty and Associates
- Mid-Water Trawlers Cooperative
- Mothership Group
PV Excellence
PV Ocean Phoenix
PV Golden Alaska
- North Pacific Fisheries Research Foundation
- North Pacific Longline Association
- North Pacific Scallop Cooperative
- Norton Sound Economic Development Corporation
Brevig Mission, Diomedea, Elim, Gambeli, Golovin, Koyuk, Nome, Saint Michael, Savoonga, Shaktoolik, Sincere, Teller, Unalakleet, Wales, White Mountain
- Pacific Seafood Processors Association
- Prowler Fisheries
- Seafood Cold Storage Association
- Southwest Alaska Municipal Conference
- Trident Seafoods Corp.
- United Catcher Boats
Akutan Catcher Vessel Assoc.
Arctic Enterprise Assoc.
Northern Vector Fleet
Peter Pan Fleet Cooperative
Unalaska Co-op
Unisea Fleet Cooperative
Westward Fleet Cooperative
- U.S. Seafoods
- Western Alaska Fisheries, Inc.
- Yukon Delta Fisheries Development Association
Akanuk, Emmonak, Graying, Kotik, Mountain Village, Nunam Iqia

February 7, 2005

Ms. Stephanie Madsen
North Pacific Fisheries Management Council
605 W 4th Ave
Anchorage, AK 99501-2252

Re: Comments on: The Preliminary Final Environmental Impact Statement on Essential Fish Habitat The Environmental Assessment, Regulatory Impact Review, and Initial Regulatory Flexibility Analysis for Habitat Areas of Particular Concern

Dear Ms. Madsen:

The Marine Conservation Alliance (MCA) is pleased to offer comments on the Essential Fish Habitat (EFH) Preliminary Final Environmental Impact Statement (EIS) and the Environmental Assessment (EA), Regulatory Impact Review, and Initial Regulatory Flexibility Analysis for Habitat Areas of Particular Concern (HAPC). The MCA is a broad-based coalition of coastal communities, fixed and mobile gear fishermen, Community Development Quota groups, vessel owners, processors, support industries and consumers directly and indirectly involved in the Alaska groundfish and shellfish fisheries off Alaska. The coalition members have joined together to support science-based policy that protects the marine environment and promotes long-term sustainability of both fishery resources and the North Pacific fishing community that depends on those resources.

The MCA would like to applaud the Agency for the tremendous amount of work undertaken in effectively responding to the Center for Independent Experts (CIE) review of the effects of fishing model and its use by the EFH analysis. The Alaska Fisheries Science Center has responded to all the major recommendations of the CIE and the SSC and taken a fresh look at the habitat consequences for managed species. After an exhaustive reexamination, the analysts' conclusion remains unchanged: the analysis does not show any impacts of fishing to have more than minimal and more than temporary effects on the habitat of managed species.

The Council's selection of final recommendations to the Secretary of Commerce on Essential Fish Habitat (EFH) and Habitat Areas of Particular Concern (HAPC) is another step in a long history of action to promote conservation of managed species and their habitats. For example, if no further action were taken by the Council at this time, over 103,000 sq. nautical miles would be closed to bottom trawling in the federal

waters off Alaska. This is a vast area, equal to a 100 mile wide band stretching from Mexico to Canada off the West Coast of North America. It covers a wide variety of habitats ranging from shallow sand/mud/cobbles along the Bering Sea nearshore environment to deep water slope and canyons off Southeast Alaska. It includes live bottom and coral habitats, pinnacles, seamounts, rocky shelves and virtually every other habitat type along the Alaska coast. This record is remarkable, and something to be proud of. Yet the Council is not resting on its laurels, and instead has taken a good hard look at what further actions might be warranted to ensure that conservation needs are met.

MCA is providing comments and recommendations on both EFH and HAPC in this document, recognizing that the Council has scheduled these as separate action items. It is important to keep in mind that EFH provisions of the Magnuson Stevens Act control here, and that HAPC are a discretionary subset of EFH. It is MCA's overall position that the extensive work the Council has already done over the years to protect habitat is the underpinning of any further additional work, and that it is entirely within the letter of the law as well as the intent to adopt EFH mitigation alternatives (including the status quo alternative) with a view that additional habitat protections may be more appropriately developed as HAPC due to their focused nature. In fact the analysis strongly suggests that this is the best approach.

As part of these comments, we wish to incorporate for the record our previous comments to the Council and the agency including but not limited to verbal comments submitted during Council deliberations as well as written comments on the Preliminary Draft EIS from October, 2003, and comments on the Draft EIS of April, 2004. Our specific recommendations follow.

The MCA supports the following alternatives for EFH measures:

Action 1: Describe and Identify EFH:

Alternative 3: Revised General Distribution

This is the Council's Preliminary Preferred Alternative,

Action 2: Adopt an Approach for Identifying Habitat Areas of Particular Concern (HAPC)

Alternative 3: Site-based Concept

This is the Council's Preliminary Preferred Alternative

Action 3: Minimize Adverse Effects of Fishing on EFH

For the Gulf of Alaska and the Bering Sea, Alternative 1: Status Quo

This is the Council's Preliminary Preferred Alternative

For the Aleutian Islands only, Alternative 5b, Option 3.

The MCA supports the following alternatives for the designation of HAPC's:

Action 1: Seamounts

Alternative 3: Designate 16 named seamounts in the EEZ off Alaska and prohibit all bottom contact fishing by Council-managed fisheries on these seamounts.

Action 2: Gulf of Alaska Corals

Alternative 2, Option 2: Designate three sites along the continental slope in the vicinity of Sanak Island, Albatross and Middleton Island as HAPC, and prohibit all bottom trawling within these areas for five years. During these five years, these sites would be prioritized for undersea mapping. Areas found to have high-relief coral would stay closed to bottom trawling and the remaining areas would be reopened.

Action 3: Aleutian Island Corals.

MCA supports Alternative 2 (with closure to bottom trawl gear only), Alternative 3, and Alternative 4 Option 2.

GENERAL COMMENTS

EFH EIS Process

The NMFS and Council should be commended for the thorough evaluation and extensive analyses that have been undertaken throughout the development of this EIS. The Council and NMFS have received extensive public input and scientific review from NMFS' habitat and fish population assessment experts, the Council's Science and Statistical Committee, the Center for Independent Experts (CIE) as well as scientists and experts engaged by the public to review and provide comments on the analyses. As the EIS developed, NMFS and the Council have been very responsive to addressing issues and concerns raised in these comments. In the final EIS document, NMFS provides a detailed and cogent response to the technical and scientific issues raised in the CIE review. The agency should be commended for all the work that went into their thorough evaluation and concise response to these issues. This has resulted in a greatly improved analysis evaluating the effects of fishing on EFH (Appendix B).

Additionally, since the Council's first consideration of EFH mitigation alternatives, additional analysis of sub-alternatives for the original Aleutian Islands "open area" 5b coral protections alternative has been conducted. Again, the Council has gone the extra mile to allow for alternatives to be revised and new information to be incorporated. It is clear to us that few if any fishery management decisions have been subjected to such an impressive degree of analysis and public process as occurred for the current EFH action.

Purpose and Need Statement

The purpose and need for the action is expressed in the Problem Statement adopted by the Council in December 2002, which states the Council intends to take action under the MSA to protect the productivity of Fishery Management Plan (FMP) species by considering possible measures to reduce any adverse effects of fishing on habitat essential to those FMP species. In compliance with the EFH provisions of the MSA, the EIS analyzes a broad suite of alternative mitigation measures to determine both their efficacy in protecting EFH and their practicability for the affected fishing industry. The regulations require the Council to look at long-term and short-term costs and benefits of mitigation measures to EFH, fisheries, and the nation. 50 CFR

600.815(a)(2)(iii). The MSA and the regulations direct the Council to analyze potential benefits in the context of the productivity of the FMP managed species.

Range of Alternatives

The MCA believes the range of alternatives clearly meets NEPA requirements. The Council and the Agency have taken extraordinary steps to consider and develop a reasonable set of alternatives for analysis in the EIS. The list of alternatives has been revised and new alternatives incorporated several times during the course of this process. The Council's EFH Committee met many times to build and review alternatives, and the public has had numerous opportunities to recommend additional alternatives. The authors list eleven alternatives that were considered but rejected either because they were subsumed in the current active alternatives, were inconsistent with the legal requirements of the MSA, or were not practicable.

The EFH provisions of the MSA require councils to engage in a multi-step process in determining whether or not to implement mitigation measures to protect EFH. The first of those steps is to identify EFH for the managed species under a council's jurisdiction. The second step is to determine whether or not fishing activities are adversely affecting such habitat and the productivity of managed species dependent on that habitat (i.e., if fishing activities are having EFH impacts that are more than minimal and more than temporary). If it is determined that fishing activities are adversely affecting such habitat, the final steps in the EFH process involve the development and implementation of management measures designed to mitigate such impacts "to the extent practicable."

The EIS identifies a definition of EFH, then determines that none of the fishing activities in the North Pacific groundfish fisheries has more than minimal and more than temporary impacts on the identified habitat. The EIS finds that based upon the best available scientific information, existing habitat conservation measures appear sufficient to sustain FMP stocks at present abundance levels.

SPECIFIC COMMENTS REGARDING THE EFH ALTERNATIVES

The MCA Supports Alternative 3, Revised General Distribution for Action 1: Describe and Identify EFH

The MCA believes the analysis in the EIS presents a strong case for this alternative as a reasonable approach to identifying and designating EFH, with the addition of certain seamounts to be designated as EFH. MCA supports designation of these seamounts as EFH in order to facilitate them also being designated as HAPCs, with mitigation measures adopted through the HAPC process as appropriate.

The MCA Supports Alternative 3, Site Based Concept, for Action 2: Adopt an Approach for Identifying HAPCs

The MCA supports Alternative 3 to describe approaches to identify HAPCs. This alternative permits the Council to select specific sites within EFH as HAPC to address a particular problem. This alternative allows the Council to focus conservation measures on more specific locations, and to mitigate for specified impacts.

For Action 3: Alternatives to Minimize the Adverse Effects of Fishing on EFH, the MCA supports Alternative 1, Status Quo, for the Gulf of Alaska and the Bering Sea

The MCA believes the analysis strongly supports this alternative for the Gulf of Alaska and the Bering Sea. The choice of Alternative 1 should not be interpreted to mean the Council and the Agency are ignoring habitat concerns. To the contrary, these findings recognize significant actions taken by the Council to protect habitat, address ecosystem considerations, and promote the continued sustainability of managed species. And, while these actions have come at a price to industry in terms of lost fishing grounds or closures of fisheries, they have also been a key component of one of the most successful fishery management regimes in the nation. These measures have been largely in the Bering Sea and the Gulf of Alaska.

An important insight into the status of actions the Council has already taken come from the Ocean Studies Board of the National Academy of Science (NAS) and the findings they made in their report "Effects of Trawling and Dredging on Seafloor Habitat." The report notes several very important characteristics of the Alaska bottom trawl fisheries, relative to fishing effort. Bottom trawling occurs on less than half of the Alaska shelf. Of the areas fished, the intensity of bottom trawling is relatively low. Total bottom trawling (measured in number of tows) has declined significantly (over 30% for each of the regions) off Alaska during the 1990s.

The NAS report recommended that management of the effects of trawling and dredging should be tailored to the specific requirements of the habitat and the fishery through a balanced combination of the following management tools: 1) fishing effort reduction, 2) modification of gear design and gear type, and 3) establishment of areas closed to fishing. All of these tools have been well utilized in the Bering Sea and Gulf of Alaska.

The analysis at Table ES-9 shows that both the Bering Sea/Aleutian Islands (BSAI) and Gulf of Alaska (GOA) already have extensive areas closed to bottom trawling totaling more than 103,000 sq. nautical miles. These closures cover virtually every habitat type in the EEZ off Alaska. Although these closures were developed and implemented for a variety of reasons prior to EFH, they encompass a vast area of diverse habitats that are already receiving protection. The benefits of these closures remain largely unstudied. Some of these areas were not specifically designed to mitigate effects of fishing on EFH but they undoubtedly serve this purpose. The analysis summarizes this clearly in Section 4.5.3.1.1 in the comparison of the status quo to pre-status quo conditions:

"No area would be closed to bottom trawling. Trawling and scallop dredging would occur in areas essential for king crab settlement and survival, especially in the Bristol Bay,

Pribilof Islands, Cook Inlet and Kodiak areas. The effects on habitat in Southeast Alaska would increase without trawl restrictions. Trawl fishing effort, particularly for pollock and flatfish, would be substantially higher (30 percent or more) in the absence of Council imposed OY limits and PSC closures. Fisheries would become more temporally concentrated as effort increased due to higher catch limits, roe stripping of pollock, lack of permit limitation or rationalization programs, and absence of bycatch closures. Without IR/IU limitations for pollock and Pacific cod, wasteful underutilization of these economically important resources would occur, with substantially greater discharges of offal and economic discards. As was the case with roe stripping, this practice could result in eutrophication of EFH in some areas. Without gear restrictions, more bottom contact would occur in the pollock trawl fisheries.”

