Alaska Groundfish Harvest Specifications
Environmental Impact Statement

Scoping Report

United States Department of Commerce
National Oceanic and Atmospheric Administration
National Marine Fisheries Service, Alaska Region

North Pacific Fishery Management Council

June 2006
Introduction

This report summarizes the comments received during the March 14, 2006, to May 15, 2006, scoping period for the Alaska Groundfish Harvest Specification Environmental Impact Statement (EIS). The EIS will provide decision-makers and the public with an evaluation of the environmental, social, and economic effects of alternative harvest specifications. It is intended that the EIS will serve as the central decision-making document for management measures developed by the National Marine Fisheries Service (NMFS) and the North Pacific Fishery Management Council (Council) to implement the provisions of the proposed action. NMFS decided to prepare an EIS under the provisions of 40 CFR § 1501.3(b) in order to assist agency planning and decision-making.

In this report, we identify the issues and describe alternatives raised during the scoping process. This report also presents proposed alternatives for analysis in the EIS. The primary purpose of this report is to inform the Council and the public of the results of scoping and to invite Council input on the scope of issues and range of alternatives for the EIS.

What is this Action?

The proposed action would adopt total allowable catch (TAC) and prohibited species catch (PSC) harvest specifications for the federally managed groundfish fisheries in the Gulf of Alaska (GOA) and the Bering Sea and Aleutian Islands (BSAI) management areas. Alaska groundfish harvests are managed subject to annual limits on the amount of each species of fish, or of each group of species, that may be taken. TACs set upper limits on total (retained and discarded) harvest limits for a fishing year. TACs are set for each “target species” and “other species” category defined in the GOA and BSAI groundfish fishery management plans (FMPs) or harvest specifications. The U.S. Secretary of Commerce (Secretary) sets the limits based on the recommendations of the Council. NMFS manages the groundfish fisheries.

Groundfish harvests are controlled by the enforcement of TAC and PSC limits, apportionments of those limits among seasons and areas, and allocations of the limits among fishing sectors. TAC seasonal apportionments and allocations are specified by regulations at 50 CFR part 679.

Prohibited species include halibut, herring, salmon, steelhead, king crab, and Tanner crab. A target fishery that has caught the seasonal (or annual) PSC limit apportioned to an area, is closed in that area for the remainder of the season (or year). PSC limits are specified in the FMP or regulations. The Council has discretion to apportion PSC limits among seasons, or allocate PSC limits among target fisheries, following criteria in the Federal regulations. PSC limit allocations are driven primarily by anticipated halibut bycatch mortality during a fishing year and the need to optimize the amount of total groundfish harvest under the halibut PSC limit. For instance, the Council will recommend allocating enough halibut PSC to the Pacific cod hook-and-line sector to avoid the risk that it will not fully harvest its Pacific cod TAC allocation.

The Council’s Groundfish Plan Teams use stock assessments to calculate biomass, overfishing levels (OFL) and acceptable biological catches (ABC) for each species or species group for specified management areas of the exclusive economic zone off Alaska. OFLs and ABCs are published with the harvest specifications, and provide the foundation for the Council and NMFS
to develop the TACs. OFL and ABC amounts reflect fishery science, applied in light of the requirements of the FMPs, and are not part of this action.

The FMPs define OFL, ABC, and TAC as follows (page 12 in each FMP):

**Overfishing level (OFL):** “…a limit reference set annually for a stock or stock complex during the assessment process…Overfishing occurs whenever a stock or stock complex is subjected to a rate or level of fishing mortality that jeopardizes the capacity of a stock or stock complex to produce maximum sustainable yield (MSY) on a continuing basis. Operationally, overfishing occurs when the harvest exceeds the OFL.” MSY is defined in the FMPs as “…the largest long-term average catch or yield that can be taken from a stock or stock complex under prevailing ecological and environmental conditions.”

**Acceptable biological catch (ABC):** “…an acceptable sustainable target harvest (or range of harvests) for a stock or stock complex, determined by the Plan Team and the Science and Statistical Committee during the assessment process. It is derived from the status and dynamics of the stock, environmental conditions, and other ecological factors, given the prevailing technological characteristics of the fishery. The target reference point is set below the limit reference point for overfishing.”

**Total allowable catch (TAC):** “…the annual harvest limit for a stock or stock complex, derived from the ABC by considering social and economic factors.”

**The Action Area**

The action area effectively covers all of the Gulf of Alaska, Bering Sea, and Aleutian Islands, under U.S. jurisdiction, extending southward to include the waters south of the Aleutian Islands west of 170°W to the border of the EEZ (Figure 1). The internal marine waters of the State of Alaska (State) have been treated as a part of the action area because vessels fishing in Federal waters pass through State waters, and because some fishing for Federal ABCs or TACs takes place in State waters.
Figure 1: Exclusive Economic Zone (EEZ) in the waters off Alaska.

Purpose and Need for this Action

The TAC and PSC harvest specifications are necessary for the management of the groundfish fisheries and the conservation of marine resources, as required by the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) and as described in the management policy, goals, and objectives in the FMPs. Harvest specifications include the establishment of annual TACs, and their seasonal apportionments and allocations, and PSC limits. TACs are harvest limits that include retained and discarded catch.

The harvest specifications provide for orderly and controlled commercial fishing for groundfish (including Community Development Quota fishing) to promote sustainable incomes to the fishing, fish processing, and support industries; support sustainable fishing communities, and provide sustainable flows of fish products to consumers. TACs balance groundfish harvest in the fishing year with ecosystem needs (such as non-target fish stocks, marine mammals, seabirds, and habitat).
The harvest specifications must comply with

- Magnuson-Stevens Act and others relevant laws;
- the groundfish FMPs; and
- applicable Federal regulations.

The harvest specifications are a key component of Alaska groundfish fisheries management and must meet the Magnuson-Stevens Act’s ten national standards for fisheries conservation and management. Perhaps the most influential of these is National Standard 1: Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield (OY) from each fishery for the United States fishing industry (16 U.S.C. 1851).

The harvest specifications must comply with provisions of the groundfish FMPs. The FMPs contain management objectives to guide fishery management decision-making. These objectives were analyzed in the Alaska Groundfish Fisheries Programmatic Supplemental EIS (PSEIS) and incorporated into the FMPs through Amendments 81 and 74, respectively (69 FR 31091, June 2, 2004, approved August 26, 2004). The FMPs also impose procedures for setting the harvest specifications. Of particular importance are the definitions of areas and stocks (Section 3.1), procedures for determination of harvest levels (Section 3.2), rules governing time and area restrictions (Section 3.5), and rules governing catch restrictions (Section 3.6).

The Federal regulations at 50 CFR part 679 provide specific constrains for the harvest specifications by establishing management measures that create the framework for the TAC apportionments and allocations. Specifically, the Federal regulations establish the general limitations, bycatch management, closures, seasons, gear limitations, and inseason adjustments.

The scope of this action is therefore defined by the requirements of the Magnuson-Stevens Act, FMPs, and Federal regulations.

**EIS Schedule**

The EIS will be produced pursuant to the following schedule:

<table>
<thead>
<tr>
<th>March to May 2006</th>
<th>Scoping Period</th>
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</thead>
<tbody>
<tr>
<td>June 2006</td>
<td>Present scoping report to Council and request Council input on range of alternatives and relevant issues</td>
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<tr>
<td>September 2006</td>
<td>Draft EIS released</td>
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<tr>
<td>September to October 2006</td>
<td>Public comment period on DEIS</td>
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<tr>
<td>October 2006</td>
<td>Council review and comment on Draft EIS</td>
</tr>
<tr>
<td>December 2006</td>
<td>Council reviews comment analysis report and chooses preferred alternative</td>
</tr>
<tr>
<td>January 2007</td>
<td>Final EIS released</td>
</tr>
<tr>
<td>February 2007</td>
<td>Record of Decision issued</td>
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Public Participation

The Alaska Groundfish Harvest Specification EIS is being developed with opportunity for public participation. Scoping is the term used for involving the public in the National Environmental Policy Act (NEPA) process at its initial stages. Scoping is designed to provide an opportunity for the public, agencies, and other interest groups to provide input on potential issues associated with the proposed action. Scoping is used to identify the scope of environmental issues related to the proposed action and identify alternatives to be considered in the EIS. Scoping is accomplished through written communications and consultations with agency officials, interested members of the public and organizations, and tribal governments. This EIS will address the relevant issues identified during the scoping process.

