

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver 
Executive Director

ESTIMATED TIME 4 HOURS

DATE: September 25, 2002

SUBJECT: Essential Fish Habitat

ACTION REQUIRED

- (a) Receive EFH committee report
- (b) Identify final alternatives for analysis

BACKGROUND

EFH committee report

The Council appointed an EFH Committee in May 2001, to develop alternatives for EFH & HAPC designation, and alternatives to minimize adverse effects of fishing. Since the June Council meeting, the Committee has met twice to review staff reports on preliminary analysis on HAPC & EFH designation, the findings of the effects of fishing, and to develop alternatives to minimize to the extent practicable adverse impacts of fishing on habitat. Draft minutes from the August meeting are attached as Item C-5 (a)(1). Minutes from the September meeting will be distributed. This fall, the Committee will undertake discussions to determine HAPC designations outside of the analysis, and a means to incorporate public input to this process.

Identify final alternatives for analysis

At this meeting, the Council is scheduled to adopt a final list of alternatives for analysis. A summarized list of the EFH Committees final recommendations on the designation alternatives for EFH, HAPC, and alternatives for mitigation are attached as Item C-5 (b). The Committee requests additional guidance to discuss the process for HAPC designations outside of the analysis, and a means to incorporate public input. A preliminary draft of the Supplemental Environmental Impact Statement (SEIS) is scheduled to be ready for initial review in April 2003. The draft schedule for the SEIS is attached as Item C-5 (c).

Draft Minutes
EFH Committee
August 27, 2002 9am
Teleconference (907) 586-7060

Committee Members present: Linda Behnken (chair), Stosh Anderson (vice-chair), Heather McCarty, Scott Smiley, Ben Enticknap, Jon Kurland, John Gauvin, Earl Krygier, Glenn Reed, Michele Ridgway, Gordon Blue

Agency staff present: Cathy Coon (NPFMC), David Witherell (NPFMC), Cindy Hartmann (NMFC-HCD), John Lepore (NOAA-GC), Matthew Eagleton (NMFS-HCD), John Olson (NMFS-HCD)

Public Attendees: Thorn Smith, Donna Parker, Lori Swanson, John Gruver, Jason Brune, John Jacobsen, Brent Payne, Dave Wood, Ron Clark, and Dave Frazier.

The EFH Committee met for a teleconference on August 27, 2002. The intent of the meeting was to review the 3rd draft of the fishery descriptions, receive reports from Committee workgroup on rationalization, review the draft Fisheries Impact Analysis, and provide input based on that analysis to staff for the formulation of a 'strawman' as a starting point to the development of mitigation alternatives that will be developed during the September Committee meeting. Stosh Anderson (vice-chair) welcomed Jon Kurland as the new Habitat Division director in Juneau.

The EFH Committee will meet again on September 16-18th in Kodiak to recommend alternatives the EFH EIS analysis.

Discuss revised fishery descriptions:

Staff provided the updated fishery descriptions from the based on the Committee's revisions. The next step will be to make final editorial corrections. The format will be modified such that each section includes an introduction and a picture of gear design. Ben Enticknap suggested a more broadened section on the biology and regulatory measures, and agency scientific review for accuracy. Lori Swanson from Groundfish forum said she would be willing to take a first cut on the trawl fisheries. Other comments involved revisions to the fishery effort maps to include a comparison of average effort to overall effort. Additionally it was suggested that an overall summary table comparing gear types within regions would be useful, including information on footprint and tons of target fish caught. Linda Behnken wanted staff to check with ADF&G Tori O'Connell in regards to voluntary logbooks for the SE demersal Rockfish fishery.

Rationalization Paper:

The Committee discussed the rationalization paper drafted by the subgroup of the Committee. Linda Behnken requested staff get the most current IPHC gear loss tables to include as an addendum. Ben Enticknap, AMCC, requested time to comment on the rationalization paper and it was granted by the Committee to be received by September 1.

Discuss Draft Effects of Fishing Analysis:

Craig was unable to call into this meeting because he was out at sea, so David Witherell provided a summary of the draft impact analysis. The Committee requested that staff make a list of questions that Craig could address when he returns from his field season. Craig will give a full presentation at the September Committee

meeting and to the SSC in October. There will be no changes to the document prior to the September Committee meeting. Questions and issues included the following?

1. How is the Gulf of Alaska hook and line rockfish fishery defined by the data?
2. Include a map of the habitat definitions and make the maps available in color.
3. Will the model be peer reviewed? David said it will go under intensive review by the SSC, Stosh requested that if Committee member had additional suggestions for peer review to forward these to staff. Cindy noted that at this point the document is draft, and Craig wanted some internal NMFS review prior to a formal peer review.
4. In looking at recovery does 5 years of data examine the effects on various habitat features for an adequate duration?
5. Methods: Why did he utilize area swept w/o overlap. Some fisheries have overlap and have VMS effort to track. Everywhere his model had an assumption of no overlap, wants to see some different means to analyze this.
6. Are the relative scores on the tables for the effect on features additive?
7. Want an overall perspective regionally on the amount of impact on EFH (1-2 % overall?)
8. Also it was noted that the document uses the concept of pristine, in what context, because there is no habitat that is pristine if it's been fished.
9. Also need to relate the concepts of function, diversity, and recovery into productivity.
10. Can you compare the effect the model shows on features to other areas of the Country such as New England.?