The analysis goes on to say that under the status quo alternative (Alternative 1):

“existing fishery management measures that control the effects of fishing on habitat (trawl closure areas, effort limits and rationalization programs, catch limits, and gear restrictions) would remain unchanged. Fisheries would continue to affect fish habitat, but not in a manner that has substantial impact on EFH, prey species, habitat complexity, or habitat biodiversity. The long term effects would remain low overall across available habitat types and features, although effects would not be evenly distributed.”

The fishing effects analysis in Appendix B found that there were no adverse impacts that were more than minimal and more than temporary. The analysis states that based on the best available information “continued fishing at the current rate and intensity would not affect the capacity of EFH to support the life history processes of any species.”

However, the analysis shows that there are significant costs associated with the Alternatives, with little commensurate benefits.

For example, the slope area of the GOA comprises mainly a mixture of soft and rocky substrates with very little coral or sponge. If a closure were imposed, it would concentrate effort in very small areas that would remain open for bottom trawling off the slope. Both Northern rockfish and pelagic shelf rockfish quota would be forgone since there has been very little success with pelagic trawl gear. For Pacific Ocean Perch as much as 20% of the quota has been harvested with pelagic gear in areas where fish tend to school off bottom. Concentrating catch in substantially confined areas or zones, off shelf and areas of the shelf where fish are off bottom, could be potentially harmful to rockfish stocks since they tend to have variable distribution and include sub-populations within the overall rockfish stock population structure.

Yet the costs are very real. The EFH alternatives for the Gulf of Alaska that would close the entire Central Western GOA slope to bottom trawling for rockfish would cripple the GOA slope trawl rockfish fishery. If the entire area were closed to bottom trawling, a substantial amount of rockfish quota would remain unharvested creating an economic impact to vessels, processors and communities for this portion of their fishery economic portfolio. This could also have a significant economic impact on other fisheries in many GOA communities where groundfish harvesting and processing provide a key component to the overall economic picture.

For example, loss of groundfish opportunities could have a significant impact on salmon and herring harvesters and processors that depend on groundfish to make up a major part of their overall economic portfolio.

The same concerns arise for the Bering Sea. The Bering Sea is highly regulated with over 30,000 sq nautical miles already closed on an annual basis to bottom trawling. Additional closures exist on a seasonal basis. The EFH Alternatives go far beyond this with little benefit to habitat (as shown in App. B) but with substantial costs. Both Alternatives 4 and 5 propose the same approach which would prohibit the use of bottom trawls for all groundfish fisheries except within designated "open areas," based on historic effort. Within the open area, there would be rotating closures to bottom trawl gear in five areas to the west, north, and northwest of the Pribilof Islands. Each of the five areas would be divided into four blocks, and one block in each area would be closed for 10 years in Alt. 4 and 5 years in Alt 5. After the closed area reopened, a different block would close, and so forth. In addition, bottom trawls used in the remaining open areas would be required to have sweeps and footropes equipped with disk and bobbins to reduce contact area with the bottom.

The EIS analysis concludes, with the exception of some speculation about potential benefits to snow crabs, that in the BS the large closures proposed under alternatives 4 and 5 would provide little or no benefit to habitat or managed species. Only Alternative 6 would provide "moderately positive" effects on habitat. The analysis concluded there would be little or no benefit gained by implementing EFH mitigation measures in the BS except in sweeping proposals such as Alternative 6 which would close an additional 20% of BS fishing grounds, would put at risk \$237 million in gross revenues and would negatively impact coastal fishing communities. Most importantly, the fishing effects analysis again determined that there are no effects that are more than minimal.

Based on a finding that there are no adverse impacts caused by fishing that are more than minimal, that these proposed closed areas offer little or no benefit to habitat or managed species, that the habitat is largely sand and mud (a habitat type that is already protected in large quantity under existing closures), and that the species are highly migratory, imposition of either the closed area or the rotational area seems unreasonable rather than precautionary.

Clearly, given the results of the analysis for both the BS and the GOA, the need for additional mitigation measures to minimize the effects of fishing on EFH needs to be in response to a documented and clearly defined problem and supported by scientific analysis that shows that the mitigation contemplated will address this problem in a practicable manner. We strongly believe that the analysis shows that for the Bering Sea portion of the BSAI, and the GOA, there is no clearly identified conservation need, but there are clearly identified substantial costs to the fisheries and coastal communities. Therefore the contemplated additional EFH mitigation measures fail both the "need for additional conservation" test and the "practicability" test. That does not mean in our view that nothing further should be considered to protect habitat in these areas. Rather, we believe that this underscores the Council's approach of using HAPC to address specific conservation issues in discrete geographic locales in these management areas.

However, the relative strength of the effects of fishing model scores for coral, and comments by scientists and the public indicate that there is a particular concern for the long-lived and vulnerable corals in the Aleutian Islands. Elevating the protection level for this habitat feature, the environmental community and the AI trawl industry have both proposed special measures for preserving a number of unique and relatively undisturbed coral gardens of the Aleutian Islands. So, in the case of the Aleutian Islands, MCA believes that additional EFH mitigation measures may be warranted.

For Action 3: Alternatives to Minimize the Adverse Effects of Fishing on EFH, the MCA supports Alternative 5b, Option 3, for the Aleutian Islands

The Aleutian Islands (AI) represents a very unique case for a different approach to habitat protection and fishery management. Given its apparent high coral abundance and diversity, highly repetitive fishing patterns, and extensive areas that have not been trawled the AI stands out as an area that should be considered separately from the BS and GOA. The AI is quite distinct from the Bering Sea and Gulf of Alaska where a much larger fraction of the area is trawlable and fish abundance ranges widely over the relatively broad shelf and slope edge. Fish abundance and distribution in the Bering Sea and Gulf of Alaska appears to respond more to swings in temperature and feed distribution over the shelf and slope. The major species migrate over wide areas. In the AI target species have tended to occur in the same areas with consistency, probably in response to consistent patterns in feed abundance via the currents between the rocky passes and shelf upwelling. While we strongly support status quo on EFH measures for the Bering Sea and Gulf of Alaska, we feel a different approach for the Aleutian Islands is merited because the case for additional protection of un-impacted areas with fragile deep-water coral habitats in the Aleutian Islands was the most important finding of the EFH model.

5b Open Area component:

One of the most important steps the Council has taken in the development of the EFH EIS has been to establish a process to refine the 5b Alternative using a variety of data sources. The Council allowed the original proponents several opportunities to refine and adjust their approach, and also allowed knowledgeable industry leaders to provide information to supplement and ground truth the observer data used in developing the 5b Alternative. This has resulted in a much-improved sub-alternative for protection of long-lived and vulnerable coral habitat in the Aleutian Islands. The result is 5b Option 3 under the EFH fishing effects minimization alternatives for the Aleutian Islands.

Option 3 for AI 5b captures the original habitat protection intent for Alternative 5b: restricting non-pelagic trawling in the Aleutian Islands to the areas that have already been trawled. However, as this process has unfolded we have learned that there are problems in the database used to map out the open/closed areas under the 5b Alternative. As the Council has seen from the presentations by NMFS' GIS experts, haulback position data from observed tows is problematic for determining where fishing actually occurred. Option 3 of Alternative 5b utilizes trawl tow track and logbook information to supplement and ground truth this data in order to better delineate the open area where fishing has historically occurred. We believe that the Council should consider all the data, and rely on what is obviously the best available data for

accurately delineating the historically fished area. Doing so maintains the original intent of the Alternative, and avoids incorporating unfished areas into the open area as well as unnecessary economic impacts that Alternative 5b could create through its omission of important historically fished areas.

The Council will hear that the open/closed areas should be derived from the "official" (NMFS observed haulback) data. However, the MSA and NEPA require the Council to consider public comment and information from fishery participants as well as "official" data in making its decision. There is no magic in understanding why this is the case. As has been the case on numerous occasions, fishery participants have detailed and specialized information because of their near constant presence on the water and in the operations of the fishery. Management agencies and the Council have often relied upon this specialized knowledge when considering management measures. In this case it is clear that the observer program was not established to provide data to support this kind of analysis. The fleet data provided by knowledgeable industry participants is an important source of information that the Council must consider. Failure to do so would in itself be a violation of MSA and NEPA requirements. This is also consistent with the October 21, 2002 letter to the Council from Oceana which stated that the open area would reflect the historically fished areas and that, "These areas would be specific tows recommended by fishing interests and/or areas where NMFS data shows historically high fishing effort...".

In addition to our recommendation to adopt AI 5b Option 3 open area in its entirety, we likewise strongly encourage the Council to adopt the sub-option for a sunset to the regulations that restrict bottom trawling to the open area if mapping and other research to assess the overlap of fishing with coral and sponge abundance is not accomplished. Without this provision, little incentive will exist to undertake important habitat mapping and we predict that once the time has expired, we will be resuming what is essentially an uninformed debate on how trawling affects the overall extent of coral habitat in the Aleutian Islands. The sunset will ensure that all parties strongly support needed research.

MCA also supports the use of Experimental Fishing Permits and other such instruments to evaluate areas outside the initial open area in Option 3 of AI 5b. Research and mapping should be used to evaluate whether re-opening specific parts of the closed area would negatively affect the coral protection objectives of this measure. There simply must be a mechanism to allow access to the closed area because it is possible that the proportion of the target species in the open area may shift due to changes in environmental conditions.

SPECIFIC COMMENTS REGARDING THE HAPC ALTERNATIVES

For Action 1: Seamounts, the MCA supports Alternative 3, the designation of 16 named seamounts as HAPC, and the prohibition of all bottom contact fishing on these seamounts by Council-managed fisheries.

Seamounts are believed to be equivalent to biological islands in the deep sea, and often feature characteristic fauna that are different from those found in the surrounding soft sediment and abyssal habitat. These unique habitats provide stepping-stones for migratory fish, and rearing habitats for juvenile life stages, and thus may constitute unique ecosystems. Alternative 2

proposes to designate five seamounts as HAPC, the five named seamounts that have been examined and partially catalogued by researchers. However, even though the other named seamounts have not yet been researched, MCA believes they are likely as important as the five better-known features. In the interest of protecting the unique qualities of these habitats, MCA recommends all 16 seamounts be designated as HAPC.

For Action 2, GOA Corals, the MCA supports Alternative 2, Option 2, three sites closed to bottom trawling.

MCA supports using the HAPC process to identify discrete sites deserving special consideration for habitat protection and believes that this is the best approach and most practicable way to protect EFH. The Alaska Groundfish Data Bank and two other bottom trawl dependent fishing associations submitted three areas for the Council to consider as possible HAPCs in the GOA. These closures would be bottom trawl closures in designated areas of the slope that have met the Council HAPC priority and would be used as research areas to study the issue of EFH and FMP species productivity, as well as potential impacts of fishing.

In our view, the Council's decision to use HAPCs to protect discrete habitat sites of high vulnerability and relative importance is the best approach and most practicable way to protect EFH. During the development of the EFH alternatives to minimize impacts of fishing, a set of 11 closure areas for non-pelagic trawling for rockfish were identified. These areas are "rough bottom" lightly fished areas. Once the Council HAPC priorities of rockfish habitat and presence of corals were applied, only three of the original proposed closure areas were identified as good candidates for protection. Under the HAPC process, fishermen's experience and available scientific data were used to identify the subset of sites where there was evidence of benefits to rockfish populations and coral habitat. This was far better information than the EFH committee's imprecise identifications of "rough bottom" areas used to designate the 11 rockfish closure zones in the EFH alternatives.

For Action 3, AI Corals.

MCA supports Alternative 2, the six coral gardens with closure to bottom trawl gear only; Alternative 3, Bowers Ridge as written; and the four sites in Alternative 4 with the 5 year closure in Option 2. These are all responsive to the Council's RFP, and provide added protection and attention to these coral areas. Moreover, they encourage increased research in this region on the extent of coral habitats as well as the efficacy of these specific measures. However, the Council should note that if Alternative 5b Option 3 is adopted then many of these areas are covered under those closures as well.

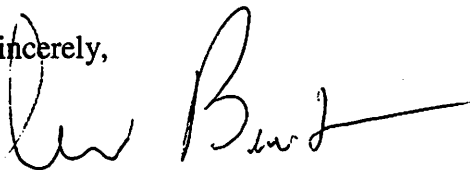
Conclusion

In conclusion, MCA would like to reiterate that this process began almost a decade ago with the passage of the Sustainable Fisheries Act. The Council was in the process of developing habitat protection measures at the time, but that work was put on hold by the *AOC v Daly* lawsuit. Since that time, the Council has been working to address the NEPA issues associated

with EFH, including making great efforts to accommodate the plaintiffs in that litigation. The Council has gone the extra mile to make sure that this has been an open, transparent process with extensive opportunities for public comment. In addition the Council and the agency have worked hard to ensure that the analysis is one of the most robust and rigorous scientific analyses ever to come before the Council. You are to be commended.

Thank you for this opportunity to comment.