Notice of Intent and Scoping

NMFS began the formal scoping period with the publication of a Notice of Intent in the Federal Register on March 14, 2006 (71 FR 13099). Public comments were due to NMFS by May 15, 2006. NMFS held one public meeting in Anchorage, Alaska. Both through the Notice of Intent and at the scoping meeting, NMFS requested written comments from the public on the range of alternatives to be analyzed and on the environmental, social, and economic issues to be considered in the analysis. The scoping meeting was held in conjunction the April Council meeting. The scoping meeting was attended by a representative from an environmental organization and a community representative. NMFS also briefed the Council at its April 2006 meeting, and answered questions posed by Council members.

Summary of Alternatives and Issues Identified During Scoping

NMFS received nine written comments from the public. Appendix 1 to this Scoping Report contains copies of the public comments. Public comments identified the following alternatives and issues to analyze in the EIS.

Alternatives identified during scoping

NMFS will consider all of the alternatives identified during scoping in the Draft EIS. NMFS and the Council will determine the range of alternatives to be analyzed in the EIS that best accomplish the proposed action’s purpose and need. The Draft EIS will also describe the alternatives raised during scoping that were considered but not carried forward, and discuss the reasons for their elimination from further detailed study.

Generally, the comments received suggested: 1) that the proposed EIS alternatives do not represent a significant departure from current groundfish management, 2) that the EIS should analyze different ecosystem-based management approaches to setting harvest limits for the North Pacific groundfish fisheries, and 3) that the TAC amounts should explicitly account for the interactions of predators and prey, spatially and temporally, with built in precautions to avoid ecosystem overfishing and large shifts in the food web.

The following summarizes the management measures suggested by public comments.
Measures to reduce TACs consistent with provisions in FMPs

- Cut all harvest by 50 percent this year and by 10 percent each succeeding year.
- Build an additional margin of safety into the fishing mortality rate rules (F_{50\%} to F_{60\%}).
- Set a harvest rate of F_{75\%} for important prey species (pollock, Atka mackerel, Pacific cod).
- Reduce the groundfish TACs for GOA trawl fleet.
- Set lower harvest rates (F_{50\%} to F_{75\%}) for rockfish and species that are long-lived and late to mature.
- Set spatially explicit TACs for rockfish that coincide with population distributions.
- For rockfish in Tiers 4-6 set harvest rate at F=0.5M.

Measures that modify stock assessment practices to influence TACs

- Stipulate a more stringent threshold on the total allowed depression of equilibrium biomass.
- Account for ecosystem considerations in determining TACs by using frequency distributions to set ecosystem and single-species harvest levels within the normal range of natural variation.
- Minimize impacts on rockfish by modifying stock modeling to incorporate old-growth age structure.
- Consider catch of pollock in the U.S. and Russian waters as total landings and in determinations of the Eastern Bering Sea pollock TAC.
- Set TACs using a higher natural mortality rate that deducts from the ABC 50 percent of the biomass for ecosystem needs for each group of species (the Convention on the Conservation of Antarctic Living Marine Resources (CCAMLR) approach).
- Constrain TACs by ecosystem components such as northern fur seals.
- Set OY to include marine mammals getting a percent of the catch.
- Set spatially explicit ABC and OFL levels for rockfish that coincide with population distributions.

Temporal and Spatial Measures

- Prohibit trawling in critical habitat.
- Implement measures to spread out harvest levels through the year.
- Implement closures within a one hundred-mile radius around the Pribilof Islands and a fifty-mile radius around Zhemchug Canyon.
- Use time/area closures in the GOA to prohibit fishing with trawl gear on Tanner crab fishing grounds.
- Design rockfish refugia around bycatch hotspots and important habitat.
- Establish marine protected areas based on ecological criteria.
- Disperse highly concentrated fisheries in time and space to avoid localized impacts to habitat, non-target species, and other ecosystem components.

Additional Measures

- Include mitigation measures to protect communities.
- Increase observer coverage in the GOA groundfish fisheries.
Include measures to reduce discards and waste such as kill caps on prohibited and protected species.
Restrict gear types and phase out dirty gear such as bottom trawls.
Reducing discards and waste by designating target species for which there is not adequate information to set the biological reference points and minimum stock size thresholds as “bycatch only” with full utilization and retention and with area and species-specific hard caps.

**Issues identified during scoping**

The comments received through the scoping process identified the following issues. The Draft EIS will analyze the impacts of the proposed action and its alternatives on these issues.

1) The harvest specification process causes disproportionate impacts to Pribilof Islands and St. Lawrence Island communities and ecosystems. The EIS should evaluate the following issues:
   - impacts on northern fur seals and Steller sea lions;
   - variation in natural mortality due to changes in species interactions or environmental changes may limit the ability of the current harvest specification process to avoid impacting predators that compete with the fisheries for prey resources;
   - spatial distribution of predator species, energy flows through the food web, and places where higher than average concentrations of birds and mammals occur;
   - impacts on the economies and culture of the Pribilof Island communities; and
   - impacts on subsistence use of marine mammals.

2) NOAA has failed to manage for bycatch reduction of Tanner crab in GOA groundfish fisheries. The EIS should analyze the following issues:
   - effects of bottom trawl gear on Tanner crab stocks off Kodiak Island;
   - effects of GOA rationalization on Tanner crab bycatch reduction and mitigation; and
   - effects of Tanner crab bycatch in the groundfish fisheries on the Tanner crab fleet and communities.

3) The EIS should consider the direct, indirect, combined, and cumulative localized and regional effects of removing species and biomass on the ecosystem, target and non-target fish species, seabirds, marine mammals, and habitats. The EIS should analyze the following issues:
   - effects of single-species MSY-based harvest levels on the marine ecosystem;
   - effects of the groundfish fisheries on localized depletion and age-structure of rockfish;
   - effects of bottom trawl and pelagic trawl gear on seafloor habitats, on managed species such as crab, on the removal of prey from marine mammal foraging habitat, and on nursery habitat;
   - impacts of variation and uncertainty in natural mortality estimates for target species on the stock assessment process;
   - effects of harvest levels on bycatch, including the bycatch of salmon in the pollock fishery; and
   - spatial and temporal impacts of the individual fisheries on target species, non-target species, habitat, marine mammals, and seabirds.

4) The EIS should evaluate the impacts of fisheries on minority and low-income communities. Alaskan communities have suffered impacts socially, economically, and environmentally from
past failed attempts to regulate fisheries. Communities are suffering from overfishing in distant waters that causes a decline in abundance of most species in near shore waters.

**Cooperating Agencies and Tribal Governments**

The Council for Environmental Quality (CEQ) regulations for implementing the procedural provisions of NEPA emphasize agency cooperation early in the NEPA process. NMFS is the lead agency for this EIS. NMFS notified representatives of the U.S. Coast Guard, Alaska Department of Fish and Game, Washington Department of Fish and Wildlife, Oregon Department of Fish and Wildlife, the U.S. State Department, and the U.S. Fish and Wildlife Service, of its intent to prepare an EIS when it briefed the Council at its April 2006 meeting.

On April 10, 2006, NMFS mailed a letter to 114 Alaska tribal governments, providing information about the EIS and soliciting consultation and coordination with interested tribal governments. To date, no requests for meetings have been received from any of the tribal governments. NMFS received two comments from tribal government representatives, which are summarized above and included in Appendix 1.

**EIS Alternatives**

The proposed action is to set the TAC and PSC harvest specifications for the GOA and BSAI groundfish fisheries within the appropriate statutory, regulatory and FMP framework. Each of the alternatives represents an alternative harvest strategy for calculating amounts of TAC that could be set for managed species and species groups for each fishing year. The alternative strategies have been selected to display a wide range of harvest specification principles. Specific TAC amounts will be calculated for each alternative to determine the effects of each of alternative. The TAC amounts, however, are not the action analyzed in the EIS. The action being analyzed is the alternative harvest strategies, or in other words, the principle for calculating the TACs.

The proposed alternatives listed below accomplish the proposed action's purpose and need. These alternatives are similar to alternatives that have been used in the specifications process for many years. They span a wide range of potential harvest levels from no fishing (under Alternative 5), to fishing at the upper range of the ABC levels associated with the Council’s overfishing criteria, themselves based on NOAA guidance under National Standard 1 (Alternative 1).

Except for Alternative 5, the alternatives to be analyzed in this EIS are within the scope of the FMP and existing regulations. The constraints for setting harvest specifications under the FMPs are, (1) setting ABCs according to FMP procedures, (2) setting TAC less than or equal to ABC for all target and other species categories, and (3) setting the sum of the TACs to be within OY range. Alternatives 1, 2, 3 and 4 would establish TACs within the OY range, and therefore, meet the constraints. Alternative 4 responds to public comment by setting conservative harvest rates for important prey species (pollock, Atka mackerel, and Pacific cod), and setting conservative and spatially explicit TACs for rockfish species that are long-lived and late to mature species. Alternative 5 would set TAC at zero for target species and is considered the no action alternative, as required by NEPA.