Discuss Effects of salmon, crab and scallop fisheries

David Witherell provided an overview concerning whether the salmon, crab, or scallop fisheries would be considered to have adverse impacts on EFH at this time. This was based on the preliminary impact worksheet that he constructed last December. These fisheries were not summarize into the Rose analysis, and need separate rationale if they need to be included into the mitigation alternatives. All fisheries will be examined in the cumulative impact assessment.

Committee members expressed concern about these fisheries and would still like to review them again for potential impact, Both Ben Enticknap and Linda Behnken expressed specific concern about the scallop dredge fishery, and looking at impacts on a large scale they may not show adverse impacts that may occur on a more localized level. The scallop fisheries off Yakutat were specifically noted.

Motion:

The Committee directs staff to develop strawman alternatives based on the tables on page 26 and 27, figures 4 and 5 of the 8/11/02 Draft Fishing Impact Analysis. The Committee selected the following fisheries based on the draft, and outlined a set of mitigation tools for each fishery. Gulf of Alaska slope rockfish trawl and deep water flatfish trawl, based on impact of this fishery on bio-shelter, pebble-rock and substrate shelter pebble-rock; EBS pollock trawl, impacts on bio-shelter sand/mud; AI atka mackerel, P.cod, and rockfish on bio-shelter pebble and rock with recommendation for gear conversion for P.cod only and HAPC reserve (for pebble and rock bio-shelter) for all fisheries, with TAC reductions; Bering Sea flatfish trawl on bio-shelter sand/mud. Mitigation would be based on the important habitat types within each region. Rationalization, open areas on the slope in the GOA, reduction of TAC, gear conversion, and closure areas for rockfish trawl were all included in the list of potential tools to be used in designing mitigation measures.

It is not the intent of the Committee that the effects of any fishery be ignored or be specifically focus upon either independently or cumulatively, nor that localized impacts be dismissed. Finally, the Committee is not prejudging the necessity of mitigating impacts in any fishery at this time. *Motion carries 10-0*

Public testimony was provided by Thorn Smith, Donna Parker, and Lori Swanson. Testimony was given supporting inclusion of SeaState data in the analysis to address the issue of spatial overlaps in fisheries. It was recommended the Committee establish a “bar” above which fishery impacts would be mitigated. The weight of fishing gear is different in water than it is out of water, this should be factored in when assessing gear impacts on habitat.

Next meeting, EFH Committee meeting logistics and agenda

The next meeting will be in Kodiak on September 16-18th at the Fishery Industrial Technology Center on 118 Trident Way Room 221. Meetings will begin at 8:30 am. and end at approximately 5:30 pm, except on the last day it will end at 3pm. An agenda will be sent out during the week prior to the meeting along with a draft of the strawman alternatives, and the purpose and need statement.

**EFH Committee Final Recommendations to Council on EFH Alternatives
based on September 16- 18, 2002 meeting**

I. EFH Designation Alternatives :

Alternative 1: No Action - No EFH Designation

EFH would not be designated. This is not a viable alternative as it is in violation of Magnuson Stevens Fishery Conservation Management Act (MSFCMA). It is not the status quo. However, according to the Department of Justice (see January 22, 2001, Hogarth memo), it is the no action alternative and must be considered as an alternative. The resulting action of this alternative would result in changing the FMP's from the current EFH amendment measures..

Alternative 2: Status quo-General Distribution – EFH EA is not updated

Under the status quo alternative EFH would be designated on a species by species basis for a species life stage, based on the general distribution of that species life stage EFH is a subset of the overall species range and described as ~ 95% of this range. Status quo is described in the Environmental Assessment for fishery management plan Amendments 55/55/8/5/5, January 1999.

Alternative 3: Updated General Distribution

Under this alternative EFH would be designated on a species by species basis for a species life stage, based on the general distribution of that species life stage. EFH must be described by text and map [50 CFR 600.815 (a)(iv)(B) & (a)(v)(A);pg 2377]. Therefore the maps will match the legal definition. EFH will be a subset of all waters; 95% of the species range based on the best scientific information available for each species and life history stage.

Alternative 4: Highest Known Information

Define EFH using the highest level of information available for each species by lifestage [CFR 600.815 (a)(iii)(B)]. When information is available EFH will be described at 75% of the species range based on the best scientific information . This approach would dictate that EFH be designated on the basis of the highest level of information available. This alternative would specify EFH designations in accordance with the criteria established in the final rule (*updated from interim final rule).

Alternative 5: Eco-region Strategy

This alternative would specify EFH designations relative to classification of habitat types occurring each region (GOA, AI, BS). These regional habitat domains will incorporate the assemblages of species and lifestages associated with them. Each species, lifestage will be described as in Alternative 3 but will refer to eco-region map and text information. Each habitat domain will use habitat modifiers initially set by depth categories such as shelf break, gully, flats, banks, but will incorporating other physical or biological (i.e. substrate, temperature where available). Habitat domains common for an assemblage of spp. [CFR 600.815 (a)(iv)(E)] will refine EFH.

Alternative 6: EFH Designation would only apply to Federal Waters EFH would be described and identified in waters of the EEZ. Specifically to our region, the inner boundary the EEZ is a line coterminous with the seaward boundary of the coastal State of Alaska. Thus, this zone is from 3 nautical miles (nm) from any point of land to 200 nm (3-200nm).