Sincerely,

A handwritten signature in black ink, appearing to read "David Benton". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

David Benton
Executive Director
Marine Conservation Alliance

Jon Tillinghast
Pub. Test. handout
2-10-05 825am

**Statement of the Board of Forestry on Revised Appendix G to the Environmental Impact
Statement on Essential Fish Habitat**

Adopted by Consensus February 8, 2005

- The Alaska Board of Forestry appreciates the updated scientific information that the National Marine Fisheries Service has included in its revised Appendix G to the draft Environmental Impact Statement (“EIS”) for the Essential Fish Habitat (“EFH”) program in Alaska;
- Appendix G still fails to give adequate recognition to the Alaska Forest Resources and Practices Act (“FRPA”) as a comprehensive, effective and sufficient regulatory program for protecting upland fish habitat on non-federal land from the possible impacts of silvicultural activities;
- The Board of Forestry therefore respectfully urges the North Pacific Fishery Management Council to not approve Appendix G to the EIS unless the following additional changes are made:
 1. Silvicultural conservation recommendations should unambiguously state that compliance with the standards of the FRPA’s best management practices (“BMPs”) is sufficient to protect upland fish habitat on non-federal land. Scientific review during development and monitoring of the FRPA has identified no scientific support for the conclusion that additional BMPs, above-and-beyond the requirements under the FRPA, are necessary to protect upland fish habitat on non-federal land; and
 2. Appendix G’s description of the environmental impacts of log transfer facilities (“LTFs”) continues to erroneously allege that bark accumulations from LTFs have an adverse effect on Council-managed fisheries. No scientific study has ever documented an such adverse effect, and the Tetra Tech study accompanying the federal general LTF permits stated that the conditions of those permits “should minimize the potential for adverse impacts to commercial fisheries.” Scientifically-unsupportable allegations of harm to fisheries from LTFs in Appendix G should be deleted.

December 1, 2004

Ms. Stephanie Madsen, Chairman
North Pacific Fishery Management Council
605 West 4th Ave.
Anchorage, AK 99501
FAX: 907-271-2817

RE: Aleutian Island Trawl Industry's AI 5b proposal

Dear Madame Chair:

On November 10th, 2004, I forwarded an electronic chart to NMFS indicating the fishing areas that Aleutian Islands trawlers feel should be included in their version of an AI 5b "open area" alternative. The chart includes the areas where non-pelagic trawling has occurred extensively based fishermen's plotter records and in some cases vessel logbook data. While I had hoped that the historically fished areas could be more precisely delineated in the chart I put together, as you will see below I encountered numerous difficulties putting this information together in an efficient manner.

A primary problem in this endeavor was the inherent challenge of matching tow track data (with varying levels of spatial resolution) to catch records stored in various formats at fishing company offices and on vessels. I also experienced technical issues such as incompatible plotter formats, plotter programs with varying capabilities for spatial resolution, different levels of accessibility of logbook and plotter data between vessels, and varying levels of in-house technical capabilities with plotting or record keeping software and filing systems. Below I elaborate on these issues to help the Council understand the nature of the information I used, the process I undertook to compile this information, and the judgment calls that I sometimes had to make. These judgments involved deciding whether an area represented a historically important fishing area when a precise assignment of catch to a specific area was not possible or when data gaps were encountered.

The task:

As you will recall, my project was to compile confidential tow track and paper logbook information to address problems with the NMFS' charts indicating open areas based on haulback positions for observer catch records. Upon seeing NMFS' charts in October, Aleutian Islands trawlers felt there were the obvious shortcomings in NMFS' charts indicating spatial blocks meeting the 200 ton cumulative catch threshold. From the outset, it is important to keep in mind that the same method of assigning catch based on haulback positions was used to fashion Oceana's 5b proposals as well.

At the Sitka meeting, Dave Fraser and I received considerable feedback from skippers who examined the charts representing the suite of AI 5b open area proposals. Upon seeing the charts depicting areas that would remain open under Oceana's "modified" 5b proposal (which was supposedly attempting to better define where trawlers fish), skippers continued to have major concerns that Oceana's new and old 5b proposals would still drastically reduce their fishing areas and their ability to prosecute trawl fisheries in

the Aleutian chain. What was a bigger surprise, however, was that NMFS' charts depicting the trawl industry's 5b proposal had overlooked large portions of fishing areas as well.

As was obvious from the industry plotter data we showed to the Council in October, numerous, and in some cases expansive, fished areas were not incorporated into the open blocks. As NMFS' analysts reported to the Council, those charts were based on haulback positions alone because for most of the period of interest, NMFS haul-by-haul data includes only the haulback positions. For the recent years where trawl start positions are included in NMFS' NORPAC database, it was clear from NMFS' presentation that many hauls are not contained within the set of qualifying 6-by-6 minute blocks in NMFS' charts. NMFS also presented some examples of recent tows for which the agency has both haulback and start point positions. This showed some impossibly long tows indicating that not all of the start or end position data in the NORPAC database are accurate. Hence, it was clear that the official data are not necessarily the best available data for the purpose of defining a legitimate set of open areas.

To remedy this situation, the Council asked the AI trawl industry to compile available plotter tracks and logbook information and essentially revise its open area sub-alternative under AI 5b. Toward this end and with respect to the available time, I did my best to compile the information while respecting the industry's concern over the confidentiality of their tow tracks and fishing locations from haul by haul position data in logbooks. To address confidentiality concerns, I had to visit separately with skippers from different companies because they were not comfortable with reviewing their tow track and logbook information in front of their competitors.

AI trawl industry' proposed open area:

The chart I sent to NMFS essentially started with NMFS' October 2004 200-ton qualified blocks chart indicating the qualifying "open areas" based on 6-by-6 minute spatial blocks with more than 200 tons of non-pelagic trawl catch from 1991-2003. To those qualifying blocks, areas were added where I felt there was considerable trawling activity and catch during the period of interest. In some cases, the additions to the open area were generated from confidential industry tow track data. In other cases, the added areas were based on individual vessel logbook information reflecting start and end points of tows for fishing activities from 1991-2003. In those cases, the spatial resolution of the data was considerably lower thus making it impossible to add portions of 6 x 6 blocks or diagonal portions of blocks along bathymetric lines.

While it would have been preferable to start with a blank chart and overlay everyone's tow tracks to create the most precise and efficient common fished area, this was simply not possible given what I had to work with. Simply put, not everyone has their plotter data, there are actually several formats of plotters and different technical capabilities for spatial resolution, not to mention a long list of other issues affecting the ability to reach back into fishing history when some plotters used well into the late 1990s did not even allow for archiving of more than a few hundred positions.

The use of logbook records of haulbacks and set positions also has limitations. In the Aleutian Islands, fishing follows complex bathymetry and fishing almost never occurs in straight lines, yet straight lines are assumed by connecting start and end points. Additionally, latitude and longitude positions are rounded off to the nearest minute in the NORPAC data NMFS used to assign catches to qualifying blocks.

After re-assessing the workload roughly one week into this exercise, I decided that I needed to be practical and start with NMFS' charts of the existing 200-ton qualifying blocks. From there, I asked skippers to identify areas that they fished that were not included on the 200 ton qualifying block charts based on their plotter and/or logbook data. I also asked them to identify any 200-ton qualified blocks that are simply not

areas they fished. Some such areas were identified in the process and thus dropped from the industry's "open area".

Next, I visited with skippers individually to see their tow tracks and logbook information used for the areas they added to the 200-ton block charts. Once I was satisfied that the added areas were based on significant and verifiable fishing effort that likely met the Council's 200 ton threshold, I checked off the areas to be added to the master chart. For the Council's information, I have included on the last page of this letter the list of vessels for which I reviewed plotter or logbook data.

Given that tow track data does not report how much was caught and logbook information does not reveal the actual towing path, judgment calls were unfortunately necessary in some cases. The rule of thumb I used was that if a vessel or set of vessels repeatedly towed an area, it was extremely likely that the cumulative catch exceeded 200 tons, so I looked to the logbook information for verification where possible. In the case that the fishing occurred directly adjacent to 200-ton qualified blocks, the determination to include these areas was rather straightforward given that they were essentially part of the effort that comprised the fishing associated with the qualified blocks. However, in the cases where the fishing occurred with no proximate or adjacent qualified blocks on NMFS' original 200-ton charts, my determination of whether to include the area relied on the relative amount of fishing from the tow tracks and the degree to which haulback and start position data from the logbooks corresponded to the tow tracks. It is important to keep this in mind as the Council considers the proposed open area I put together for the AI trawl industry proposal.

To evaluate some of the more enigmatic areas where considerable fishing has apparently occurred from the tow track information but no qualifying blocks were found in NMFS' 200-ton qualifying block charts, we had a meeting on November 22nd with NMFS' Alaska Region GIS specialist and representatives of the NMFS Observer Division. The Observer Division is currently evaluating some examples of catch records supplied by skippers and we are working with the Observer Division to hopefully resolve some of these discrepancies. For vessels with less than 100 percent observer coverage, gaps in catch records on a spatially specific basis are not unexpected. For 100 percent coverage vessels, however, we are interested in seeing whether catch records in some cases may have been assigned to the incorrect locations or have been otherwise misclassified in the industry's records or NMFS' database.

From my perspective, I agreed to undertake this plotter and logbook data exercise to make the industry's AI 5b sub-alternative as spatially reflective of the historically trawled area as possible. The Council will likely want to verify the information used to craft our proposed non-pelagic trawl open area, therefore all of the industry parties involved in this process have agreed to make their information available for verification in an appropriate venue and process. However, they feel this should occur without compromising the confidentiality of the tow track and logbook catch position data. One possible model that we discussed could be for the Council to set up a review process whereby skippers or company representatives show their plotter and logbook data to NMFS' analysts or some sort of committee of NMFS officials, Council staff, or even possibly Council members as the Council sees fit.

Lastly, I would like to once again thank the Council for the opportunity it provided October for us to attempt to use industry's plotter and logbook data to address the problems with NMFS' charts depicting the open area for the AI industry's 5b proposal. Our original intent in stepping forward with an industry proposal was to use the basic idea that Oceana had put forward of keeping AI trawl fisheries to historically fished areas while research and mapping of corals and sponges in the Aleutian Islands takes place over the coming years. For this reason, I feel the AI trawl industry supports this basic concept of an open area for the Aleutian Islands. This support, however, is contingent upon whether the area remaining open to non-

pelagic trawling actually reflects where trawlers fish. Additionally, our support for an open area proposal does not extend to the proposed TAC reductions, coral and sponge bycatch caps, and other bells and whistles that would reduce the open area.

We hope the information we have provided is useful to the Council's consideration of the trawl industry's AI 5b sub-alternative. We certainly recognize the unique nature of the information we have used to delineate our proposed open area and we look forward to working with the Council to undertake a reasonable verification process for this information.

Sincerely,



John Gauvin

(on behalf of Groundfish Forum and all AI non-pelagic trawlers)

List of vessels for which plotter and/or logbook data were used for delineating this AI trawl industry proposal for an "open area":

Ocean Storm; Muir Milach; Tracy Anne; Katy Anne; Alaska Ranger; Alaska Spirit; Sea Freeze Alaska; Ocean Peace; Seafisher; Alaska Voyager; Alaska Juris; Unimak Enterprise; American #1; U.S. Enterprise; Alaska Warrior



UNITED STATES DEPARTMENT
 National Oceanic and Atmospheric Administration
 National Marine Fisheries Service
 P.O. Box 21668
 Juneau, Alaska 99802-1668

*Jason Brune referred to
 this letter in
 his testimony*
 AGENDA C-4
 Supplemental
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N.P.F.M.C.

Stephanie Madsen, Chair
 North Pacific Fishery Management Council
 605 W 4th Avenue, Suite 306
 Anchorage, Alaska 99501-2252

Dear Ms. Madsen:

Per the Council's request, enclosed please find a brief issue paper regarding the discussion in the Essential Fish Habitat Environmental Impact Statement (EFH EIS) of activities other than fishing that may adversely affect EFH. The National Marine Fisheries Service is continuing to revise the EIS in response to public comments in anticipation of final Council action at the February 2005 meeting.

Sincerely,

For James W. Balsiger
 Administrator, Alaska Region

Enclosure

Attn: Jason



Background Information on the Discussion of Non-Fishing Threats to EFH in the Environmental Impact Statement for EFH Identification and Conservation in Alaska

Prepared for the North Pacific Fishery Management Council
by the National Marine Fisheries Service, Alaska Region
November 30, 2004

Legislative and Regulatory Background

In 1996 Congress added new habitat conservation provisions to the Magnuson-Stevens Fishery Conservation and Management Act. Section 303(a)(7) of the amended Magnuson-Stevens Act required that every fishery management plan (FMP) describe and identify Essential Fish Habitat¹ (EFH) for federally managed species, minimize to the extent practicable the adverse effects of fishing on EFH, and identify other actions to encourage the conservation and enhancement of EFH. The 1996 amendments to the Magnuson-Stevens Act also directed the Secretary to develop by regulation guidelines to assist the Fishery Management Councils in developing the EFH components of FMPs. The National Marine Fisheries Service (NMFS) issued an interim final rule with such guidelines in 1997 and a final rule in 2002.

The EFH regulations at 50 CFR 600.815(a)(4) specify that "FMPs must identify activities other than fishing that may adversely affect EFH" and "For each activity, the FMP should describe known and potential adverse effects to EFH." The regulations also specify that "FMPs must identify actions to encourage the conservation and enhancement of EFH, including recommended options to avoid, minimize, or compensate for the adverse effects identified... especially in habitat areas of particular concern" (50 CFR 600.815(a)(6)).