The five alternatives are as follows:
Alternative 1: Set TACs to produce fishing mortality rates $F$, that are equal to $\max F_{ABC}$, unless the sum of the TACs is constrained by the OY established in the FMPs. This is equivalent to setting TACs to produce harvest levels equal to the maximum permissible ABCs, as constrained by OY. The term “$\max F_{ABC}$” refers to the maximum permissible value of $F_{ABC}$ under Amendment 56 to the groundfish FMPs. Historically, TAC has been set at or below ABC, so this alternative provides a likely upper limit for setting TAC within the OY and ABC limits.

Alternative 2: Set TACs that fall within the range of ABCs recommended by the Plan Teams and TACs recommended by the Council. Under this scenario, $F$ is set equal to a constant fraction of $\max F_{ABC}$. The recommended fractions of $\max F_{ABC}$ may vary among species or stocks, based on other considerations unique to each.

Alternative 3: For species in Tiers 1, 2, and 3, set TAC to produce $F$ equal to the most recent five year average actual $F$. For species in Tiers 4, 5, and 6, set TAC equal to the most recent five year average actual catch. This is equivalent to: For stocks with a high level of scientific information, set TACs to produce harvest levels equal to the most recent five year average actual fishing mortality rates. For stocks with insufficient scientific information, set TACs equal to the most recent five year average actual catch. This alternative recognizes that for some stocks, TAC may be set well below ABC, and recent average $F$ may provide a better indicator of $F_{TAC}$ than $F_{ABC}$ does.

Alternative 4: (1) Set TACs for rockfish species in Tier 3 at $F=75\%$. Set TACs for rockfish species in Tier 5 at $F=0.5M$. Set spatially explicit TACs for shortraker and rougheye rockfish in the BSAI. (2) Set TACs at $F=75\%$ for pollock, Pacific cod, and Atka mackerel (in the BSAI), unless total TAC is below OY; in which case, set $F=\%$ for these species that would achieve the lower limit of OY. (3) Set TACs for all other species following Alternative 2. This alternative sets conservative harvest rates for important prey species (pollock, Atka mackerel, and Pacific cod) and sets conservative and spatially explicit TACs for rockfish species that are long-lived and late to mature species.

Alternative 5: No Action: Set TAC equal to zero. This alternative recognizes that, in extreme cases, TAC may be set at a very low level, perhaps zero. This ‘no action’ alternative does not reflect the ‘status quo’ or baseline.

Related NEPA Documents

The NEPA documents listed below have detailed information on the groundfish fisheries, and on the natural resources and the economic and social activities and communities affected by those fisheries. These documents contain valuable background for the proposed action.

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$F$ stands for the fishing mortality for a stock (a ratio between fishing mortality and biomass size). Fishing mortality includes both retained and discarded catch.
The implementation of the harvest specifications is a project-level action within the fishery management programs under the GOA and BSAI groundfish FMPs. In June 2004, NMFS completed the PSEIS that analyzed the impacts of alternative groundfish fishery management programs on the human environment. The following provides information on the relationship between this EIS and the PSEIS. NMFS issued a Record of Decision on August 26, 2004, with the simultaneous approval of Amendments 74 and 81 to the FMPs, respectively. This decision implemented a policy for the groundfish fisheries management programs that is ecosystem-based and is more precautionary when faced with scientific uncertainty. For more information on the PSEIS, see the [http://www.fakr.noaa.gov/sustainablefisheries/seis/default.htm](http://www.fakr.noaa.gov/sustainablefisheries/seis/default.htm) website.

The PSEIS has multiple purposes. First, it serves as the central environmental document supporting the management of the GOA and BSAI groundfish fisheries. The historical and scientific information and analytical discussions contained therein are intended to provide a broad, comprehensive analysis of the general environmental consequences of fisheries management in the EEZ off Alaska. The document also provides agency decision-makers and the public with an analytical reference document necessary for making informed policy decisions in managing the groundfish fisheries and sets the stage for future management actions. In addition, it describes and analyzes current knowledge about the physical, biological, and human environment in order to assess impacts resulting from past and present fishery activities. The PSEIS brings the decision-maker and the public up to date on the current state of the environment, while describing the potential environmental consequences of alternative policy approaches and their corresponding management regimes for management of the groundfish fisheries off Alaska. In doing so, it serves as the overarching analytical framework that will be used to define future management policy with a range of potential management actions. Future amendments and actions will logically derive from the chosen policy direction set for the PSEIS’ preferred alternative.

As stated in the PSEIS, any specific FMP amendments or regulatory actions proposed in the future will be evaluated by subsequent environmental assessments (EAs) or EISs that incorporate by reference information from the PSEIS but stand as case-specific NEPA documents and offer more detailed analyses of the specific proposed actions. As a comprehensive foundation for management of the GOA and BSAI groundfish fisheries, the PSEIS functions as a baseline analysis for evaluating subsequent management actions and for incorporation by reference into subsequent EAs and EISs that focus on specific Federal actions.

The CEQ regulations encourage agencies preparing NEPA documents to incorporate by reference the general discussion from a PEIS and concentrate solely on the issues specific to the EIS subsequently prepared. According to the CEQ regulations, whenever a PEIS has been prepared and a subsequent EIS is then prepared on an action included within the entire program or policy, the subsequent EIS shall concentrate on the issues specific to the subsequent action. The subsequent EIS need only summarize the issues discussed and incorporate discussions in the PSEIS by reference (see 40 CFR 1502.20).

The Alaska Groundfish Harvest Specifications EIS will offer a detailed analysis of the proposed action, the harvest specifications. The harvest specification alternatives derive from the policy established in the preferred alternative in the PSEIS. This EIS will incorporate by reference information from the PSEIS, when applicable, to focus the analysis on the issues ripe for decision and eliminate repetitive discussions.
Annual TAC-Specification Environmental Assessments

In addition to the PSEIS, EAs have been written to accompany most annual harvest specifications since 1991. The 2005 and 2006 harvest specifications were analyzed in an EA and a finding of no significant impact was made prior to publication of the rule. Harvest specification EAs back to 2000 may be found at the NMFS AKR web site: http://www.fakr.noaa.gov/analyses/list.htm#tac.

Essential Fish Habitat EIS

In 2005, NMFS and the Council completed the EIS for Essential Fish Habitat Identification and Conservation in Alaska (EFH EIS). The EFH EIS provided a thorough analysis of alternatives and environmental consequences for amending the Council’s FMPs to include EFH information pursuant to Section 303(a)(7) of the Magnuson-Stevens Act and 50 CFR 600.815(a). Specifically, the EFH EIS examined three actions: (1) describing and identifying EFH for Council managed fisheries, (2) adopting an approach to identify Habitat Areas of Particular Concern within EFH, and (3) minimizing to the extent practicable the adverse effects of fishing on EFH. The Council’s preferred alternatives from the EFH EIS is implemented through Amendments 73/65 and 73/65 to the GOA and BSAI FMPs, respectively, and corresponding amendments to the Council’s other FMPs. A Record of Decision was issued on August 8, 2005. NMFS approved the amendments on May 3, 2006. The Final EIS may be found on the NMFS AKR web site at: http://www.fakr.noaa.gov/habitat/seis/efheis.htm.

Several management analytical tools and measures are noteworthy and mostly contained in appendices to the EFH EIS.

Appendix B - Evaluation of Fishing Activities that May Adversely Affect EFH. Appendix B addresses the requirement to conserve and protect fish habitats from adverse fishing activities. Appendix B is a newly developed model completed by NMFS and reviewed by a panel of independent scientists. The model evaluates current fishing activities on areas specifically described as EFH, incorporates the most accurate and up-to-date fishing gear descriptions, and formulates an effects index. Index values provide a range of fishing gear effects on habitat.

Appendix F – Essential Fish Habitat Assessment Reports (HAR). Appendix F is the most recent compilation of each fishery stock by FMP. The HAR contains life history, reproductive traits, and predator/prey relationship information. Additionally, each species profile in the HAR contains a list of references and information sources used by stock assessment experts for that species.

EFH EIS, Section 3.4.1 MSA Managed Fisheries. For each of the five FMPs (GOA Groundfish, BSAI Groundfish, BSAI Crab, Scallops, and Salmon), a subsection accurately describes the fisheries and gears used within that particular fishery. These descriptions are a product of a workshop held between fisheries managers and fishers regarding specific gear types currently used. This information was used in the fishing effects model to assess gear impacts on different habitat types.