II. HAPC Designation Alternatives :

In November 2001, the EFH Committee developed a set of alternatives for HAPC designation. Staff had recommended simplifying the alternatives for practical and analytical reasons. After the staff presentation the Committee drafted and agreed on the following working definitions and revised alternatives:

HAPC sites are defined as specific geographic locations, identified on a chart, that meet the considerations established in the regulations, and are designated to address identified problems for FMP species and achieve clear, specific management objectives.

Further, HAPC type designations are used to focus research priorities, such as ascertaining ecological links between habitat and FMP species, etc. Our intent is that the type designation alone does not invoke mitigation measures.

Alternative 1: No Action. Under this alternative there would be no designation of HAPC in the region.

Alternative 2: Status quo. HAPC would remain as defined and adopted under amendments 55/55/8/5/5: living substrates in shallow waters, living substrates in deep waters, and freshwater areas used by anadromous fish.

Alternative 3: Site- based concept. Individual sites meeting one or more of the considerations and selected to address an identified problem may be designated HAPC sites. It does not allow for designation of types of habitat but constrains HAPC designation to explicitly geographically defined sites or locations, such as a particular seamount.

Alternative 4: Type/site based concept. This alternative establishes HAPCs as individual sites selected as subsets of HAPC types. This is done as a two step process:

Step A) Types are selected based on the regulatory considerations.

Step B) All known sites or a subset of all known sites of those known types are selected

Alternative 5. Species core area

This alternative starts with the assumption that the data available on the distribution and abundance of an FMP species (and other species important to FMP species) is one of the factors that provides an indication of areas in which to examine the link between habitat and productivity. The Committee notes that HAPC core areas will only be designated as reliable information on the link between habitat and productivity becomes available.

As more information on the interaction between habitat and FMP species/ecosystem productivity becomes available, HAPC could be refined to a core habitat that could be a type or a site that may be a bottleneck or key habitat. At low levels of information we start with species distribution and abundance, filter it through the four considerations and if one or more applies, HAPC may apply. As more information becomes available HAPC could be refined to a core habitat that could be a site designated to achieve specific management objectives.

June Council gave the Committee and staff the following guidance for HAPC designation alternative analysis this fall.

1. The Council directs staff (within the SEIS analysis) to describe how each HAPC designation alternative would apply to each of the following four examples HAPC: pinnacles and seamounts, gorgonian corals, Bristol Bay Red King Crab habitat (or similar species habitat), and shelf break. The EFH Committee should develop examples mitigation measures for each case to help with understanding what the alternatives might do.
2. After the October Council meeting and before the April 03 Council Meeting the Council recommends that the EFH Committee develop a process for the public to interact with the Council to develop, and amend HAPC designation.
3. The Council expresses its intent to the public that there will be no call for HAPC proposals until a process has been established by the NPFMC.

III. Mitigation Alternatives:

This is the list of alternatives to minimize to the extent practicable adverse effects on such habitat caused by fishing developed by the EFH Committee at its September 16-18, 2002 meeting. The Committee notes that the available scientific information provides an analysis on fishing impacts on habitat features but does not provides an analysis of effect of those impacts on the health of managed species.

Alternative 1: No action/Status quo. No new management measures in addition to those already in place would be implemented at this time to minimize the effects of fishing on EFH.

Staff comment: The FMPs already contain measures to limit the effects of fishing on habitat including: year-round no trawl zones, seasonal closures, gear regulations, effort controls (licenses, IFQs, coops), catch limits, bycatch limits, etc.

Alternative 2: Prohibit all directed fishing with bottom trawl gear for GOA slope rockfish, and modify provisions of the license limitation program to allow gear conversion. Under a gear conversion provision, vessels with license designations for trawl gear in these areas would get endorsements to fish for these stocks with pelagic trawl or fixed gear.

Staff comment: This alternative addresses the habitat and fishery with highest effect score in the 8/11/02 draft analysis on the effects of fishing on fish habitats off the waters off Alaska. The rationale for this alternative is that pelagic trawl or non-trawl gear may have lower habitat impacts per ton of fish caught than bottom trawl gear. Allowing vessels currently licensed for trawl gear to continue fishing for these species using non-trawl gear was proposed by a Committee member to lessen allocative concerns.

Alternative 3: Prohibit all directed fishing with bottom trawl gear for GOA slope rockfish and Bering Sea flatfish, except within designated open areas.

Staff comment: This alternative addresses the habitats and fisheries with highest effect scores in the 8/11/02 draft analysis on the effects of fishing on fish habitats off the waters off Alaska. The rationale for this alternative is that concentrating trawl fishing effort may provide better conservation of habitat than allowing widely dispersed trawl fishing effort, particularly on those habitat features with high sensitivity values and slow recovery rates.

Alternative 4: Prohibit the use of bottom trawl gear for all fisheries in the GOA slope area and in the Bering Sea, except within designated open areas.

Staff comment: This alternative addresses the areas and habitat features with highest effect scores in the 8/11/02 draft analysis on the effects of fishing on fish habitats off the waters off Alaska. The rationale for this alternative is that concentrating trawl fishing effort may provide better conservation of habitat than allowing widely dispersed trawl fishing effort, particularly on those habitat features with high sensitivity values and slow recovery rates. This alternative would address other trawl fisheries (i.e., Bering Sea Pacific cod, Bering Sea rockfish, GOA sablefish, GOA deepwater flatfish, GOA cod) not considered in Alternative 3.