In addition, Section 305(b) of the Magnuson-Stevens Act requires federal agencies to consult with the Secretary regarding all actions or proposed actions permitted, funded, or undertaken by the agency that may adversely affect² EFH. The EFH regulations establish procedures for EFH coordination, consultations, and recommendations regarding such actions, including non-fishing activities (50 CFR Part 600, Subpart K).

When it added the EFH provisions to the Magnuson-Stevens Act, Congress found that "One of the greatest long-term threats to the viability of commercial and recreational fisheries is the continuing loss of marine, estuarine, and other aquatic habitats. Habitat considerations

1 EFH means "those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity." "Waters" include aquatic areas and their associated physical, chemical, and biological properties. "Substrate" includes sediment underlying the waters. "Necessary" means the habitat required to support a sustainable fishery and the managed species' contribution to a healthy ecosystem. "Spawning, breeding, feeding, or growth to maturity" covers all habitat types utilized by a species throughout its life cycle. (50 CFR 600.10)

2 Adverse effect means any impact that reduces the quality and/or quantity of EFH. Adverse effects may include direct or indirect physical, chemical, or biological alterations of the waters or substrate and loss of, or injury to, benthic organisms, prey species, and their habitat, as well as and other ecosystem components. Adverse effects may be site-specific or habitat-wide impacts, including individual, cumulative, or synergistic consequences of actions. (50 CFR 600.910(a))

should receive increased attention for the conservation and management of fishery resources of the United States” (16 U.S.C. 1801(a)(9)). Congress also stated that a purpose of the amended Magnuson-Stevens Act is “to promote the protection of essential fish habitat in the review of projects conducted under Federal permits, licenses, or other authorities that affect or have the potential to affect such habitat” (16 U.S.C 1801(b)(7)).

Implementation Background

To address the new EFH requirements, the Council amended its five FMPs in 1998. The Secretary, acting through NMFS, approved the Council’s EFH FMP amendments in January 1999. In the spring of 1999, a coalition of seven environmental groups and two fishermen’s associations filed suit in the United States District Court for the District of Columbia to challenge NMFS’ approval of EFH FMP amendments prepared by the Gulf of Mexico, Caribbean, New England, North Pacific, and Pacific Fishery Management Councils (*American Oceans Campaign [AOC] et al. v. Daley et al.*, Civil Action No. 99-982-GK). The focus of the *AOC v. Daley* litigation was whether NMFS and the Council had adequately evaluated the effects of fishing on EFH and taken appropriate measures to mitigate adverse effects. In September 2000, the court upheld NMFS’ approval of the EFH amendments under the Magnuson-Stevens Act, but ruled that the environmental assessments (EAs) prepared for the amendments violated the National Environmental Policy Act (NEPA). The court ordered NMFS to complete new and thorough NEPA analyses for each EFH amendment in question.

NMFS issued a draft Environmental Impact Statement (EIS) in January 2004 as required by the court order. The EIS reexamines the effects of fishing on EFH, presents a wider range of alternatives, and provides a more thorough analysis of potential impacts than the EA approved in 1999. The court did not limit its criticism of the 1999 EA solely to the section that considered the effects of fishing on EFH, so the EIS also reexamines options for identifying EFH and identifying activities other than fishing that may adversely affect EFH.

Purpose of Appendix G to the EFH EIS

Appendix G to the EFH EIS fulfills the requirement to describe non-fishing activities that may have adverse effects on EFH and identify actions to encourage the conservation and enhancement of EFH. Non-fishing activities can adversely affect the quantity or quality of EFH for species managed by the Council. Such activities may include dredging, filling, discharges, and actions that contribute to nonpoint source pollution. Appendix G provides an introductory description of each activity, identifies potential adverse impacts, and suggests general conservation measures that would help minimize and avoid adverse effects of non-fishing activities on EFH.

Non-fishing activities are subject to a variety of regulations and restrictions under federal, state, and local laws designed to limit environmental impacts. Many of these existing requirements help to avoid or minimize adverse effects to aquatic habitats, including EFH. The conservation recommendations contained in Appendix G are rather general and may overlap with certain existing standards for specific development activities. Nevertheless, the

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Non-fishing activities are subject to a variety of regulations and restrictions under federal, state, and local laws designed to limit environmental impacts. Many of these existing requirements help to avoid or minimize adverse effects to aquatic habitats, including EFH. The conservation recommendations contained in Appendix G are rather general and may overlap with certain existing standards for specific development activities. Nevertheless, the

recommendations highlight practices that can help to avoid and minimize adverse effects to EFH. During EFH consultations between NMFS and other agencies, NMFS strives to provide reasonable and scientifically based recommendations that account for restrictions imposed under various state and federal laws by agencies with appropriate regulatory jurisdiction. NMFS will not recommend that state or federal agencies take actions beyond their statutory authority, and NMFS' EFH conservation recommendations are not binding.

The conservation measures discussed in Appendix G should be viewed as options to avoid, minimize, or compensate for adverse impacts and promote the conservation and enhancement of EFH. Ideally, non-water-dependent actions should not be located in EFH if such actions may have adverse impacts on EFH. Activities that may result in significant adverse effects on EFH should be avoided where less environmentally harmful alternatives are available. If there are no alternatives, the impacts of these actions should be minimized. Environmentally sound engineering and management practices should be employed for all actions that may adversely affect EFH. If avoidance or minimization is not practicable, or will not adequately protect EFH, compensatory mitigation should be considered to conserve and enhance EFH.

During interagency consultations, NMFS evaluates potential impacts of non-fishing activities and develops appropriate conservation recommendations. Because adverse effects to EFH can be direct, indirect, and cumulative, NMFS biologists must consider and analyze these interrelated impacts. Consequently, it is not unusual for particular impacts to be overlooked or discounted during a consultation. In addition to fulfilling the requirements for revising the FMPs, Appendix G will be useful to NMFS biologists reviewing proposed projects as they consider potential impacts to EFH. The document should also be useful for federal action agencies undertaking EFH consultations, especially in preparing the EFH assessments that are a required part of interagency consultation.

The conservation recommendations included in Appendix G are a series of site-specific measures that can be undertaken by the action agency to avoid, offset, or mitigate impacts to EFH. All of the suggested measures are not necessarily applicable to any one project or activity. NMFS may develop more detailed or different recommendations based on project specific considerations before or during EFH consultations, and would communicate those to the appropriate agency. The recommendations provided in Appendix G represent a short menu of the types of measures that can contribute to the conservation of EFH. These recommendations are not binding on any action agency or permit applicant.

In response to public comments on the draft EFH EIS, NMFS is revising Appendix G to ensure that it reflects the best available information specific to Alaska. The revisions will clarify that non-fishing activities are subject to a variety of regulatory requirements that help to reduce threats to EFH. The revisions will also clarify that the conservation recommendations are advisory and should be followed to the extent practicable, recognizing that many non-fishing activities have unavoidable consequences for EFH.



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ARCTIC STORM MANAGEMENT GROUP, LLC

400 North 34th Street, Suite 306
Seattle, Washington 98103 U.S.A.

February 6, 2005

Ms. Stephanie Madsen, Chair
North Pacific Fishery Management Council
605 West 4th Ave., Suite 306
Anchorage, AK 99501

RE: EFH and HAPC Final Action

Dear Ms. Madsen:

Arctic Storm would like to offer comments for consideration by the North Pacific Fishery Management Council when it takes final action on Essential Fish Habitat (EFH) and Habitat Areas of Particular Concern (HAPC). Our two catcher processor and two catcher vessels fish in the Bering Sea, the Aleutian Islands and the western and central Gulf of Alaska. We primarily engage in pelagic trawling for pollock but also use bottom trawl gear for cod and flatfish. Further, we would like to acknowledge our deep appreciation for the agency and Council staff who have researched and made available to the public in a usable form all available information for use in making this important decision.

Arctic Storm continues to support the Council's EFH Preliminary Preferred Alternatives (PPA) but with some modification in the Aleutian Islands. We also support the Council's preference for using discreet HAPC site designation to mitigate potential adverse impacts of fishing especially on high relief hard coral areas that provide protective habitat to rockfish as well as appropriate seamounts. Finally, in recognition and appreciation of the intense scrutiny and preparation of the HAPC analysis required by the agency, Council staff, the Council and the public we support extending the review cycle from three to five years and or making such review discretionary to accommodate research and staff scheduling..

Specific Recommendations for EFH:

- 1) EFH Designation: *Alt. 3 - Revised General Distribution of Managed Species as described in the Council's PPA.* This alternative would refine the existing EFH description and is based on the best scientific information available. It also increases potential benefits for managed species because efforts could be focused on areas important to the managed species.

- 2) HAPC Designation: Alt. 3 - Site based concept as described in the Council's PPA. The existing HAPC identifications would be rescinded and the Council would adopt an approach that is more site-specific within EFH and selected to address a particular problem such as was done in Council's HAPC RFP on hard coral and rockfish habitat.
- 3) Minimize Adverse Effects of Fishing on EFH in the GOA and BS: No additional closures in the highly regulated BS and GOA, as identified in the Council's PPA. The analysis found that there were no adverse impacts that were more than minimal *and* more than temporary and so no action is required. Further, many precautionary measures have been implemented in the past closing vast areas of the BS and GOA to bottom trawling or all trawling, as well as effort limitation and gear modification requirements. All groundfish stocks are stable or in high abundance indicating robust habitat for managed species.. The analysis concluded there would be little or no benefit gained by implementing EFH mitigation measures in GOA and BS except in sweeping proposals such as Alternative 6 which would close an additional 20% of BS fishing grounds to all gear types, would put at risk \$237 million in gross revenues and would negatively impact coastal fishing communities. In crafting its PPA, the Council concluded that discreet HAPC instead of sweeping EFH closures would provide the best approach for potential, additional habitat restrictions
- 4) Minimize Adverse Effects of Fishing in AI: Option 3 of AI portion of Alternative 5b – industry identified “open area” approach. With the exception of Steller sea lion closures there have been no closure areas imposed in the AI. That region was identified in the fishery impacts model as being vulnerable to adverse impacts of fishing because of recent discovery of high coral abundance. Because fish are comparatively sedentary in the AI, bringing the fleets back to the same grounds year after year, and because little research has been conducted in the region compared to the BS, make the AI region a candidate for the “open area” approach proposed by Oceana. However, use of observer data to identify areas that would remain open is flawed and so effort to revise open areas based on additional data supplied by the fleet is improved and more practicable in that it reduces cost to participants because it does not, unnecessarily, close important, historical fishing grounds. *This “open area” approach is uniquely suited to the AI for the above cited reasons and would be wholly inappropriate to impose on the BS and GOA where fish are highly migratory, much more is known about existing habitat and many closures and other actions have already been imposed. It should also be noted that the extensive ice cover over much of the Bering Sea for many months is, in itself, a mitigation effort imposed by Mother Nature.*

Specific Recommendations for HAPC:

1. HAPC Action 1 on Seamounts: Alternative 3 – Designate 16 named seamounts identified by the agency and Plan Team and prohibits all bottom contact fishing.

Seamounts are unfished and protection afforded to isolated fish populations and unique habitat features is precautionary and practicable.

2. HAPC Action 2 on western and central GOA: Alternative 2, Option 2 - close three sites (Sanak, Albatross and Middleton) to bottom trawling for five years. During the five years, these sites would be prioritized for undersea mapping. Areas with high relief coral would stay closed to bottom trawling and remaining areas would be reopened. This precautionary approach seems appropriate because the GOA slope rockfish fishery received the highest Long-Term Effect Index (LEI) score in the Fishery Impact Model. Creation of these three research areas would assist in increasing our understanding of benthic habitat on the GOA slope, fishery impacts to that habitat and, at the same time, attempt to mitigate potential impacts and judge the efficacy of those measures. This proposed site designation met the Council RFP requirements and is precautionary and practicable.
3. HAPC Action 3 on AI corals: Alternatives 2, 3, 4 with Option 2 of Alternative 4 which applies to bottom trawl only. These HAPC sites were proposed by the agency and the Marine Conservation Alliance. They are responsive to the Council's RFP and are precautionary and practicable.
- 5) No HAPC action for the Bering Sea. The Council's RFP for HAPCs asked for proposals that identified appropriate seamounts and high-relief long-lived hard corals that provided habitat for rockfish. After rigorous review of the survey, observer and other data, NOAA fisheries concluded that, based on the best scientific information available, no such areas existed in the Bering Sea.
- 6) HAPC review cycle. Finally, in recognition and appreciation of the intense scrutiny and preparation of EFH/HAPC analysis required by the agency, Council staff, the Council and the public we support extending the review cycle from three to five years and or making such review discretionary to provide flexibility to best coincide with appropriate research results, habitat mapping, staff availability and to avoid procedural litigation because of a constraining schedule. We support efficacy review of HAPCs before the imposition of additional mitigation measures.

There has been extensive public comment in the past on how to identify and designate EFH and HAPC and how to best minimize adverse impacts of fishing on EFH. We specifically support the past detailed comments of the Marine Conservation Alliance as well as the Council record in selecting its Preferred Preliminary Alternative. However, we would like to focus more detailed comments on why new mitigation measures are unnecessary in the Bering Sea, the most important fishing grounds to our vessels.