Steller Sea Lion Protection Measures Supplemental EIS

A supplemental EIS (SEIS) was completed in 2001 to evaluate the impacts of groundfish fishery management measures in the GOA and BSAI on Steller sea lions. The purpose of the SEIS was
to provide information on potential environmental impacts that could occur from implementing a suite of fisheries management measures on the western population of Steller sea lions. Fisheries management measures were designed to not jeopardize the existence of the western population of Steller sea lions nor adversely modify its critical habitat. Alternative 4, the area and fishery specific approach, was selected in the Record of Decision. Revision of fishery management measures in accordance with that decision has been promulgated through proposed and final rulemakings in accordance with Magnuson-Stevens Act procedures. Many components of the harvest specifications incorporate these management measures. The EIS may be found at the NMFS AKR web site:

American Fisheries Act Amendments 61/61/13/8 EIS

The American Fisheries Act (AFA) EIS was prepared to evaluate sweeping changes to the conservation and management program for the pollock fishery of the BSAI and to a lesser extent, the management programs for the other groundfish fisheries of the GOA and BSAI, the king and Tanner crab fisheries of the BSAI, and the scallop fishery off Alaska. Under the Magnuson-Stevens Act, the Council prepared Amendments 61/61/13/8 to implement the provisions of the AFA in the groundfish, crab, and scallop fisheries. Amendments 61/61/13/8 incorporated the relevant provisions of the AFA into the FMPs and established a comprehensive management program to implement the AFA. The EIS analysis provided an evaluation of the environmental and economic effects of the management program that was implemented under these amendments, as well as developed scenarios of alternative management programs for comparative use. The harvest specifications include components of the AFA program. The EIS may be found at the NMFS AKR web site:

List of Preparers

Ben Muse and Gretchen Harrington, NMFS Alaska Region.
Appendix 1: Public Comments
All harvests should be cut by 50% this year due to overfishing and by 10% each succeeding year. The fish stocks belonging to U.S. citizens are being raided by commercial fish profiteers, who use the law of the commons to take it all before somebody else can get it.

Meanwhile, the marine mammals that depend on this fish stocks are being starved to death since all the food is being taken by greedy commercial fish profiteers.

This situation cannot continue and complete emptying of the seas is occurring daily, with one stock after another disappearing. The administration of this nationally owned resource is being completely neglected due to commercial fish profiteers being the only ones allowed to comment on what is taken from the seas.

This complete negligence on the part of NOAA must be stopped and now.

B. Sachau
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Florham Park NJ 07932
Sue Salverson
Assistant Regional Administrator
Sustainable Fisheries Division, Alaska Region
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

Dear Assistant Regional Administrator,

These comments are in response to NOAA correspondence dated April 10, 2006, re: (I.D. 030806B) Fisheries of the Exclusive Economic Zone Off Alaska; Groundfish Fisheries in the Bering Sea, Aleutian Islands and Gulf of Alaska.

Public Involvement... "The public is invited to attend the scoping meeting on Tuesday, April 4, 2006, in Anchorage, AK." Forwarding correspondence is dated April 10, 2006. The meeting date has past before stake-holding communities received this notice, or were given the opportunity to respond.

"A principal objective of the scoping and public input process is to identify potentially significant impacts to the human environment that should be analyzed in the EIS process." Too many barriers exist for Alaska communities to provide input for NMFS to receive meaningful input to this Environmental Impact Statement from communities that have already suffered impacts socially, economically, and environmentally from past failed attempts to regulate fisheries. Why would an agency host a meeting in a Anchorage where the general population of that community have nothing at stake, socially or economically? Meeting should be held in Cordova, Kodiak, Sitka, Ouzinkie, St. George, St. Paul, Akutan, Sand Point, etc. These are communities that have been impacted by fisheries, not Anchorage.
Technology has made it easy to “overkill” - and I'm not tech-smart enough to name the electronic or fishing equipment - but it's all there. Once the shoreline of the Pacific Ocean, especially Alaska, were teeming with so many different species of fish, these memories are fading from our mind that they ever existed because it's like waking from a pleasant dream and coming back to reality. In our bay (Ouzinkie) there used to be so many eels (we never bothered to ask what kind), bullheads from small to gigantic, flounder, “candle fish” (huligan?) by massive numbers buried in the sand, “pogies”, halibut; a mass of herring darting as far as we could see; and other uncounted species that we didn’t know existed because they weren't the “choice” fish. Dungeness crab and cockle clams - all gone without a trace. A graphic picture comes to my mind from an Indian speaker of the Salish Sea area: “...When we paddled our canoes out into the bay, the flounders and eels would have to scurry out of our way. Now there’s nothing there...” That's the impact on the human environment.

Ouzinkie used to be a community that thrived on commercial fishing, especially salmon and king crab. There used to be many families that owned salmon fishing permits. In recent years, those hold-out families have tried to sell their gear and permits, and there are no buyers. So, a commercial salmon fishing permit has no resale value. We are suffering the consequences of overkill in distant waters. When you speak about ecosystems, it ends here where the last of the little fish are disappearing.

When I made a statement about barriers: flying to Anchorage to attend a hearing is a barrier. Tribes, of which I represent, don’t have funds to send representatives. Barrier. Some fishers, especially in economically depressed communities like ours, would most likely love to comment, but, of course they cannot afford to make the trip. Barrier. The majority of your target audience probably don’t know that an EIS is being solicited. Barrier.

I would also like to suggest that your EIS summarize very specifically why an environmental impact statement is being initiated. “Summary: The scope of the EIS will be to determine the impacts to the human environment resulting from setting groundfish harvest specifications.” ... to me is very general.

I'm not sure that my comments are germane to the exact intent of the notice, but, I feel obligated to submit comments. It is always difficult to decipher a Federal notice. That is a common barrier that we work through. While I have fished in my life, and I am from a fishing community, I cannot say that I’m front-line fisherman. I appreciate the opportunity to submit written comments. To leave the door open, I would also accept an invitation on behalf of Ouzinkie Tribal Council to future Government-to-Government consultation. Thank you.

Sincerely,

Daniel Ellanak

Cc: OTC
15 May 2006

Sue Salveson
Assistant Regional Administrator
Sustainable Fisheries Division
Alaska Region
NMFS
PO Box 21668
Juneau, AK 99802

Re: Alaska Groundfish Harvest Specifications EIS

Dear Ms. Salveson:

Thank you for the opportunity to submit comments during the scoping process for the upcoming Alaska Groundfish Harvest Specifications Environmental Impact Statement.

As you are aware, an analysis of impacts under NEPA must “inform decision-makers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment.” 40 C.F.R. § 1502.1. This requirement has been described in regulation as “the heart of the environmental impact statement.” Id. § 1502.14. The agency must therefore “[r]igorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.” Id. § 1502.14(a). The alternatives proffered should “sharply define[e] the issues and provid[e] a clear basis for choice among options by the decisionmaker and the public.”

We feel that the proposed alternatives do not represent any significant departure from the current status quo for groundfish management, with the exception of the no action alternative. We would like to see additional alternatives that evaluate substantive changes to the current TAC setting process by incorporating more explicit ecosystem considerations and that evaluate the spatial apportionment of the TAC for target species

1 Id.
that interact with Essential Fish Habitat, ESA protected critical habitat and forage species of northern fur seals and seabirds that reside in the Pribilof Islands region.

The Traditional Council is submitting these comments because we are highly concerned at the sustained decline of northern fur seals and Steller sea lions from our island. These species are a very important subsistence resource for our survival. As co-managers of the northern fur seals and Steller sea lions we would like to see alternatives that address the impact the TAC setting process is having on these species. We feel that the models used for setting the TAC do not place enough emphasis on ecosystem-based management and would like to specifically request that you include in your NEPA analysis an evaluation of the natural mortality estimated for target species and what implications variation and uncertainty in these estimates might have during the stock assessment process.

In this regard, we reference the NPFMC report The Scientific Review of the Harvest Strategy Currently Used in the BSAI and GOA Groundfish Fishery Management Plans Draft Report by (Goodman et. al 2002). On page 85, the report states:

"The constant natural mortality rate, M, is in units per capita of the target stock. Thus the total consumption by higher trophic levels, when M is assumed to be constant, will vary in proportion to the target stock size (or biomass). A harvest management strategy, such as F40%, that by design reduces the biomass of the target stock biomass by a large fraction, will, all other things being equal, reduce the total consumption by higher trophic levels by a similar large fraction, and we would expect the predator populations to be reduced accordingly."