Alternative 5: Establish no-take marine reserves (closures to all bottom tending gear, and all groundfish species including halibut) in slope areas of the Gulf of Alaska. TACs of FMP slope species (sablefish, slope rockfish, deepwater flatfish) would be reduced relative to their historic catch within these areas. In the Bering Sea and Aleutian Islands, prohibit all trawling within designated sites (based on concentrations of large emergent epifauna), and reduce TACs based on the relative amount that historically (1998-2001) came out of the sites. For the Bering sea sites, TAC reductions would be made for flatfish, cod, and pollock. For Aleutian Islands sites, TAC reductions would be made for mackerel, rockfish, and Pacific cod (trawl gear allocation).

Staff comment: This alternative addresses the areas and habitat features with identified effects in the 8/11/02 draft analysis on the effects of fishing on fish habitats off the waters off Alaska. The rationale for this alternative is as follows: For the GOA slope, a marine reserve would eliminate effects of all trawl, longline, and other fisheries. For the BSAI, only trawl closure areas would be considered, because longline effects were found to be de minimus. TAC reductions would be made for effected fisheries to negate potential effects on EFH due to effort redistribution.

Alternative 6: Establish no-take marine reserves (closures to all gear for all groundfish species including halibut) in each region based on the objective and definitions below. The primary purpose EFH reserves are to protect habitat in order to sustain productivity of FMP species.

A. GOA slope objective: To preserve relatively unimpacted Gulf slope habitat for the purpose of conserving biotic features of the seafloor and associated fish and shellfish assemblages typical of the Gulf of Alaska slope ecosystem.

1. Identify relatively unfished areas by looking at 10 years of data
 - subtracting the fished areas defined as 90% of catch
 - consider identifying a network of reserves distributed throughout the spatial extent of the habitat
2. Consider proportional impacts to fisheries and communities
3. Consider appropriateness of exempting gears with no impact.
4. Be able to delineate the areas geographically
5. Consider proportional TAC reductions where appropriate based on historic catch.
6. 5-15% of these areas would be analyzed and proportionally distributed within the entire region for closed areas.

Initial Mapping could focus on portion of East bank of the fair weathers, pinnacles off South Kodiak Island, Dixon entrance slope, additionally staff is to examine biological and substrate information in contrast to places that fall within gaps of productive fishing.

B. Bering Sea objective: To preserve relatively unimpacted Bering Sea habitat for the purpose of conserving biotic features of the seafloor and associated fish and shellfish assemblages typical of the Bering Sea ecosystem. The marine reserves are tagged to address impacts from the flatfish and pollock fishery.

1. Primary consideration the mobility of target species to get to the fluid nature of the habitat conditions that support target species. I.e. frequent review
2. use longer term fishing data for flatfish and pollock to identify relatively unfished areas by subtracting the fished areas defined as 90% of catch
 - consider identifying a network of reserves distributed throughout the spatial extent of the habitat

- describe large concentrations of emergent epifauna

Initial Mapping could focus on biological and substrate information in contrast to places that fall within gaps of productive fishing.

C. Aleutian Islands objective: To preserve relatively unimpacted Aleutian Island biological and substrate shelter habitat for the purpose of conserving biotic features of the seafloor and associated fish and shellfish assemblages typical of the biological and substrate shelter habitat in the Aleutian Island ecosystem.

1. Use longer term fishing data for mackerel, pollock and cod to identify relatively unfished areas by subtracting the fished areas defined as 90% of catch
 - consider identifying a network of reserves distributed throughout the spatial extent of the habitat
 - describe large concentrations of emergent epifauna
 - examine existing closed areas and their original purpose of closure.
2. Conduct cursory spatial analysis to identify areas in the AI where the following features intersect (using existing information*):
 - * hard corals (use updated data from bycatch and surveys: use data for areas of high abundance, consider the >50 kg/km level)
 - * Golden king crab EFH (general distribution)
 - * Thorny head EFH
 - * Shortraker rockfish EFH
 - * Roughey rockfish EFH
 - * Dusky rockfish EFH
 - * Pacific Cod EFH

Goal is trying to find emergent epifauna in relatively unfished areas recognizing we may not be able to.

3. Consider proportion impacts to fisheries and communities
4. Consider appropriateness of exempting gears with no impact.
5. Ability to delineate geographically
6. Request that the state of Alaska and Board of Fisheries participate in this analysis through providing information on fisheries and habitats, ideas for mitigation of habitat impacts.

Initial Mapping could focus on portion of Petrel bank, bowers ridge, Attu region, Amlia region additionally staff is to examine biological and substrate information in contrast to places that fall within gaps of productive fishing.

Alternative 7: Establish at least 20% of the BS, AI, and GOA areas as no-take marine reserves (closures to all gear, and all species including halibut) across a range of habitat types, and reduce the TACs for all groundfish species by 20%.

Staff comment: This alternative stems from the Draft Programmatic Groundfish SEIS FMP framework alternatives 3.2 and 4.1. The rationale for this alternative is that it addresses uncertainty regarding the effects of fishing on habitat by ensuring that at least 20% of benthic habitat would be left entirely undisturbed by fishing. TAC reductions would be made to negate potential effects on EFH due to effort redistribution.