Minimize Adverse Effects of Fishing on EFH

The EIS analyzes six alternatives to minimize to the extent practicable the adverse effects of fishing on EFH. Appendix B evaluates the effects of all North Pacific fisheries on

EFH in Alaska, and concludes that no Council-managed fishing activities have more than minimal *and* more than temporary effects on EFH for any of the FMP species. Importantly, it concludes that additional mitigation measures seem unnecessary based on existing management measures which directly or indirectly mitigate fishing impacts and the determination that all groundfish species are harvested at sustainable levels in the North Pacific.

The Analysis Correctly Supports the Council PPA choice on EFH Mitigation for Bering Sea and Gulf of Alaska.

In July 2002, the Ocean Studies Board of the National Academy of Science (NAS) released their report "Effects of Trawling and Dredging on Seafloor Habitat." The report notes several very important characteristics of the Alaska bottom trawl fisheries, relative to fishing effort. Bottom trawling occurs on less than half of the Alaska shelf. Of the areas fished, the intensity of bottom trawling is relatively low. Total bottom trawling (measured in number of tows) has declined significantly (over 30% for each of the regions) off Alaska during the 1990s. And much of the benthic habitat, especially in the Bering Sea, is mud and sand and so less vulnerable to the effects of fishing.

According to the NAS report, compared to the rest of the United States, the continental shelf off Alaska is subjected to relatively low bottom trawl effort.

The NAS report recommended that management of the effects of trawling and dredging should be tailored to the specific requirements of the habitat and the fishery through a balanced combination of the following management tools: 1) fishing effort reduction, 2) modification of gear design and gear type, and 3) establishment of areas closed to fishing.

All of these tools have been well utilized in the Bering Sea and Gulf of Alaska including over 100,000 square nm of closures, prohibition of bottom trawl gear in the Bering Sea pollock fishery, and effort limitation efforts that include the halibut and sablefish IFQ, CDQ and AFA rationalization programs as well as the BSAI and GOA TAC caps which further constrain the effects of fishing.

Please see attachments that detail these past actions by the Council.

Additional Alternatives for EFH Mitigation

In its recommendations to the Council on potential EFH actions, NMFS notes that uncertainty remains regarding the application of the fishery impacts model to the EFH analysis. Nonetheless, the model is based upon the best scientific information available as affirmed in its rigorous review by the Scientific and Statistical Committee as well as the Center of Independent Experts.

NMFS has recommended in the past that the Council consider additional precautionary options that could be taken to protect deep water coral communities even though fishery

impacts have been determined to be minimal and temporary. This seems useful advice for the Aleutian Islands where abundance of high relief corals are present, the target species seem fairly stationary, and little research data increases uncertainty about potential fishery impacts.

However, in the much studied Bering Sea where huge schools of migrating fish move across large expanses of mostly mud and sand habitat, it is inappropriate.

Bering Sea Mitigation Measures

The Bering Sea is a semi-enclosed, high latitude sea. Its broad continental shelf of mostly mud and sand is one of the most biologically productive areas of the world. It is also one of the most regulated waters of the world. The Bering Sea has attracted more attention by the Council than any other region in the past two decades. During that time dozens of major area closure, gear modification requirements and effort limitation measures have been imposed, significantly reducing fishery impacts in the Bering Sea. (See Attachment 1)

As part of this EIS, two major EFH Alternatives for the BS were developed for consideration by the Council. No areas in the BS met the Council's RFP requirements for overlapping areas of hard corals and rockfish because few of either inhabit the Bering Sea. The analysis indicates that one alternative, embedded in both Alternative 4 and 5, provides little benefit and the other alternative, as described in Alternative 6, would close such large expanse of heavily fished grounds to all bottom tending gear as to be extremely costly and impracticable.

Alternative 4 and 5. Both alternatives propose the same alternative which would prohibit the use of bottom trawls for all groundfish fisheries except within designated "open areas," based on historic effort. Within the open area, there would be rotating closures to bottom trawl gear in five areas to the west, north, and northwest of the Pribilof Islands. Each of the five areas would be divided into four blocks, and one block in each area would be closed for 10 years in Alt. 4 and 5 years in Alt 5. After the closed area reopened, a different block would close, and so forth. In addition, bottom trawls used in the remaining open areas would be required to have sweeps and footropes equipped with disk and bobbins to reduce contact area with the bottom.

The rotational closures were largely discredited in the SSC review of EFH alternatives in the Preliminary EIS which have not changed in the revised document. The other closed area includes vast continental shelf areas north, east, west and south of high CPUE areas and in some cases overlap fished areas. These closed areas were identified by some members of the EFH Committee using dated (up to '95) CPUE data. There is some discussion about potential protection to some crab species, but vast areas of the Bering Sea have already been closed to protect crab, with little benefit to the cyclical decline of some populations.

The EIS analysis concludes that in the BS, the large closures proposed under alternatives 4 and 5 would provide little or no benefit to the habitat or to the managed species. Simply, this proposed alternative does not seem designed to protect the habitat of managed species from identifiable effects caused by fishing and so does not address the Council's problem statement.

Based on a finding that there are no adverse impacts caused by fishing that are more than minimal, that these proposed closed areas offer little or no benefit to the habitat or managed species, that the CPUE data used to determine the closed area boundaries is dated, that the habitat is largely sand and mud and that the species are highly migratory, imposition of either the closed area or the rotational area seems unreasonable rather than precautionary.

Alternative 6:

Alternative six would close an additional 20% of the Bering Sea shelf to fishing by all gear types including trawl, longline and pot gear. It would close some of the most heavily fished and productive areas of the Bering Sea even though fishery effects were determined to be less than temporary and minimal. While the analysis determined there might be some benefits to habitat, much of those benefits might be lost to a redistribution of fishing effort from areas of high CPUE to previously unfished or lightly fished areas. The analysis also found that such sweeping closures would put at risk \$237 million in annual gross revenue to those dependent on the resource and would have additional negative effects to shoreside support industries and coastal fishing communities.

HAPC proposals for BS.

The Council's RFP for HAPCs asked for proposals that identified appropriate seamounts and high-relief long-lived hard corals that provided habitat for rockfish. After review of the survey, observer and other data, NOAA fisheries concluded that, based on the best scientific information available, no such areas existed in the Bering Sea.

Additionally, in consideration of crafting HAPC proposals for the Bering Sea, the Marine Conservation Alliance and SeaState Inc. requested and received all survey and observer data received by Oceana in its Freedom of Information Act (FOIA) request to the agency. It also queried for additional data and research collected by NOAA fisheries. After detailed review of the data, MCA/Sea State was unable to identify areas where hard corals and rockfish overlapped. Unable to meet the Council's RFP requirements for HAPCs, MCA came to the same conclusion as NOAA fisheries and so chose not to submit HAPC proposals for the Bering Sea.

Sincerely,



Donna Parker

Director, Govt. Affairs

Attachment 1

Past Actions by the Council and Agency that Protect Habitat

The EFH EIS correctly notes that efforts to integrate habitat considerations into fishery management go back to the Magnuson-Stevens Act in 1976. In 1983, NMFS adopted a National Habitat Conservation Policy, uniting its Magnuson-Stevens Act authority with its advisory responsibilities. The NMFS habitat policy was incorporated into the Alaska Region's FMPs through BSAI FMP Amendment 9 and GOA Groundfish FMP Amendment 14. Since that time the Council and NMFS have enacted specific measures that were designed in part, to protect habitat from potential negative impacts from fisheries. These measures include gear restrictions, time and area closures, and harvest restrictions. Of these, the most widely used is closure of areas to certain gear types. This in effect creates a type of marine protected area. Specific past measures implemented in the North Pacific include the following, but it should be noted that most mitigation measures have been implemented in the Bering Sea:

Current Fishing Equipment Restrictions:

The Council and NMFS have implemented several restrictions to fishing equipment, primarily to reduce bycatch but these measures have had an important benefit of reducing effects on EFH. The analysis correctly notes that such restrictions include pelagic trawl requirement for the BSAI pollock fishery, scallop and dredge use limitations, pot size limitations in crab and groundfish fisheries and allowable gear definitions which prohibit the use of unlisted gear types such as gillnets, explosives, chemicals or other gears that could have adverse impacts on EFH.

Current Marine Protected Areas and Marine Managed Areas:

Marine protected and or managed areas can be used to preserve or restore fish habitats. Establishing areas closed to particular gear types is a common tool used in fishery management to protect benthic habitat from adverse impacts. It is specifically cited in EFH EIS and also noted in the NAS report as an effective mitigation tool. The Council, NMFS and the Board of Fish have adopted over the years numerous area closures for fishing to protect habitat for fish, crabs and marine mammals. These closed areas comprise about 20% of Alaska's continental shelf, exceed 104,000 square nautical miles, or larger than the combined area of Maine, New Hampshire, Vermont, Massachusetts, Rhode island, Connecticut, New Jersey, Delaware, Maryland and Virginia. These closures include the Pribilof Islands Habitat Conservation Area, the Bristol Bay Trawl Closure Area, Red King Crab Savings Areas, the Opilio, Tanner and Red King Crab Bycatch Limitations Zone, Area 516 Seasonal Crab Closure, Bogoslov Area Closure Area, the Kodiak Trawl Closure Areas, the Southeast Alaska Trawl Prohibition, the Cook Inlet Trawl Closure Area, the Sitka Pinnacles Marine Reserves, Walrus Islands Closure Areas, Seasonal Groundfish Closures Areas, Scallop Dredge Closure Areas, State Waters Trawl and Dredge Closure Areas and Steller sea lion closures.

Current Harvest Limits:

The regulations for managing adverse effects on EFH from fishing note that the fishery management actions to mitigate effects may include limits on the take of species. The analysis correctly notes that limits currently in place include tightly controlled catch limits for target species and protected species, optimum yield limits capping the GOA at 800,000 mt and the BSAI at 2 million mt of groundfish removals and a prohibition on development of a forage fish fishery. The analysis concludes that all of these management measures reduce the intensity of fishing effort and therefore, effects on benthic habitat as noted in the NAS report.

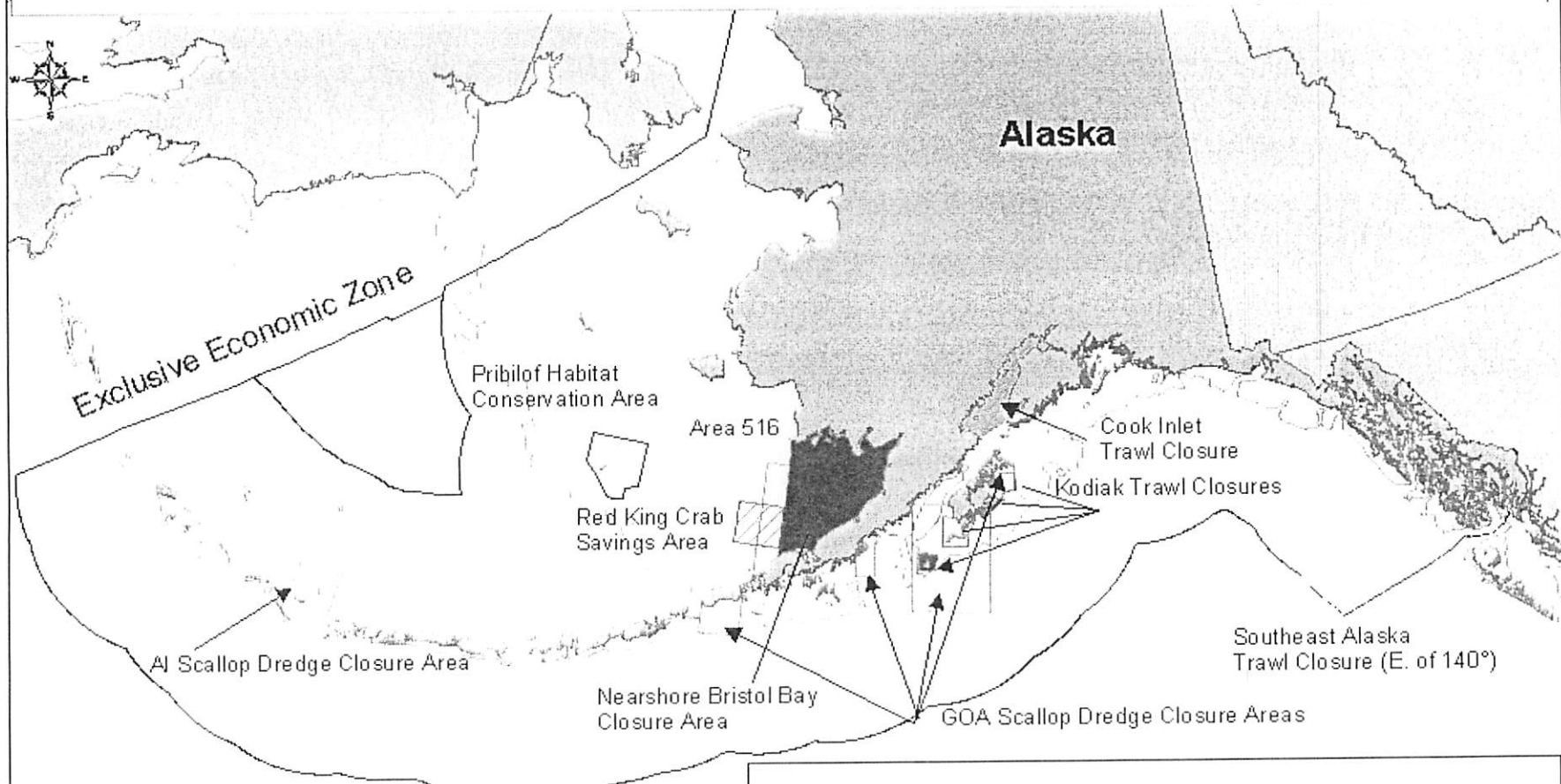
Current Effort Reduction and Limitation:

The effects of fishing on fish habitat depend to some extent on the amount and intensity of fishing effort. Because fishing effort appears to have been controlled with existing catch limits and fishing effort reduction measures, additional measures to directly reduce fishing effort were thought to be neither reasonable nor practicable as a tool to reduce the effects of fishing on EFH and so were not included in the suite of alternatives. In addition to conservative catch limits there are several effort limitation measures for groundfish, crab, and scallop fisheries already in place which further reduce intensity of fishing effort and gear impact to benthic habitat. Although habitat protection was not the rationale used in development of these programs, the analysis concludes that limiting effort does benefit habitat. Those programs include groundfish and crab moratorium, scallop vessel moratorium, groundfish and crab License Limitation Programs and the scallop License Limitation Program.