The decline in northern fur seals, harbor seals and Steller sea lions in the waters surrounding our island is cause for concern that variation in natural mortality due to changes in species interactions or environmental changes may limit the ability of the current TAC setting process to avoid impacting predators that compete with the fisheries for prey resources. Accordingly, we would like to suggest that the EIS process include the evaluation of an alternative that builds an additional margin of safety into the fishing mortality rate rules (such as shifting to F50% or F60% for example) or stipulating a more stringent threshold on the total allowed depression of equilibrium biomass (such as the limit adopted in the Commission for the Conservation of Antarctic Marine Living Resources Convention).

To evaluate the spatial apportionment of the TAC, we would like to suggest evaluation of an alternative similar the "Low and Slow Approach" described in the SSL SEIS and the Draft Programatic SEIS for the Groundfish Fisheries (NMFS 2001a). Essentially, the approach seeks to establish lower total allowable catch levels (TACs) for pollock, Pacific cod, and Atka mackerel, prohibit trawling in critical habitat, and implement measures to spread out catches through the year. The advantage of drawing from this alternative is
that you already have a wealth of existing background material which could be brought into the analysis. This would also be an alternative that would be in accordance with the US Commission on Ocean Policy and the Pew Oceans reports such that ecological constraints are quantified – explicitly dealing with the difference between Maximum Sustained Yield and Optimum Yield (“OY”). OY needs to include marine mammals getting a percent of the catch. (See attached article by NMFS scientist Charles W. Fowler).

In this regard, we would like to see some analysis of the existing data on spatial distribution of predator species in order to examine energy flows through the food web at different areas in our region. If transect data for all known birds and mammals were overlaid within a 1000 square km area around St. George, and then binned based on the total number of all animals in 10 km blocks within this larger area, it would indicate “hotspots” or places where higher then average concentrations of birds and mammals occur. This would give a much clearer idea of areas of importance specific areas to these higher trophic level species. Goodman et al. (2002) state:

In the context of fishery management that takes ecological and ecosystem considerations into account, reserves (marine protected areas) play two extremely important roles. First, a no-take marine reserve of sufficient size will allow one to maintain a source of baseline data for components of the ecosystem. This is important because we should expect change to occur in ecosystems. Without having a source of baseline data in which there is no (or at least limited) human intervention, it will often be difficult to ascertain whether changes are due to fishing or other factors. Second, for stocks that have complicated social structure (e.g. sex-changing fish or harem or lek breeding marine mammals or birds), a no-take marine reserve will allow a full representation of the social structure of that stock, such social structures might otherwise be truncated by either direct or indirect effects of fishing.

The Pribilof Islands provide a perfect place to implement this type of ecosystem-based management. So, we would like to recommend the evaluation of an alternative that implements closures within a hundred mile radius around the Pribilof Islands and a fifty mile radius around Zhemchug Canyon to the north.

We also request that particular attention be paid to evaluating the impact of the alternatives on the environment, economics and culture of the Pribilof Island communities. As you are aware, the recent trend of industrial fisheries intensifying their activities around the Pribilof Islands is having profound impacts to our communities. We hope that NMFS will meet the substantially higher burden of analysis imposed by Executive Order 12898 (“Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations.”) This responsibility includes not only paying
close attention to impacts from fisheries on the island inhabitants, but also addressing significant mitigation measures that may be put into place to protect communities.

We look forward to continuing to work with the agency so that the TAC setting process will no longer cause disproportionate impacts to Pribilof communities and ecosystems.

Sincerely,

[Signature]

Chris Merculief
President
Date: Monday, May 15, 2006

Document Identifier: Harvester Specs. (EIS)

To:
Ms. Sue Salveson, Assistant Regional Administrator
Sustainable Fisheries Division, Alaska Region NMFS
P.O. Box 21668; Juneau, Alaska 99802
Attn: Records Officer
Federal Building; 709 West 9th Street; Room 420A

Juneau, Alaska

Fax: 907-586-7557
EIS.Specifications.Intent@noaa.gov

From:
Mr. Ludger Dochtermann – Gulf of Alaska
F/V North Point & F/V Stormbird

RE: Alaska Groundfish Harvest Specifications
Environmental Impact Statement

A. Scoping & Statutory Requirements:

As you know, in the scoping and public input process, the principle objective is to identify potentially significant impacts to the human environment that should be analyzed in the EIS process. Impacts are to include (1) essential fish habitat, (3) non-target fish stocks... and prohibited species, and (5) the ecosystem. Social and economic impacts are also to be considered in terms of the effects that changes in projected harvests will have on (1) those who participate in harvesting other living marine resources, and (6) fishing communities.

As you also know, under the Magnuson-Stevens Act, National Standard 1 requires Optimum Yield for each fishery, NS3 addresses interrelated stock managements in close coordination, NS7 requires minimizing costs, NS2 requires management measures based on the best scientific information, and NS8 addresses Communities – and rebuilding of overfished stocks.

The above are not exhaustive of all relevant statutory instructions and federal law, regarding the concerns of fishermen such as myself – participants in the Tanner Crab fisheries of Kodiak Island, in the Gulf of Alaska.
B. Need for Higher GOA Groundfish Observer Coverage:

You have been present for North Pacific Fisheries Management Council meetings from June of 2005 until April of 2006 where, on at least six occasions, either myself or a representative have presented the Council with repeated testimony on the issues of GOA Observer Program coverage deficiencies; and we asked for a motion to instruct the Council to address this in Staff Tasking and other venues. You are likely aware that on each occasion, we were unsuccessful at even getting the Council to forward a Motion for consideration, despite observed coverage being less than 8% of tow in the GOA, as compared to 82% in the Bering Sea/Aleutian Islands groundfisheries. This lack of action was in spite of the wise and practical words of Council member Ed Rasmussen, who said, “this problem is not going to go away, and we should consider dealing with it now” (paraphrase).

C. Higher Coverage Needed to Stop “Trawler Crab” Practices:

As you may also be aware, Kodiak tanner fishermen (led by myself) long ago made self- and publicly-responsible efforts to address the mismanaged fishery stocks of GOA crab stocks. While on the grounds this season, myself and other tanner pot harvesters noticed the intrusions of bottom trawlers and the significant (major) damage they were doing to our tanner stocks in specific areas off Kodiak Island.

The time consuming efforts of pulling of pots in those areas, only to find remarkable percentages of “trawl crab” damages, necessitating us to throw back into the sea this valuable resources – a wanton waste of national wealth – has cost us dearly in time and fuel and crew efforts (and risks to safety). There is no system for compensation to us for the harms of the trawler fleet upon these crab stocks.

Rather than go into the matter further during this public comment, I’d like to request that NOAA Fisheries would please seriously consider the need to quantify these harms against non-target species in the upcoming EIS, i.e. in the scoping review.

D. GOA Rationalization Problem Statement Unmet Needs:

The ‘proposed’ Gulf Ratz problem statement identifies “reduced economic viability, high bycatch, decreased safety, reduced product value and utilization, jeopardy to community stability and their historic reliance; and the limited ability to adapt to MSA requirements to minimize bycatch and protect habitat.”

Therefore, the EIS should show us answers to these questions (and more):

“What reduced economic viability?” – are they talking about the harms to our tanner stocks?

“How much too high is the bycatch?” – how can that be known without recommending increased observer coverage and addressing the problem with full observation according to the Dochtermann proposals to the Council? (Copies can be supplied, as they have been placed on the federal record on numerous occasions over the past year).

“What harms would occur in the groundfish harvest at specific TAC levels, given the undeserved “% PSC reserved rights” wreaking havoc on our non-targeted species?” – How
can you quantify it? You can’t without observing it first! Where are the three years of mandated data to prove reduced viability?

“What is the reduced product value and utilization” – for tanner crab thrown back overboard after “trawl smashing” occurs?

“What is the data to show us the trawlers don’t need to go out in certain risky weather?” – crab boats are restricted to weather windows, so why not trawlers too? (if safety is a real issue). Why should they be on our grounds when we can’t?

And, “What is the practice limiting adaptability to MSA requirements to minimize bycatch in the trawl fisheries?” - Isn’t it the assumed privileges of bycatch rights to full historical levels instead of the adherence to laws requiring reduction and mitigation, instead?” – quantify what reductions would occur and how much adaptability would be improved were the TAC to be reduced (or by other means).

E. Tanner Crab Harms Derive from PSC Allowances:

In addition, we believe that these “trawl crab” damages are the direct result of the trawl harvesting paradigm that results from a management problem caused by NOAA’s mismanagement of the groundfisheries – whereby the Agency allows, in direct contradiction of minimizing prohibited species catch (i.e. the goal of bycatch reduction and mitigation of damages on other stocks), these trawlers to target “secondary species” of greater value than targeted fisheries.