Alternative 8:

A. Prohibit all directed fishing with bottom trawl gear for GOA slope rockfish, and modify provisions of the license limitation program to allow gear conversion. Under a gear conversion provision, vessels with license designations for trawl gear in these areas would get endorsements to fish for these stocks with pelagic trawl or non-trawl gear.

B. Prohibit the use of bottom trawl gear for all fisheries in the Bering Sea, except within designated open areas. The open area approach is being developed by the subcommittee and the stakeholders meeting prior to the October Council meeting.

C. Prohibit the use of all gear types within marine reserve areas within the Aleutian Island region. The objective is to preserve relatively unimpacted Aleutian Island biological and substrate shelter habitat for the purpose of conserving biotic features of the seafloor and associated fish and shellfish assemblages typical of the biological and substrate shelter habitat in the Aleutian Island ecosystem.

1. Use longer term fishing data to identify relatively unfished areas by subtracting the fished areas defined as 90% of catch
 - consider identifying a network of reserves distributed throughout the spatial extent of the habitat
 - consider identifying a network of reserves distributed throughout the spatial extent of the habitat
 - describe large concentrations of emergent epifauna
 - examine existing closed areas and their original purpose of closure.
2. Conduct cursory spatial analysis to identify areas in the AI where the following features intersect (using existing information*):
 - * hard corals (use updated data from bycatch and surveys: use data for areas of high abundance, consider the >50 kg/km level)
 - * Golden king crab EFH (general distribution)
 - * Thorny head EFH
 - * Shortraker rockfish EFH
 - * Rougheye rockfish EFH
 - * Dusky rockfish EFH
 - * Pacific Cod EFH

Goal is trying to find emergent epifauna in relatively unfished areas recognizing we may not be able to.

3. Consider proportion impacts to fisheries and communities
4. Consider appropriateness of exempting gears with no impact.
5. Ability to delineate geographically
6. Request that the state of Alaska and Board of Fisheries participate in this analysis through providing information on fisheries and habitats, ideas for mitigation of habitat impacts.

Initial Mapping could focus on portion of Petrel bank, bowers ridge, Attu region, Amlia region additionally staff is to examine biological and substrate information in contrast to places that fall within gaps of productive fishing.

DRAFT SCHEDULE
for the
Essential Fish Habitat SEIS
EFH Committee and Council participation
Revised 9/23/02

Date¹	Agency/Group	Action
May 15-17, 2002 Sitka	EFH Committee	Finalize fishery descriptions, review updated descriptions of EFH & HAPC designation alternatives, and move initial recommendation for HAPC site designations, discuss fishery evaluation methodology and rationalization.
June 3-10, 2002 Dutch Harbor	Council	Progress report to Council, SSC approves methodology for impacts analysis. Council approves revised EFH and HAPC alternatives; directs the EFH Committee to develop a process for the public to interact with the Council to develop and amend HAPC designation; decides on NO call for HAPC proposals at this time.
August 19, 2002	Council/NMFS HCD/NMFS AFSC staff	Draft progress reports sent to committee on EFH & HAPC designation, fishery impact assessment and HAPC proposal evaluation.
August 27, 2002	EFH Committee	EFH Committee teleconference to review staff draft reports and possibly discuss mitigation alternatives.
September 9, 2002	Council/ NMFS HCD/NMFS AFSC staff	Staff reports sent to EFH Committee with recommendations on EFH and HAPC alternatives, and strawman mitigation alternatives.
September 15 - 18, 2002 Kodiak	EFH Committee	Committee meeting to review staff reports and make recommendations for the October meeting.
September 30-October 7, 2002 Seattle	Council	Progress report to Council - Committee recommendations to Council- Council adopts final EFH and HAPC designation alternatives, and alternatives to mitigate the effects of fishing.
October 15, 2002 through March 7, 2002	Council/NMFS staff Contractor - FWEC	Effects Analysis, writing, DSEIS compilation

¹ Specified dates are no-later-than dates. Actions may be completed before these dates.

March 17 , 2003	NMFS/Council	Preliminary Draft SEIS sent to Council and Committee
March 24 - 27 (last week) 2003 - tentative dates	EFH Committee	Review Preliminary Draft EFH EIS and make recommendation to Council on Initial Action (preferred alternative)
March 31 - April 8, 2003 Anchorage	Council	Initial Action: Council reviews preliminary Draft SEIS, receives public testimony and selects preliminary preferred alternative(s).
April-June, 2003	Council/NMFS staff Contractor - FWEC	Make revisions as needed. Final internal review.
July 1, 2003	Council/NMFS staff Contractor - FWEC	Complete Draft SEIS. Print DSEIS.
July 15, 2003	NMFS-Region	Submit copies of Draft SEIS to HQ.
July 24, 2003	NMFS-HQ	File Draft SEIS with EPA.
August 1, 2003 ²	EPA	Publish NOA for Draft SEIS; begin 90-day public comment period. ³
August 1 through October 31, 2003	Public	Public comment period (92 days). Note: A 90 day public comment period is required by the settlement agreement (Joint Stipulation and Order).
November 3-26, 2003	NMFS-Region Contractor- FWEC	Summarize public comments.
Early December, 2003	EFH Committee	Review DSEIS and make final recommendations

² The following dates are specified in the Joint Stipulation and Order (Settlement Agreement between the Plaintiffs and Defendants, December 5, 2001). Specified tasks may be accomplished sooner than these dates, but may not be accomplished later than these dates:

June 6, 2001 - Notice of Intent to Prepare EIS Published in the Federal Register
June 6 - July 21, 2001 - Scoping Period
August 1, 2003 - Draft EIS Published
August 1 - October 31, 2003 – Draft EIS Public Comment Period
June 1, 2004 - Issuance of Final EIS
August 13, 2004 - Issuance of Record of Decision

“NMFS will approve an FMP amendment and implementing regulations no later than 24 months after the date of the ROD, unless the Secretary subsequently determines that such other action is no longer necessary. “

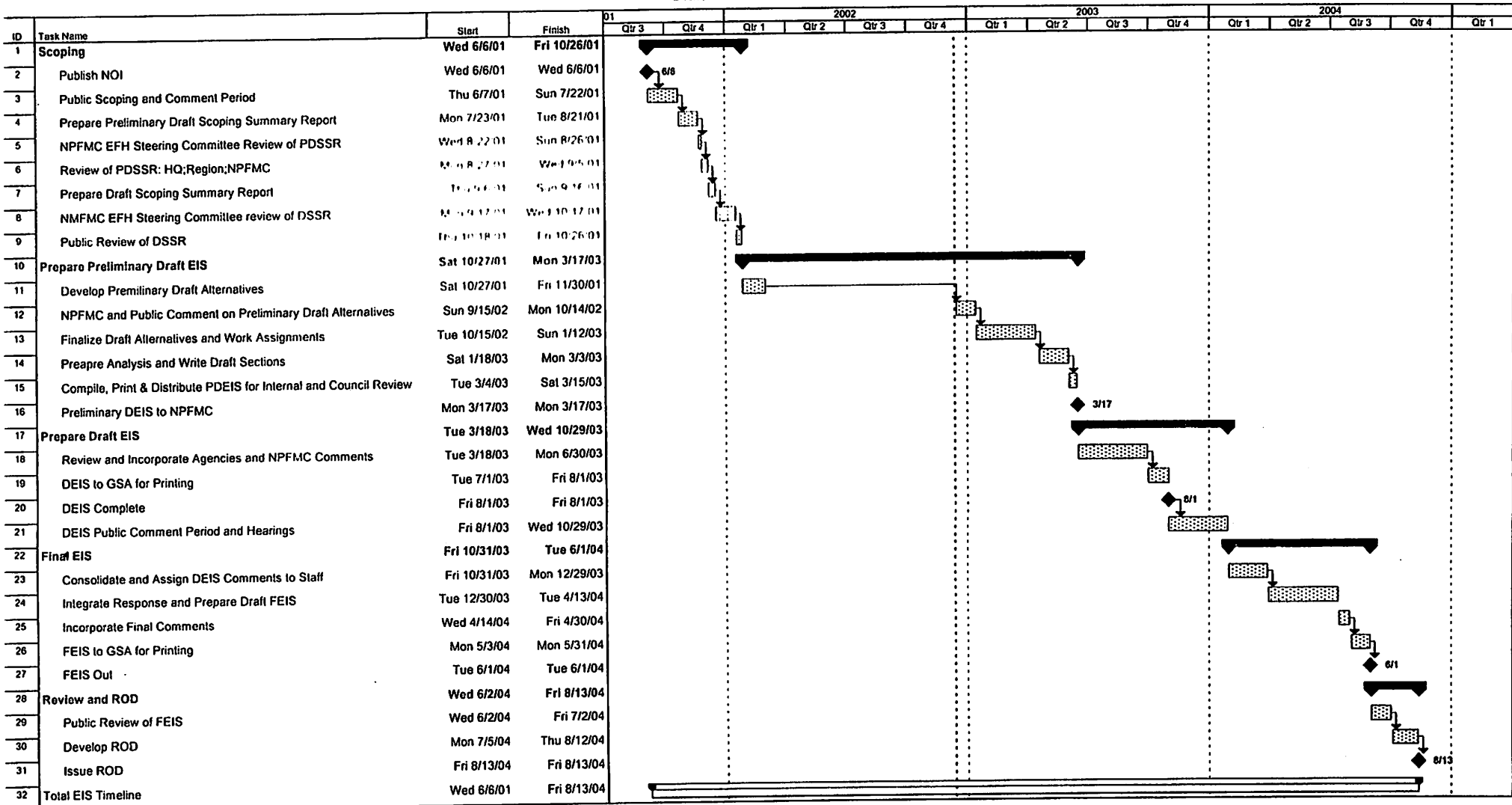
December 8-15, 2003 ³	Council	Final Action: Council reviews comments on Draft SEIS, receives additional testimony, adopts preferred alternative.
January-February, 2004	Council/NMFS Contractor-FWEC	Revise SEIS as needed to put in final form; draft FMP amendment text; draft proposed rules.
March, 2004 ⁴	NMFS-Region	Review/sign off on proposed FMP amendments/rule package; Final SEIS.
April 2, 2004	NMFS-Region	Submit Final SEIS to HQ.
April 8, 2004	NMFS-HQ	File Final SEIS with EPA.
April 9, 2004	Council/NMFS	Transmit proposed FMP amendments/rule package to HQ starting formal Secretarial review under MSA.
April 16, 2004	EPA/NMFS-HQ	EPA publishes NOA for Final SEIS beginning public comment Final SEIS; NMFS publishes NOA for FMP amendments beginning 60-day public comment period on FMP amendments required by MSA.
April 16-June 15, 2004	Public	Public comment period on Final SEIS and proposed FMP amendments.
May 3, 2004	NMFS-HQ	Publish NOA for proposed rules to implement FMP amendments if approved; start 45-day comment period.
July 15, 2004 ⁵	NMFS-HQ	Secretarial approval/disapproval decision on FMP amendments and ROD on Final SEIS.
September 2004	NMFS-Region/HQ	Publish final implementing rules.