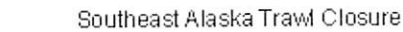
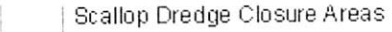
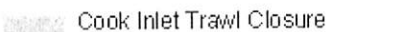




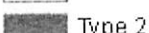
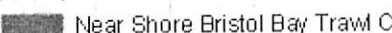

Current Fishery Rationalization Programs:

The EFH EIS correctly concludes that rationalization of excess fishing capacity can result in reduced impacts to fish habitat. The NAS report noted that "The establishment of some form of rights-based management program is one approach for meaningful and permanent reduction of fishing effort." The Council and NMFS have implemented rationalization programs for some fisheries already and other programs are under development including ones for BSAI crab fishery, GOA groundfisheries and BSAI non-pollock species. Existing rationalization programs include the halibut and sablefish Individual Fishing Quota (IFQ) program, the Community Development Quota (CDQ) groundfish and crab programs and the American Fisheries Act which rationalized the BSAI pollock fishery.

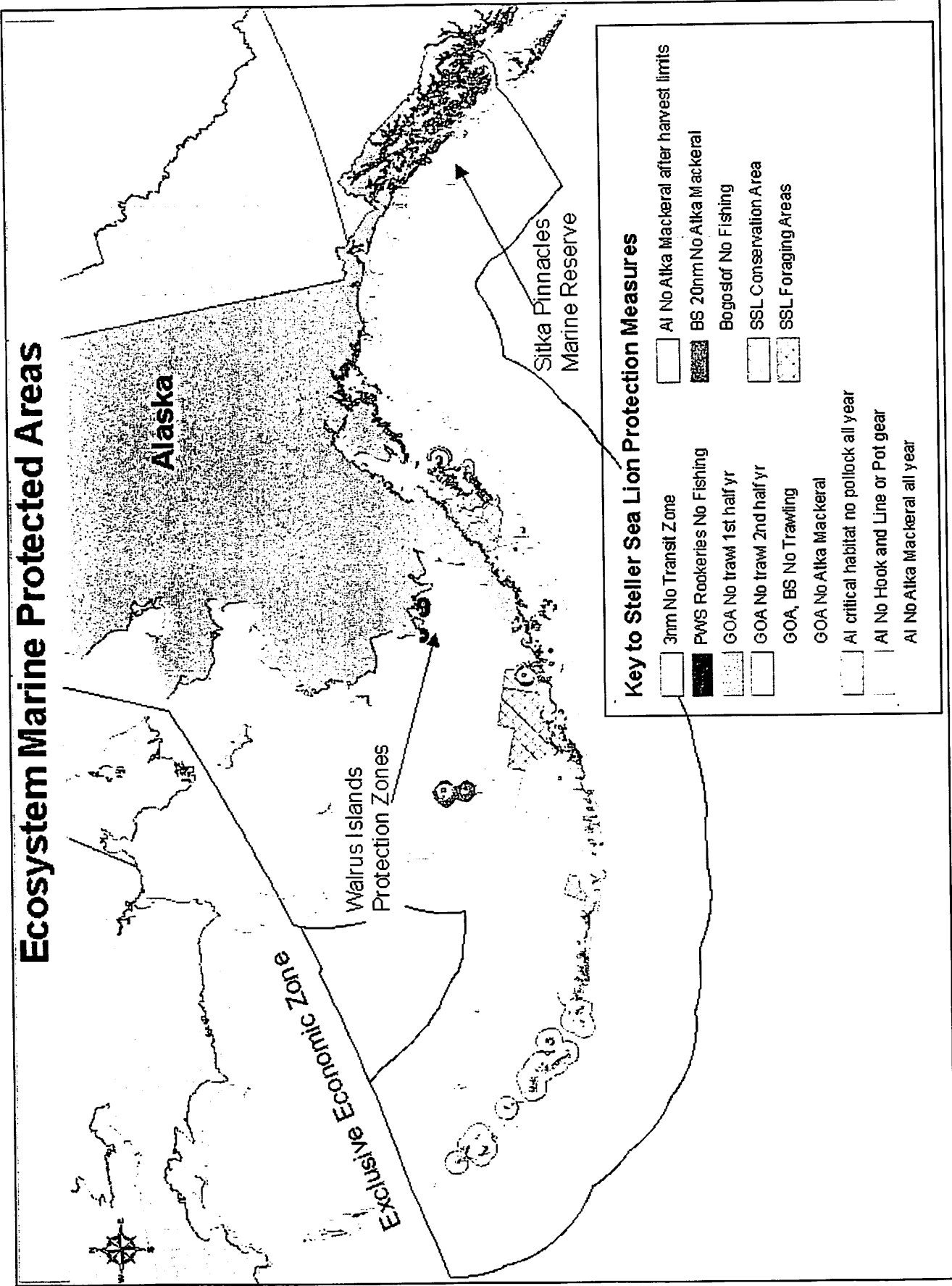
Habitat Conservation Marine Protected Areas



Habitat Conservation Marine Protected Areas

 Southeast Alaska Trawl Closure	 Scallop Dredge Closure Areas
 Cook Inlet Trawl Closure	 Scallop Dredge Closure Area
Kodiak trawl closures	 Red King Crab Savings Area
 Type 1	 Area 516
 Type 2	 Near Shore Bristol Bay Trawl Closure
	 Pribilof Is Habitat Conservation Area

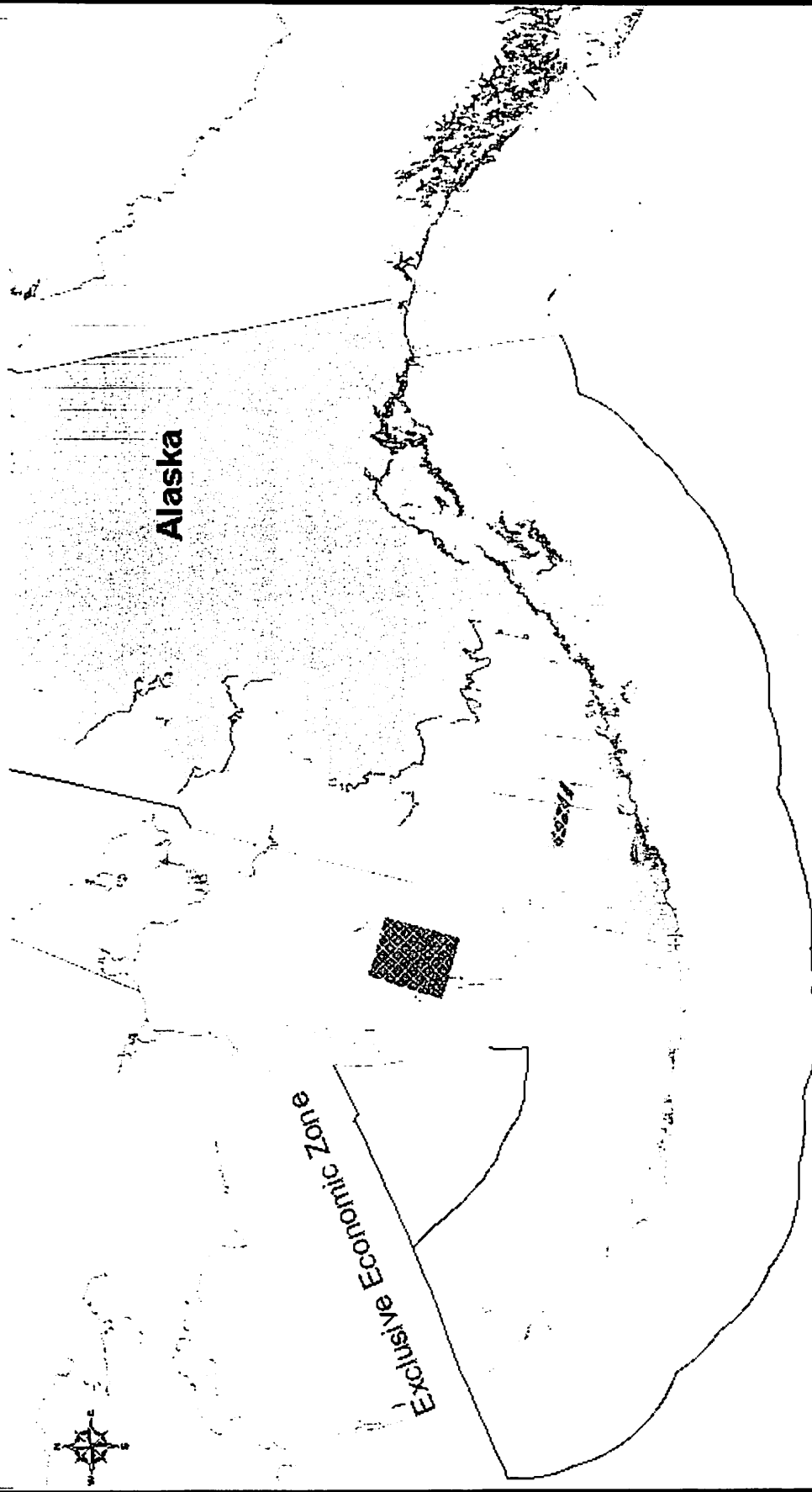
Ecosystem Marine Protected Areas



Key to Steller Sea Lion Protection Measures

- | | | | |
|--|---|--|--|
| | 3nm No Transit Zone | | AI No Atka Mackerel after harvest limits |
| | PWS Rookeries No Fishing | | BS 20nm No Atka Mackerel |
| | GOA No trawl 1st half yr | | Bogostof No Fishing |
| | GOA No trawl 2nd half yr | | SSL Conservation Area |
| | GOA, BS No Trawling | | SSL Foraging Areas |
| | GOA No Atka Mackerel | | |
| | AI critical habitat no pollock all year | | |
| | AI No Hook and Line or Pot gear | | |
| | AI No Atka Mackerel all year | | |