As you personally described to the Council in February. NOAA likes to allocate the PROHIBITED SPECIES CATCH total allowances to “industry” as various management conditions change, and that the Agency may have its own problems with future allotments of such unwarranted PSC allowances to specific gear groups or companies etc.

For our part, as tanner harvesters, we have a major problem with the entire issue of NOAA Fisheries and the Council’s failures to follow Sec. 600.350 National Standard 9 on Bycatch, which (with emphasis added) states “Conservation and management measures shall, to the extent practicable: (1) Minimize bycatch; and (2) To the extent bycatch cannot be avoided, minimize the mortality of such bycatch.” While the groundfisheries are not allowed to retain crab, it is nonetheless a “non-targeted stock” and “interrelated stock” requiring closely coordinated management.

We’d like the Agency and Council to fully consider all appropriate analytical elements needed to decide what the damages to these interrelated non-target stocks are, how much cost a mismanaged GOA groundfish harvest imposes on our Tanner fleet and the harms to our Communities, as well.

It may well be that when the issues of PSC allocations being treated as if permanent future harvesting rights by these trawlers when they are actually not the targeted catch – and not being addressed through proper reduction management (applying EXISTING mitigation tools) – are fully considered, the appropriate solution (and only practicable solution given harvester behavior) is to do one of the following:

1) **reduce the TAC for GOA groundfish trawlers**, as the only means to reduce damages to non-target species and allow full tanner crab stock rebuilding – because if the % PSC is considered a right, then the only means for reduction of
harms is to reduce the TAC as multiplier against these "un-policing %PSC privileges;" until NOAA can resolve the failure to manage for bycatch reduction in total and by fishery, and address these 'politically rationed' rights to destruct natural resources;

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3) **the proper management solutions can only come about with greater information** in the terms of **IMPROVED OBSERVER COVERAGE IN THE GOA TRAWL FISHERIES**, so that the best science and proper management and conservation decisions can be made based on real information – so, this should be an element of study in the EIS, as well as one of its recommendations concluding that NOAA and the Council are "managing blind."

We'd appreciate your future increased efforts to improve the management of the Nation's fisheries that belong to the People, not to those who would abuse not only their special "secondary species" privileges, but also our non-targeted species -- at great harms to others, our communities, the Treasury and myself. Please show us that our personal efforts to identify the causes of tanner crab mismanagement and personal sacrifices to return these stocks to viable levels were not for naught.

Sincerely,

Ludger Dochtermann, P.O. Box 714; Kodiak, AK 99615 Tel: (907) 486-5450
F/V North Point & F/V Stormbird

CC: Secretary of Commerce, Hon. Carlos Gutierrez
North Pacific Fishery Management Council, Chris Oliver, exec. director
Date: Monday, May 15, 2006

**Document Identifier: Harvester Specs. (EIS)**

To:

Ms. Sue Salveson, Assistant Regional Administrator  
Sustainable Fisheries Division, Alaska Region NMFS  
P.O. Box 21668; Juneau, Alaska 99802  
**Attn: Records Officer**  
Federal Building; 709 West 9th Street; Room 420A

Juneau, Alaska

Fax: 907-586-7557  
EIS.Specifications.Intent@noaa.gov

From:

Mr. Ludger Dochtermann – Gulf of Alaska  
F/V North Point & F/V Stormbird

**RE: Alaska Groundfish Harvest Specifications Environmental Impact Statement**

**A. Scoping & Statutory Requirements:**

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Sincerely,

[Signature]

Ludger Dochtermann, P.O. Box 714; Kodiak, AK 99615 Tel: (907) 486-5450
F/V North Point & F/V Stormbird

CC: Secretary of Commerce, Hon. Carlos Gutierrez
North Pacific Fishery Management Council, Chris Oliver, exec. director
May 15, 2006

Ms. Sue Salveson
Assistant Regional Administrator
NMFS, Alaska Region
P.O. Box 21668
Juneau, AK 99802

Delivered via facsimile: (907) 586-7557; and email: EIS.Specifications.Intent@noaa.gov

RE: North Pacific Catch Specifications EIS

Dear Ms. Salveson:

Each year the North Pacific Fishery Management Council and the National Marine Fisheries Service (NMFS) establish catch specifications for the Bering Sea/ Aleutian Islands (BSAI) and Gulf of Alaska (GOA) groundfish fisheries. This major federal action has significant effects on the quality of the human environment. North Pacific groundfish fisheries catch roughly two million metric tons of marine life each year, with a range of local and regional ecological effects as well as species specific impacts. While we have some concerns about the apparent generic nature of this EIS, we look forward to working with the Council, agency, and the public to develop and analyze different ecosystem-based management approaches to setting catch limits for the North Pacific groundfish fisheries. This is increasingly important in the face of an era of reduced productivity, lower biodiversity, and the dominance of single species in the Bering Sea. As the agency and Council move forward in this process, in addition to those alternatives and issues identified in the Federal Register notice, we request consideration of a broader range of ecosystem-based management approaches to specify catch levels, increase consideration of the cumulative effects of the groundfish fisheries on specific managed species, and consider ecological impacts at local and regional scales.

1. Catch levels that account for ecosystem considerations:

The current suite of alternatives consists of minor modifications to the current single-species-based approach to setting catch levels. As we move towards ecosystem-based management, different methods to establish catch levels that explicitly incorporate ecological considerations must be explored and adopted.

Each year an “Ecosystem Considerations” report is prepared as an appendix to the BSAI and GOA harvest specifications analysis. While the Ecosystem Considerations report provides valuable information, it is not explicitly integrated into the process of setting Acceptable Biological Catch (ABC) and Total Allowable Catch (TAC) levels. In the “Scientific Review of the Harvest Strategy Currently Used in the BSAI and GOA Groundfish Fishery Management Plans,” the authors noted that any downward adjustment of the TAC from the $F_{10}$-based ABC is done in an “ad hoc” manner, and explained that it is unclear if grounds exist for believing this adjustment is enough for ecosystem purposes.

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For example, Total Allowable Catch levels for Bering Sea pollock are made in the absence of information on the prey needs and foraging behavior of Northern fur seals and other predators which are in direct competition with commercial fisheries. Total Allowable Catch amounts should explicitly account for the interactions of predators and prey, spatially and temporally, with built-in precautions to avoid ecosystem overfishing and large shifts in the food web. Setting a TAC that accounts for ecological considerations means that we must first ask what the ecosystem requires to sustain other populations including predators, and then calculate sustainable fishery removals and appropriate rates.

We suggest the following alternatives for accounting for ecosystem considerations in determining catch levels:

a. Use frequency distributions to set ecosystem and single-species harvest levels within the normal range of natural variation.

One way to provide for ecological considerations is to set levels and rates to ensure they fall within normal ranges of natural variation based on empirical examples of sustainability. Sample applications of this approach at ecosystem and single-species levels have been developed by NOAA scientist Dr. Charles W. Fowler and others using the central tendencies of frequency distributions to calculate ecologically sustainable yields and harvest rates. This may be one way to explicitly account for ecosystem considerations in setting catch levels, and should be considered as a full-blown alternative. Other approaches that depart from traditional single-species management methodologies should be developed and explored by the agency, Council, and the public in this EIS as well.

b. Use current single species methodologies with more conservative harvest rates for ecosystem considerations.

In addition to alternatives that depart from traditional management tools, the agency should consider alternatives that use the traditional tools, but that set more precautionary harvest control rules.

For example, an alternative should be considered that accounts for food-web dynamics and ecosystem functions by setting a catch rate of F_{75\%} for important prey species (such as pollock, Atka mackerel and cod), and for species that are long-lived and late to mature (i.e. rockfish) in Tiers 1-3. Target species in Tiers 4-6, for which there is not adequate information for setting biological reference points and minimum stock size thresholds, should be designated as “bycatch only” with full utilization and retention, with area and species-specific hard caps.

c. Evaluate the impacts of MSY-based harvest levels on the marine ecosystem.

In addition to developing additional alternatives such as those described above, we want to emphasize that the analysis of alternatives must include detailed consideration of the effects the current single-species MSY-based system has on the ecosystem. As stated by the Ecosystem Principles Advisory Board in its 1998 report to Congress:

"Much of the foundation of fisheries science provides a basis for determining maximum yields so that fishing can safely remove surplus production. However, when fishing is examined in an ecosystem

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context, the rationale for harvesting surplus production is unclear.... Very little, if any of this biomass, is truly 'surplus' to an ecosystem....

The EIS should consider the direct, indirect, combined, and cumulative localized and regional effects of removing species and biomass amounts on the ecosystem, target and non-target fish species, seabirds, marine mammals, and habitats.