³ An ESA consultation would likely be needed on the Council's preferred alternative. If a consultation were done on the preliminary preferred alternative(s), re-consultation may be necessary if the Council's preliminary and final actions are different.

⁴ This assumes that the preferred alternative selected by the Council would result in FMP amendments and implementing regulations which may not be the case.

⁵ The earliest a ROD could be produced is 30 days after April 16, 2004, under this schedule, but may be after that date to accommodate MSA schedule on proposed FMP amendments. This draft schedule is designed to culminate in a ROD and approval/disapproval decision on the same day, four weeks ahead of the Stip-mandated date of August 13, 2004.

NMFS Alaska Region
Draft Timeline - EFH EIS



Project: cindy's data
Date: Wed 9/11/02

Task Progress Summary Rolled Up Split Rolled Up Progress Project Summary

Split Milestone Rolled Up Task Rolled Up Milestone External Tasks



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RE: Mitigation measures for EFH

September 24, 2002

Dear Chairman Benton and Dr. Balsiger,

Oceana and The Ocean Conservancy have serious concerns about the recommendations of the EFH Committee for mitigation measures to address adverse impacts to Essential Fish Habitat. The EFH Committee has not adequately addressed the destruction of corals and sponges in the Aleutian Islands.

The first major problem with the process relates to the methodology for determining adverse impacts to EFH. The only discussed adverse impacts were some hypothetical situations "measured" by an untested, non-peer reviewed mathematical model. Parameters entered into the model were based on severely limited science, did not incorporate many studies on fishing impacts to habitat, and were often admittedly best guesses of one scientist. According to the developer, Dr. Rose, long-lived corals such as those found in the Aleutians were not included in the model. You may be aware that the results from the model for the Aleutian Islands region were used to justify denying mitigation measures for the Aleutians in Alternatives 2, 3, and 4. This is totally irresponsible and I'm sure you agree needs to be revisited.

In a letter dated September 9, 2002 to Oceana from Bill Hogarth, he stated, "Corals, sponges, and other living substrata in waters off Alaska are already classified by NOAA Fisheries as Habitat Areas of Particular Concern deserving special protection because of their importance as habitat and their vulnerability to human impacts. We encourage your input as we develop this [EFH] EIS." As indicated by our prior letters to the Council, Oceana and The Ocean Conservancy are concerned with the extremely urgent issue of coral and sponge destruction in the Aleutian Islands. Please view our "Scientific Justification for Mitigation of Adverse Impacts to EFH Containing Corals and Sponges" attached at the end of this letter.

We are dissatisfied with the recommended alternatives of the EFH Committee to mitigate adverse impacts on this type of Essential Fish Habitat because no alternative mitigates current damage to habitat while protecting unimpacted habitat. Alternatives 1, 2, 3, and 4 do not contain any additional measures that address habitat issues in the Aleutians. Alternative 5 bases protective measures on a few areas where known coral and sponge occur, but not where it is most at risk from fishing impacts and not in areas where it has not yet been discovered. Alternatives 6 and 8 only protect corals and sponges in areas where little to no fishing occurs, do nothing to mitigate impacts to corals and sponges in areas where they are being destroyed the most, and treat all gear types equally. Alternative 7 creates no-take marine reserves that are not necessarily based on where corals and sponges are being impacted, leaving much coral and sponge habitat unprotected, and failing to distinguish between gear types. In summary, no alternative has the objective of directly mitigating effects on EFH where adverse fishing impacts are most severe.

We would like to see an alternative that both mitigates the adverse impacts on habitat currently occurring while preventing fishing impacts from moving into new areas until research can show where this may be appropriate. From all available scientific data, it is clear that bottom trawling is the most damaging gear type to seafloor habitat, particularly corals and sponges (see attachment).

We find it troubling that the Council has not accepted our HAPC proposals and the EFH Committee has refused to include Oceana's proposal for mitigating adverse impacts on EFH containing corals and sponge habitat. Therefore, we urge you to take the opportunity to consider the following in the alternatives in the EFH EIS:

Prohibit the use of bottom trawl gear for all fisheries in the Aleutian Islands management area, unless it can be shown that bottom trawling is not having an adverse impact on corals, sponges, or other sensitive habitat. Prohibit all potential bottom interaction in known areas containing reef-like coral and sponge structures and/or dense concentrations of ancient corals and sponges. A 3-year comprehensive research program included as part of this proposal will identify areas that could be reopened to trawling, thus minimizing the impacts to fishing, providing an incentive for research, and protecting EFH to the maximum extent practicable. Observer coverage must be increased to 100% sampling of all catch and bycatch in fisheries with potential impacts to corals and sponges.


Rationale: This proposal is to protect corals and sponges and other related benthic habitat now reported as destroyed in the Aleutians, while allowing trawl fisheries to continue where research shows could be appropriate. It also protects unimpacted coral and sponge habitat that has not yet been destroyed by trawl gear. Based on the facts, bottom trawl fisheries are the most destructive to corals and sponges. Within three years, we and habitat scientists expect that a comprehensive research program could identify areas where bottom trawling could be allowed without significant destruction of habitat.