Vulnerable Stocks Marine Protected Areas



Vulnerable Stocks Marine Protected Areas













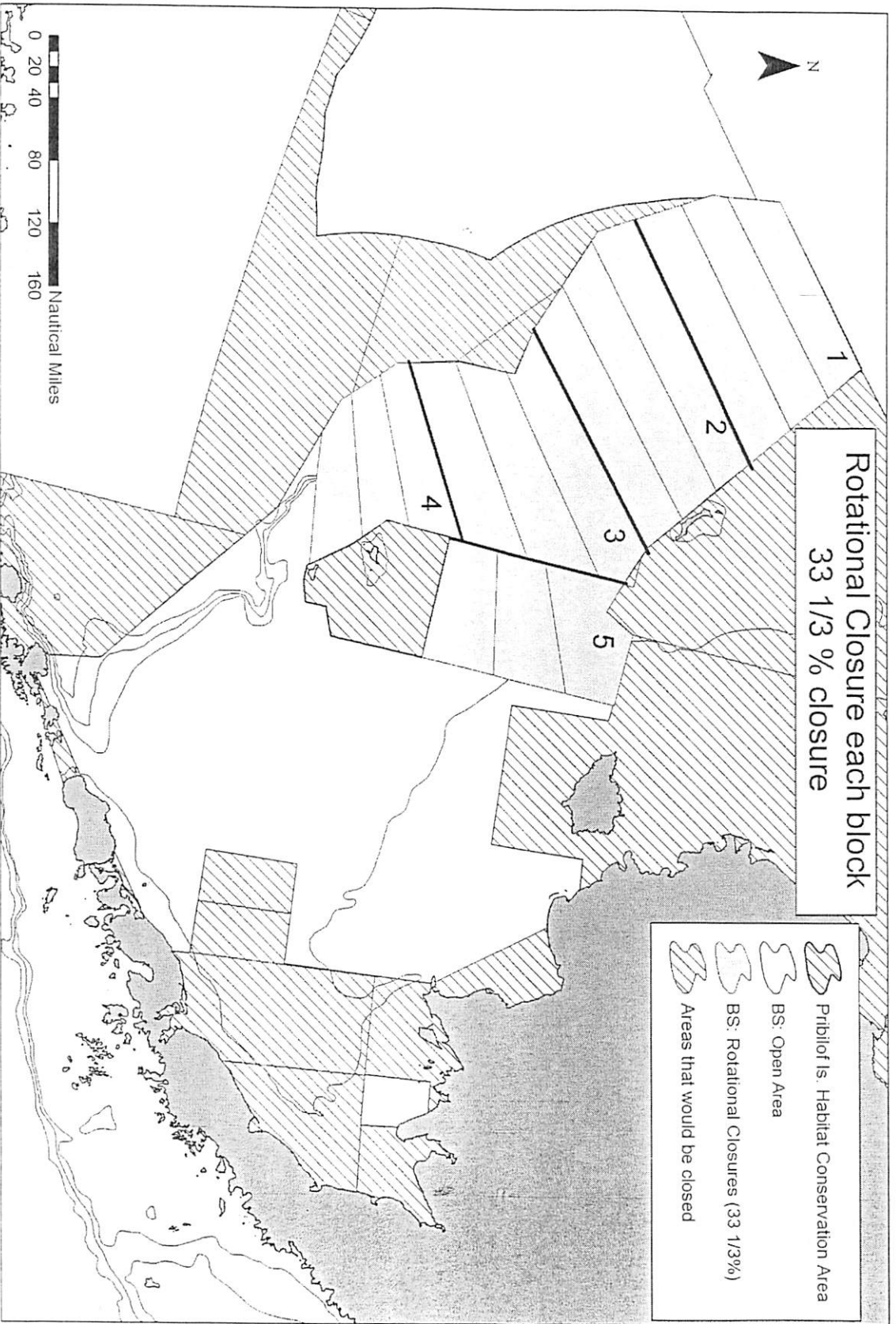
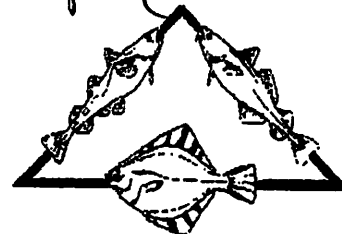
- | | | | | | |
|---|------------------------------------|---|--|---|-----------------------|
|  | Salmon Fishery Closure (W of 144°) |  | Prohibited Species Bycatch Limitation Zone |  | Herring Savings Area |
|  | Chum Salmon Savings Area |  | Zone 1 Red King Crab |  | Winter Savings Area |
|  | Chinook Salmon Savings Area |  | Zone 2 Tanner Crab |  | Summer Savings Area 1 |
|  | Bogoslaf No Fishing |  | C. Opilio Bycatch Limitation Zone |  | Summer Savings Area 2 |

Figure 2-49. Alternatives 5A and 5B: Bering Sea Open/Closed Areas



C-lab Julie Bonney
handout 2-10-05
1pm (didn't testify)



Alaska Groundfish Data Bank
Julie Bonney, Executive Director
P.O. Box 788
Kodiak, AK 99615

Ms. Stephanie D. Madsen, Chair
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, AK 99501-2252

February 1, 2005

Re: Essential Fish Habitat Final Action

Dear Ms. Madsen:

The members of Alaska Groundfish Data Bank (AGDB) offer the following comments on the Council's selection of final preferred alternatives for Essential Fish Habitat (EFH). The members of Alaska Groundfish Data Bank include both shorebased processors and trawl catcher vessels that are dependent on the fishery resources in the North Pacific. The members support science-based policy that protects the marine environment and promotes long-term sustainability of both fishery resources and the North Pacific fishing community that depends on those resources.

AGDB overall recommendations for EFH measures and HAPC areas as follows:

AGDB members are dependent on the GOA and BS fisheries, thus our recommendations for EFH fishing effects minimization measures and HAPC are restricted to these fishing areas. With regard to the broader decision points within the EIS for EFH, we support the Preliminary Preferred Alternatives (PPA) selected by the North Pacific Fishery Management Council and the National Marine Fisheries Service for Action 1: Describe and Identify EFH; and Action 2: Adopt an Approach for Identifying Habitat Areas of Particular Concern (HAPC). For the EFH alternatives to minimize fishing effects, the Council should maintain its recommendation for *status quo EFH protection measures for the Bering Sea and Gulf of Alaska*. We feel a different approach for the Aleutian Islands is merited because of the important finding in the EFH model that made the case for additional protection of un-impacted areas with fragile deep-water coral reef habitats in the Aleutian Islands. Thus for the Aleutian Islands the Council should adopt Option 3 of the Aleutian Islands portion of Alternative 5b for minimizing fishing effects for EFH.

HAPCs are site-specific areas of Essential Fish Habitat (EFH) of managed species. The Environmental Assessment (EA), Regulatory Impact Review (RIR), and Initial Regulatory Flexibility Analysis evaluates alternatives for designating HAPC sites in the Gulf of Alaska (GOA) and the Aleutian Islands (AI) and implementing associated fisheries management measures to provide additional conservation of specified HAPC areas.

Three separate actions are considered in the EA: (1) HAPC designation and conservation of seamounts, (2) HAPC designation and conservation of hard coral areas in the GOA, and (3) HAPC designation and conservation of hard coral areas in the Aleutian Islands. AGDB members recommend that the Council select the following alternatives at a minimum:

- 1) For action 1 (Seamounts), the Council should select Alternative 3
- 2) For action 2 (GOA corals), the Council should select Alternative 2 Option 2 (bottom trawl gear).

Adequacy of the range of alternatives for minimizing the effects of fishing on EFH:

The members believe that the range of alternatives in the EFH EIS clearly meet NEPA requirements. The Council and the Agency have taken extraordinary measures to consider and develop a reasonable set of alternatives for analysis in the EIS. The list of alternatives has been revised and new alternatives incorporated several times during the course of this process. The Council's EFH Committee met many times to build and review alternatives, and the public has had numerous opportunities to recommend additional alternatives. The final EIS was modified adding 2 new options for alternative 5B for the Aleutian Islands after the release of the Draft EIS.

There has been a tremendous amount of time and energy to compile the best available science to measure fishing impacts to EFH for managed species. Appendix B evaluates the effects of all North Pacific fisheries on EFH in Alaska, and concludes no Council-managed fishing activities has more than minimal and more than temporary effects on EFH for any of the FMP species. The Appendix B analysis was further reviewed by the Center for Independent Experts. NMFS considered and incorporated appropriate modifications as recommended by the review team, however the overall result did not change.

Status quo in the Gulf of Alaska: The Gulf of Alaska already has extensive no trawl areas. The Eastern GOA, most of State waters and various Federal crab no bottom trawl areas are already in regulation. The closed areas were not designed to mitigate effects of fishing on EFH, and they have not been studied to assess positive effects on managed species; however, some benefit for benthic habitat have resulted in these areas. All the EFH fishing mitigation measures in the EIS address the slope rockfish fishery in the GOA. The slope rockfish fishery has changed significantly over time with huge amounts of catch and effort occurring during the foreign fishery days with virtually the entire slope area of the Gulf of Alaska being heavily fished. Due to more precautionary management measures through the trawl closure of the Eastern GOA and conservative TAC setting, fishing effort, and area fished have been dramatically reduced for the rockfish fishery that is conducted today.

The EFH alternatives for the Gulf of Alaska that would close the entire Central Western GOA slope to bottom trawling for rockfish would cripple the GOA slope trawl rockfish fishery. If the entire area were closed to bottom trawling, a substantial amount of rockfish quota would remain unharvested creating an economic impact to vessels, processors and communities for this portion of their fishery economic portfolio. The closure could refocus fishing effort to new areas that have not been heavily fished in the past. The net result could potentially be negative impacts for habitat instead of the perceived benefits.

The slope area of the GOA comprises mainly a mixture of soft and rocky substrates with very little coral or sponge. If a closure were imposed, it would concentrate effort in very small areas that would remain open for bottom trawling off the slope. Both Northern rockfish and pelagic shelf rockfish quota would be forgone since there has been very little success with pelagic trawl gear. For Pacific Ocean Perch as much as 20% of the quota has been harvested with pelagic gear in areas where fish tend to school off bottom. Concentrating catch in these smaller zones, off shelf and areas of the shelf where fish are off bottom, maybe harmful to the rockfish stocks since they tend to have patchy distribution and include sub-population within the overall rockfish stock population structure. Additionally there is no inshore – offshore split for rockfish so while both the catcher processor fleet and the catcher vessel fleet would be hamstrung by the slope closure, the catcher vessels would be especially disadvantaged in the present race for fish if the traditional fishing grounds are closed and travel time to and from the fishing grounds to shorebased processors increases.

HAPC as a measure to protect habitat instead of EFH mitigation measures:

AGDB supports using the HAPC process to identify discrete sites deserving special consideration for habitat protection and believe that this is the best approach and most practicable way to protect EFH. In fact AGDB and two other bottom trawl dependent fishing associations submitted three areas for the Council to consideration as possible HAPCs in the GOA. These closures would be bottom trawl closures in designated areas of the slope that have meet the Council HAPC priority and would be used as research areas to study the issue of EFH and FMP species productivity, as well as potential impacts of fishing.

In our view, the Council's decision to use HAPCs to protect discrete habitat sites of high vulnerability and relative importance is the best approach and most practicable way to protect EFH. During the development of the EFH alternatives to minimize impacts of fishing, a set of 11 closure areas for non-pelagic trawling for rockfish where identified. These areas are "rough bottom" lightly fished areas. Once the Council HAPC priorities of rockfish habitat and presents of corals were applied, only three of the original proposed closure areas were identified as good candidates for protection. Under the HAPC process, fishermen's experience and available scientific data were used to identify the subset of sites where there was evidence of benefits to rockfish populations and coral habitat. This was far better information than the EFH committee's imprecise identifications of "rough bottom" areas use to designate the 11 rockfish closure zones in the EFH alternatives.

CGOA Rockfish rationalization

We have been repeatedly informed by NMFS that rationalization is outside the scope of the fishing mitigation alternatives. For this reason, it was impossible to include due to court time lines and fish policy issues regarding rationalization. However, the Council is in the process of finalizing a rationalization plan for the CGOA rockfish fishery, which should be in place no later than January of 2007. NMFS notes in their response to public comments on the EIS that rationalization can be beneficial for EFH. Additionally, NMFS concurs that rationalization reduces fishing effort and excess capacity, which increases catch per unit effort and decreases the opportunity for interactions between fishing gear and fish habitat¹. The CGOA rationalization plan not only reduces fishing effort as noted but also is designed to allow vessels to fish more carefully to avoid damaging their fishing gear by fishing too close to rough bottom. Outside of the race for fish, fishermen will be able to take their time and hence minimize habitat impacts. With the allocation of secondary species (Pacific cod, sablefish,

¹ Preliminary Final EFH EIS – January 2005, Appendix L: Response to Public Comments, page 13.

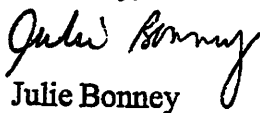
Shortraker/Rougheye, and thornyhead) and target rockfish species to the vessel level, this will also allow the fleets to move forward with experimenting with efficiencies of pelagic gear for the different target rockfish species without concern regarding loss of catch share. The participants in the program would report to the Council not only the economic benefits/impacts to the fishing sectors, but also the conservation benefits.

The NAS report recommended management of the effects of trawling and dredging should be tailored to the specific requirements of the habitat and the fishery through a balanced combination of the following management tools: 1) fishing effort reduction; 2) modification of gear design and gear type; and 3) establishment of areas closed to fishing. Through the HAPC process and CGOA rationalization program all three of these recommendations for the GOA rockfish fishery will be accomplished. Yet all can be done without impacting the economic viability of dependent fishermen, processors and communities, yet met the suggested measures by the NAS report.

The Council process is dynamic and will continue to address conservation concerns as they ripen. It is apparent that while the alternatives for EFH have been moving through the process that the Council has moved on but the simultaneous work the Council is doing on rationalization will impart benefits to fish habitat as well. The HAPC process plus additional Council initiatives will continue to support science-based policy that protects the marine environment and promotes long-term sustainability of fishery resources.

Thank you for your consideration of these comments.

Sincerely,


Julie Bonney

H0/Draft Motion
NOT FINAL
2-10-05

EFH Final Action NPFMC February 2005 Council Motion

Action 1: Describe and Identify EFH

Adopt Alternative 3 - Revised General Distribution (The Council's Preliminary Preferred Alternative) as described on page ES - 2 of the Preliminary Final EFH EIS - January 2005.

Action 2: Adopt an Approach for Identifying HAPCs

Adopt Alternative 3 - Site based Concept (The Council's Preliminary Preferred Alternative) as described on pages ES -4.

Action 3: Minimize Adverse Effects of Fishing on EFH.

Adopt a Modified 5B to expand Bottom Trawl Closures in the GOA and Aleutian Islands Management Areas to protect Sponge, Coral and other important habitat for managed species.