2. Analyze alternative rockfish harvest rates; set spatially explicit catch levels; and consider age truncation, localized depletion and potential overfishing when determining catch levels:

This EIS should consider different approaches to setting catch levels for North Pacific rockfish. The current process and catch levels are based on inadequate and highly variable biomass estimates, without regard to stock structure, and without proper consideration of life history characteristics such as rockfish longevity, late age at sexual maturity and the increased reproductive success of older more fecund female fish. Signs of stress in North Pacific rockfish populations include age truncation, localized depletion and potential overfishing.

a. Analyze alternative harvest rates for rockfish.

In addition to the approach outlined under ecosystem considerations (1.b above), we also request that the recommendation by Goodman et al. in the review of the North Pacific harvest strategy, to shift to $F_{50\%}$ to $F_{60\%}$-based harvest rates be included for analysis. In their report, they stated:

Lower rates, on the order of $F_{50\%}$ to $F_{60\%}$ may be more appropriate to balance yield and conservation objectives for such species. Another problem has to do with stock complexes. Because productivity of each species in the complex is likely to be different, a single $F_{\%}_{age}$ proxy will not perform equally well for all stocks in the complex.

Of course, this does not adequately deal with rockfishes in Tiers 4-5, so additional analysis is needed of these species such as a review of the natural mortality rates used (e.g. BSAI and GOA shortspine thornyhead rockfish), an alternative rate (i.e. $F = 0.5M$ instead of $0.75M$), as well as a “bycatch only” status, full utilization and retention, plus species and area specific hard caps.

b. Set spatially explicit ABC, TAC and overfishing levels that coincide with population distributions.

Research on the population structure of rougheye rockfish has determined that the Aleutians Islands is home to a population of rougheye rockfish that is distinct from adjacent populations in the eastern Bering Sea and Gulf of Alaska. Despite this finding NMFS has continued to propose a combined rougheye ABC, TAC and OFL for the entire Bering Sea and Aleutian Islands region. Doing so elevates the risk of localized depletion and overfishing of the Aleutian Islands rougheye population. NMFS and the NPFMC have been informed of this issue and the potential of localized depletion and overfishing that may be exacerbated by this fact, but have to date failed to address this because of the problems associated with the management of small TACs. It is not acceptable, however, to allow for localized depletion and potential overfishing of Aleutian Islands rougheye because managers are unwilling to deal with the management of small quotas. The EIS should analyze separate TAC and OFL levels for rougheye in the Bering Sea and Aleutian Islands as well as bycatch hotspots and refugia.

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c. Consider age truncation, localized depletion and ways to minimize impacts, such as refugia and incorporating the importance of old-growth age structure in stock modeling.

A major concern of the groundfish fisheries on rockfish populations is the impact fishing has on the age structure of rockfishes. Research had demonstrated that:

*Old-growth age structure, combined with a broad spatial distribution of spawning and recruitment, is at least as important as spawning biomass in maintaining long-term sustainable population levels.*

Research on Gulf of Alaska Pacific ocean perch indicates that the proportion of old fish (greater than 40 years old) has been in decline for the last two decades. Moreover, when considering the importance of older fish to survival and reproduction of offspring into stock modeling, NMFS scientists have indicated there would be a 3% decrease in biomass of GOA Pacific ocean perch and a 15% reduction of total allowable catch.

The BSAI and GOA groundfish fisheries may also be having a serious impact on age truncation and localized depletion of rockfishes. In the NPFMC SAFE documents, scientists have expressed concern of localized depletion of GOA northern rockfish and pelagic shelf rockfish. Approximately 89% of northern rockfish are caught by bottom trawls in the GOA from five small areas and the pelagic shelf rockfish catch has been concentrated in just a few areas west of Yakutat. The EIS should consider the effects groundfish fisheries are having on localized depletion and age-structure and consider ways to minimize those impacts including incorporating the findings of Berkeley et al. in stock modeling and designing refugia around bycatch hotspots and important rockfish habitat.

3. Analyze the effects of harvest levels on habitat:

Setting catch levels for BSAI and GOA groundfish fisheries must also take into consideration the effects these fisheries have on marine habitats. While NMFS completed the Essential Fish Habitat EIS in April 2005 and is preparing rule making now, the agency must continue consideration of the impacts groundfish fisheries have on essential fish habitat, as well as the habitat of other marine life such as marine mammals and seabirds. Mitigation measures have been proposed by the NPFMC for the Aleutian Islands and Gulf of Alaska but there have been no essential fish habitat measures proposed for the Bering Sea. Consideration must be given to the effects of bottom trawl and pelagic trawl gear on seafloor habitats, on managed species such as crab, on the removal of prey from marine mammal foraging habitat such as fur seals and sea lions, and on nursery habitat such as skate nursery sites in the eastern Bering Sea or juvenile halibut habitats along the Bering Sea slope.

4. Analyze the effects of harvest levels on bycatch:

The catch of nearly 2 million metric tons of marine life each year has come with the cost of approximately 140,000 metric tons of groundfish discards each year since 1998, plus discards of prohibited species and other marine life. While measures such as IR/IU resulted in significant declines of discards in the BSAI groundfish fisheries, overall discards in the North Pacific groundfish fisheries have remained chronically high. Some fisheries continue to have discard rates greater than 25%, such as flatfish trawl fisheries and the Aleutian Islands Atka mackerel fishery. While other fisheries have low discard rates, the total amounts of discards

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6. NPFMC 2004. GOA SAFE, at 399-400.
7. Id.
remain unreasonable. For example, the Bering Sea pollock fishery has increasingly high interception of chinook and chum salmon. How will the fishery catch the harvest level of pollock without catching hundreds of thousands of prohibited salmon? The harvest specifications EIS must look at the effects harvest levels have on discards and measures to reduce chronic discards and waste, including kill caps on prohibited and protected species as well as other non-target marine life.

5. Account for international fishing pressure on transboundary stocks when setting catch levels:

A large portion of eastern Bering Sea pollock may be caught in Russian EEZ waters in the Navarin-Anadyr area. While the extent of a straddling stock across these regions is uncertain, it is believed that eastern Bering Sea pollock move between these two separately managed regions. Catch of eastern Bering Sea pollock in the U.S. and Russian waters should be considered in total landings and in determinations of total allowable catch. As described by Kotwicki et al,

We conclude that a significant part of the EBS pollock population migrates into the Navarin-Anadyr area, which can have an impact on the way the EBS stock is managed. We should account for landings of pollock in the Navarin-Anadyr area, estimate how much of these landings include pollock from the EBS stock, and use this estimate in determining the EBS total allowable catch. Further research is needed to quantify the proportion of the EBS stock migrating into the Russian fishing zone and to estimate the number of pollock caught there.9

Oceana appreciates the commitment of NMFS and the Council to take a hard look at alternative ways to set catch levels in light of the effects those decisions have on the marine environment and our continued use and enjoyment of that environment. We request that you add several alternatives reflecting different ecosystem-based management approaches to setting catch levels, including those described above, and that the analysis of those alternatives include detailed consideration of the effects of the fisheries on issues such as habitat and bycatch. We look forward to working with you as you develop these approaches.

Sincerely,

Jim Ayers
Vice President

cc: Stephanie Madsen, Chair, North Pacific Fishery Management Council

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15 May 2006

Sue Salveson  
Assistant Regional Administrator  
Sustainable Fisheries Division  
Alaska Region  
NMFS  
PO Box 21668  
Juneau, AK 99802

Re: Alaska Groundfish Harvest Specifications EIS

Dear Ms. Salveson:

Thank you for the opportunity to comment on the proposed alternatives for the harvest specification EIS as provided by this NEPA process, which is critical to insure public involvement.

Your proposed four alternatives are quite lacking in that the first three are very similar and then the last one of a zero TAC is totally unfeasible. It seems that there should be some alternatives that really take a look at changing the overall TAC.

As you make your decision please bear in mind that the northern fur seals are disappearing from our island and that they are a very important subsistence resource. Also that the Tribal Governments of St George and St. Paul are co-managers of the northern fur seals and Steller sea lions and should have a much greater say into what happens with the prey for these marine mammals. I feel that the models used for setting TAC do not reflect ecosystem-based management and would like to request that you evaluate different rates of natural mortality and what implications that might have on your model.

The Scientific Review of the Harvest Strategy Currently Used in the BSAI and GOA Groundfish Fishery Management Plans Draft Report by Daniel Goodman (Chair) has a suggestion to “(c)alculate total removals -- including incidental mortality -- and show
how they relate to standing biomass, production, optimum yields, natural mortality, and trophic structure.” It also states:

“The constant natural mortality rate, $M$, is in units per capita of the target stock. Thus the total consumption by higher trophic levels, when $M$ is assumed to be constant, will vary in proportion to the target stock size (or biomass). A harvest management strategy, such as $F_{40\%}$, that by design reduces the biomass of the target stock biomass by a large fraction, will, all other things being equal, reduce the total consumption by higher trophic levels by a similar large fraction, and we would expect the predator populations to be reduced accordingly.”