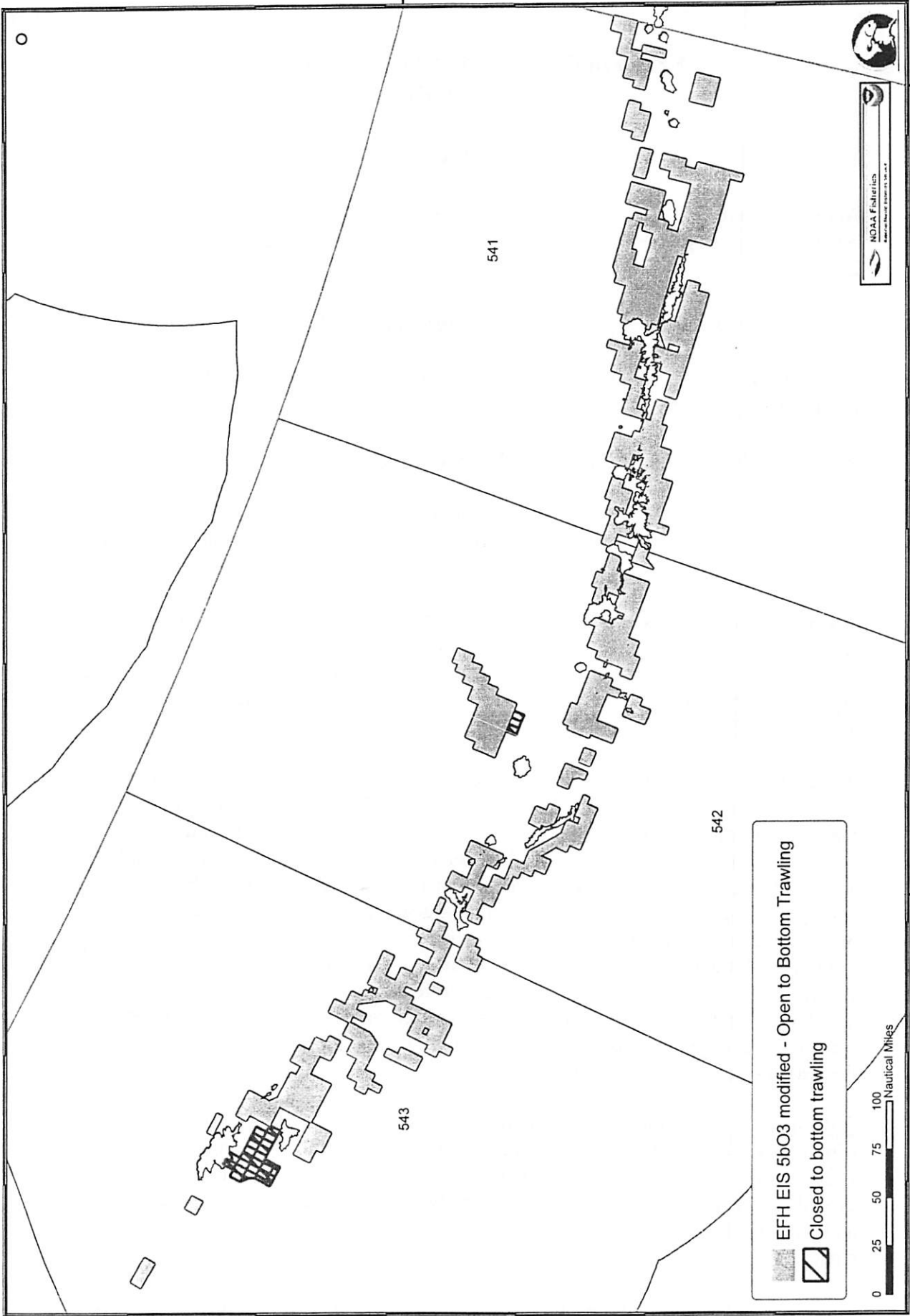
Bering Sea: Initiate an expanded analysis for the Bering Sea that tiers off of this EFH EIS analysis to further explore possible mitigation measures in the Bering Sea. The analysis should include the existing alternative, an alternative to leave the rolling closure area open, and options to open the "red hatched" closed area south of Nunnak Island and north of the Bogasloff area.

Aleutian Islands: Allow bottom trawling to continue in AI areas that have supported the highest catches in the past, and prohibits bottom trawling in all other portions of the AI management region to prevent future impacts to undisturbed habitats in those areas as described in a modified Option 3, as described in the attached Figure (modified ES - 12) and including 6 Aleutian Islands Coral Gardens (as identified in Figure ES - 11). The six coral gardens are closed to all bottom tending gear. Pelagic trawls could be used outside of the designated open areas, but only in an off-bottom mode. The existing observer program will be utilized, and a vessel monitoring system (VMS) for vessels fishing groundfish is required. A comprehensive plan for research and monitoring will be developed. Option 3 opens designated areas based on areas of higher effort distribution from 1990 through 2001 as modified through input from trawl fisherman (Groundfish Forum) and public testimony (Oceana).

Gulf of Alaska: Prohibit the use of bottom trawl for all groundfish in 10 designated areas (Figure ES - 7 in the Executive Summary of the January 2005 Preliminary Final EFH EIS). At the time of the Council's five year review period, the Council will review available research information regarding the two GOA closed areas (one west [area 610] and one east [area 620] of Sanak HACP closure to determine the efficacy of continued closure.

The Council will review these actions in five years to consider new information form on-going and future research.

5b - Option 3 Modified



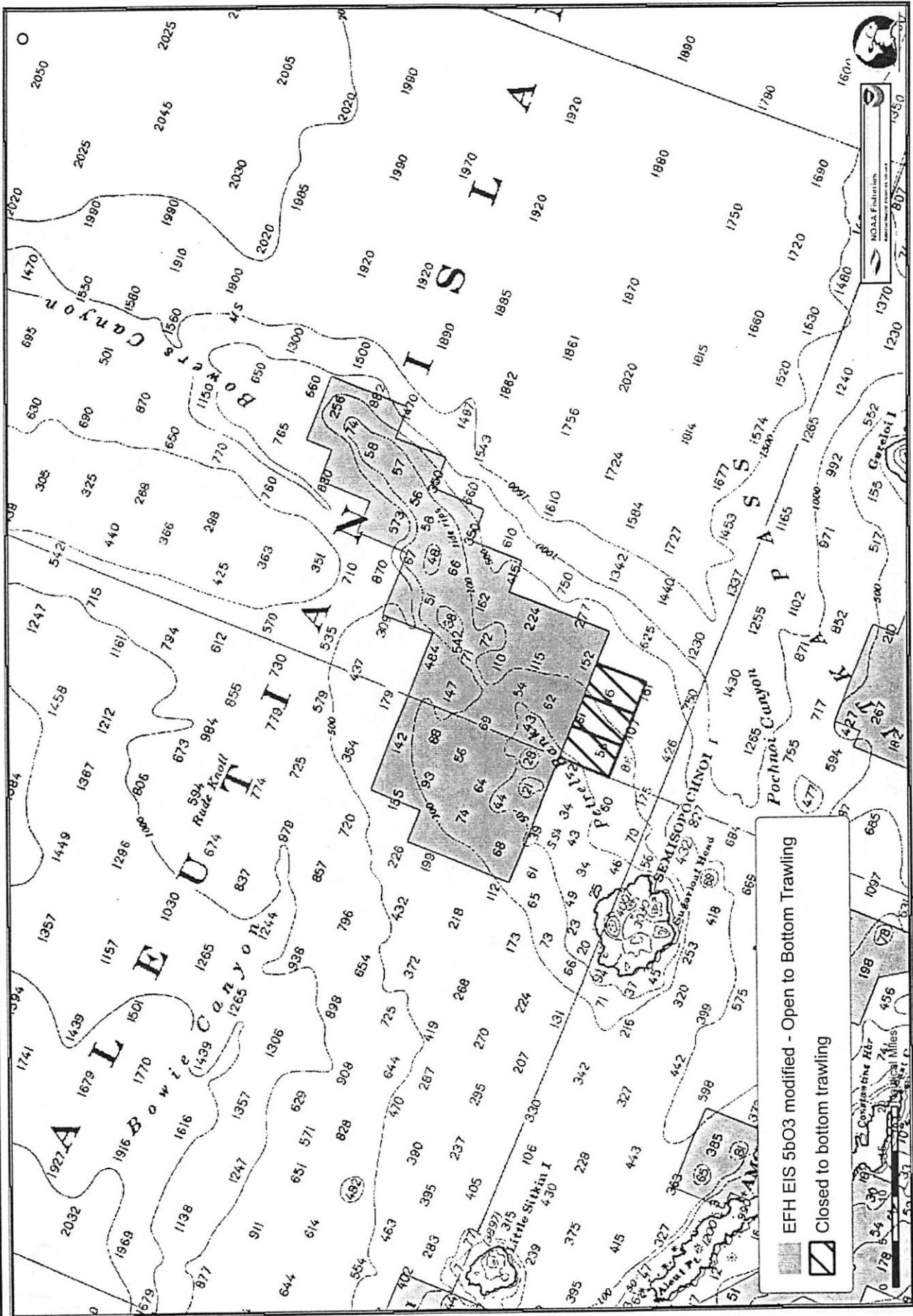
EFH EIS 5b03 modified - Open to Bottom Trawling

Closed to bottom trawling



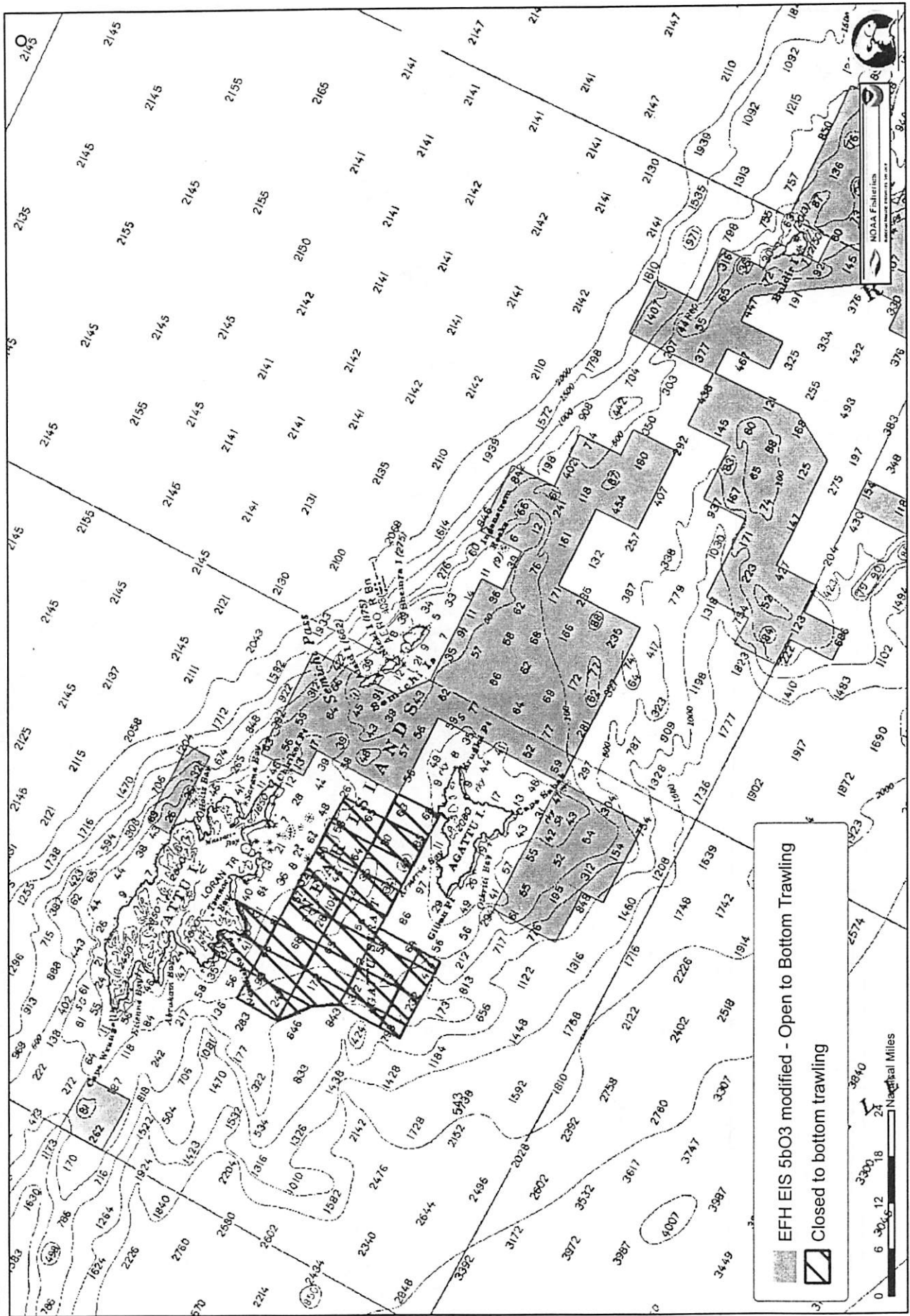
All areas not explicitly OPEN to bottom trawling are CLOSED

5b - Option 3 Modified



All areas not explicitly OPEN to bottom trawling are CLOSED

5b - Option 3 Modified



All areas not explicitly OPEN to bottom trawling are CLOSED