The decline in northern fur seals, harbor seals and Steller sea lions in the waters surrounding our island seems to indicate that this true.

It is easy enough to say that a management system could be made more protective of ecosystem properties by building additional margins of safety into a fishing mortality rate rule (such as shifting to $F_{50\%}$ or $F_{60\%}$ for example) or stipulating a more stringent threshold on the total allowed depression of equilibrium biomass (such as the limit adopted in the Commission for the Conservation of Antarctic Marine Living Resources Convention).

I would therefore like to suggest the following alternatives.

Alternative 5: Set the TAC using a higher natural mortality rate that is deductible from ABC for each group of species and that takes into account spatial and temporal variances, i.e. using the CCAMLR approach that accounts for the needs of the ecosystem – 50% of the biomass is taken out for ecosystem needs.

This would also be an alternative that would be in accordance to with the US Commission on Ocean Policy and the Pew Oceans reports such that ecological constraints are quantified – explicitly dealing with the difference between MSY and OY – OY needs to include marine mammals getting a percent of the catch.

I would like to see some analysis of the data that you already have on spatial distribution, to look at energy flows through the food web at different areas in our region. If you overlaid transect data for all known birds and mammals within a 1000 square km area around St. George, and then bin up the total number of all animals with, say, 10 square km blocks within this larger area, it would indicate “hotspots” or places where much higher then average concentrations of birds and mammals occur. This would give a much clearer idea of areas of importance to these higher trophic level species. From the Goodman report:

In the context of fishery management that takes ecological and ecosystem considerations into account, reserves (marine protected areas) play two extremely important roles. First, a no-take marine reserve of sufficient size will allow one to maintain a source of baseline data for components of the ecosystem. This is important because we should expect change to occur in
ecosystems. Without having a source of baseline data in which there is no (or at least limited) human intervention, it will often be difficult to ascertain whether changes are due to fishing or other factors. Second, for stocks that have complicated social structure (e.g., sex-changing fish or harem or lek-breeding marine mammals or birds), a no-take marine reserve will allow a full representation of the social structure of that stock; such social structures might otherwise be truncated by either direct or indirect effects of fishing.

The Pribilof Islands provide a perfect place to implement this type of ecosystem-based management. So, I would like to recommend an alternative that has a zero TAC within a hundred mile radius around the Pribilof Islands and a fifty mile radius around Zhemchug Canyon which is north of our island.

I am also interested in knowing what is your vision and understanding of environmental justice? How will you evaluate the impact of the alternatives on the environment and the economies of the Pribilof Islands?

Sincerely,

Karin Holser
May 15, 2006

Sue Salveson
Assistant Regional Administrator
Sustainable Fisheries Division
Alaska Region,
National Marine Fisheries Service
P.O. Box 21668
Juneau, AK 99802


Dear Ms. Salveson:

Pacific Environment (“PE”) appreciates this opportunity to provide scoping comments for the Alaska Groundfish Harvest Total Allowable Catch Environmental Impact Statement. As a non-governmental organization, PE works to protect the living environment of the Pacific Rim by strengthening democracy, supporting grassroots activism, empowering communities, and redefining international policies. A hard copy of these comments has also been sent via U.S. mail.

Ecosystem-Based Management

PE encourages the National Marine Fisheries Service (“NMFS”) to review alternative total allowable catch levels based upon the principles of ecosystem-based management. Current catch levels are based upon single species management and do not account for the energetic needs of other ecosystem consumers, such as marine mammals and seabirds. This has led to precipitous declines of species such as northern fur seals. Ecosystem-based management must

- Examine all the links among living and nonliving resources
- Focus on the cumulative impacts of multiple activities occurring within specific areas defined by ecosystem boundaries, rather than political boundaries
- Incorporate the precautionary principle when dealing with scientific uncertainty,
- Set catch levels based upon the needs of all parts of the food web
- Undertake research to determine the ecosystem effects of fishing and monitor the trends and dynamics in ecosystem functionality

In NMFS’ request for scoping comments, all of the alternative techniques for setting the total allowable catch are based upon the same stock assessment models and methodology. While each offers a slight difference in how many fish are to be caught, all are predicated on some version of single-species management. For the public and the decisionmaker to truly understand the environmental impacts of large scale fisheries in the North Pacific, it is important to examine alternatives that better deal with scientific uncertainty by incorporating ecosystem needs, that respond to high levels of scientific uncertainty through increasing
levels of precaution, that use a system of marine reserves to establish baseline data and protect sensitive areas, and that lessen the spatial and temporal impacts of fisheries.

**Analysis of Environmental Impacts**

While PE is encouraged that NMFS is committed to undertaking a review of the environmental impacts of the nation’s largest fisheries, we are concerned that NMFS has failed in any analysis to adequately

- Analyze spatial and temporal impacts of the individual fisheries on target species, non-target species, habitat, marine mammals and seabirds
- Analyze the cumulative impacts of fisheries on all components of the ecosystem
- Analyze the impacts of fisheries on minority and low-income communities

This missing analysis is critical for the public and decisionmaker to understand the impacts of the fisheries and to examine tradeoffs among various alternatives. While NMFS has undertaken a “programmatic” analysis that purports to look at region-wide effects, the analysis of site specific impacts from individual fisheries in specific places has never taken place. Thus trends such as the pollock fleet concentrating its effort closer to the Pribilof Islands, and in prime northern fur seal foraging habitat, are never addressed.

**Mitigation**

One of the reasons to undertake an environmental impact statement is to identify mitigation measures that can be adopted to lessen the impact of a proposed action. Indeed, this is part of the impetus to evaluate a wide range of alternatives and analyze myriad impacts of the proposed action to the ecosystem. While the Bering Sea/Aleutian Island and Gulf of Alaska Fishery Management Plans include an ad hoc list of management measures cobbled together to provide some level of protection to resources, alternative measures should be examined when setting the total allowable catch in space and time. Alternative measures that should be analyzed and suggested for mitigating the impacts of fisheries include:

- Gear restrictions, including the phasing out of dirty gear such as bottom trawls
- Catch levels constrained by other ecosystem components such as northern fur seals
- Establishment of a system of marine protected areas based upon ecological criteria
- Dispersing highly concentrated fisheries in time and space so as to not cause localized impacts to habitat, non-target species, and other ecosystem components

Again, PE appreciates the opportunity to offer these comments and we look forward to continuing to work with NMFS on this issue.

Sincerely,

Whit Sheard
Alaska Program Director
Pacific Environment
Subject: Re: COMMENTS
From: "Ben Muse" <Ben.Muse@noaa.gov>
Date: Mon, 29 May 2006 13:31:32 -0800
To: Tyler C <tylercampbellsr@yahoo.com>
CC: Records FAKR <Records.fakr@noaa.gov>, Gretchen harrington <gretchen.harrington@noaa.gov>, Melanie Brown <Melanie.Brown@noaa.gov>

Tyler,

Thanks for sending this to me. I'm passing it on to our administrative records office, and other interested parties.

Ben

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Tyler C wrote:
>
> Hello Ben,
> I tried sending the comments to
> eis.specifications.intent@noaa.gov, it didn't go
> through. So, I hope that you can forward this to the
> appropriate office. This is done by our president on
> behalf of the Council.
> 
> 
> COMMENT
> 
> Here on St. Lawrence Island, we are still heavily
> dependant on the sea mammals that migrate through the
> Bering Strait and close by our community of Gambell.
> The diet of the walrus, bowhead whale, and the seal
> consists of the clam, plankton, and various crustaceans
> and fish, which are directly related to the groundfish
> being commercially harvested by the thousands, if not
> millions, of pounds each year by fishing vessels,
> along with by-catch.
> If the commercial harvest of the groundfish causes
> severe imbalance of the ecosystem of other species
> that rely on it for survival, their diet will be
> affected. We will also be affected, along with the
> whole Bering Sea and its NATURAL RESOURCES!
> During winter, these animals follow the ice edge
> southward towards St. Matthew Island, joining the
> annual habitat of many mammals and migratory birds
> that follow their food down to the Aleutians.
> Subsistence users of this great ocean going habitat are only a tiny percentage compared to the commercial
> harvest of the Bering Sea since thousands of years and
> recorded history.
> 
> Concerned Tribe of Gambell, Alaska
> 
> Do You Yahoo!?
> Tired of spam? Yahoo! Mail has the best spam protection around http://mail.yahoo.com