We were urged to follow the timeline of the EFH Committee as the avenue to submit our input into the EFH EIS process. Although we submitted our comments and proposals in a timely fashion, the Committee did not discuss or deliberate on Oceana's proposal at the meeting in Kodiak. A similar proposal by AMCC was defeated by a 4-5 vote. It is poignant to note that NMFS neither supported the proposal nor submitted alternatives. The State of Alaska abstained. Both the Oceana proposal and the AMCC proposal could have easily been incorporated into the alternatives.

Surely we agree that given all the information (including the National Academy of Sciences report on the Effects of Trawling and NMFS recognition of coral and sponge as HAPC), there is enough scientific information available to justify immediate action to protect corals and sponges in the Aleutians from bottom trawling impacts before completion of the EIS (see Attachment). We all know that the scientific data suggest that continued destruction of corals and sponges puts Alaska's fisheries at risk and will lead to decreased productivity of benthic habitats. We strongly urge the Council to take the time to responsibly discuss the issues, the process, and the risks of failing to take action.

Oceana and The Ocean Conservancy have responded to your requests and urgin to participate in the development of the alternatives for analysis. We are disappointed with the Council's progress on coral and sponge protection both in current management measures and in the EFH EIS. Hopefully, the Council will address the concerns raised in this letter so that the Draft EIS incorporates our concerns and is of highest possible quality. We are willing to help the Council accomplish this and will continue to work through the Council process to attempt to improve this EIS.

Sincerely,


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Attachment: "Scientific Justification for Mitigating Adverse Impacts to Essential Fish Habitat Containing Corals and Sponges"



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Scientific Justification for Mitigating Adverse Impacts on Essential Fish Habitat Containing Corals and Sponges

Key Species Known to Rely on Deepwater Coral			
Rougheye rockfish	Dusky rockfish	Atka mackerel	Walleye pollock
Redbanded rockfish	Yelloweye rockfish	Golden king crab	Greenling
Shortraker rockfish	Pacific ocean perch	Shrimp	Greenland turbot
Sharpchin rockfish	Northern rockfish	Pacific cod	Sablefish
Pacific ocean perch	Flatfish (several)		

(Freese 2000; Krieger and Wing 2002; Krieger 1999; Heifetz 1999; Heifetz 2000).

- Corals are used by adult and juvenile FMP species for shelter and protection from predators (Krieger and Wing 2002).
- Corals and sponges are documented to be important for other marine animals like shrimp, on which many FMP species depend (Krieger and Wing 2002).
- Large corals can be 3m high and 7m wide (Heifetz 2000).
- 50 percent of the red tree coral in the trawl path was broken or removed by a single bottom trawl tow in the Gulf of Alaska (Andrews et al. 2002; Krieger 2000). No sign of any recovery was evident seven years later.
- Reported ages of hard corals in Alaska range from 100 to 500 years old (Cimberg et al. 1981; Heikoop et al. 1998; Andrews et al. 2002). Some scientists believe they may be thousands of years old (Bob Stone pers. comm. 2002).
- Sponges create equally complex habitat to hard corals and are more widespread than corals in Alaska (Jon Heifetz pers. comm. 2002). Freese (in press) found that bottom trawling damages 47%-67% of large sponges in a trawl path. Sponges in Alaska have slow recovery rates and growth rates with no recovery one year after trawling (Freese, in press).
- Bottom trawling is responsible for 97% of all observed and reported coral and sponge bycatch (Jon Heifetz pers. comm. 2002).
- Bottom trawling reduces the complexity, productivity, and biodiversity of benthic habitats and damage is more severe in areas of coral and sponge (National Academy of Sciences 2002).
- 88 of 90 studies on mobile gear show that bottom trawl gear reduces habitat complexity, changes community structure, and affects ecosystem processes (Auster and Langton 1999).
- Over 1 million pounds of coral and sponge are reported as bycatch in Alaska annually, over half of which comes from the Aleutian Islands region (NMFS 2001 Tables 4.7-4&5).
- Coral and sponge bioherms were discovered in summer 2002 in state and federal waters off the Aleutians, with damage from fishing gear (Bob Stone, pers. comm. 2002).
- There is a significant void in scientific understanding of the geographic distribution of ocean habitat types off Alaska.
- Gorgonian corals epitomize HAPCs (Witherell and Coon 2000)
- Corals and sponges together form a critical part of the world-renowned Aleutian marine ecosystem which provides fisheries and subsistence resources that are crucial to local communities' economy, cultural heritage, and way of life.

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EFH COMMITTEE MINUTES
Fisheries Industry Technology Center
Kodiak, AK September 16-18, 2002

Committee Members present: Linda Behnken (chair), Stosh Anderson (vice-chair), Gordon Blue, Heather McCarty, Scott Smiley, Ben Enticknap, Glenn Reed, John Gauvin, Michelle Ridgway, Jon Kurland (NMFS-HCD), Doug Woodby for (Earl Krygier ADF&G).

Agency Staff present: Cathy Coon (NPFMC), David Witherell (NPFMC), Matt Eagleton (NMFS-HCD), Cindy Hartmann (NMFS-HCD), Tom Meyer (NOAA-GC), Craig Rose (NMFS-AFSC), Kristin Mabry, Denby Lloyd, David Barnard, Dave Jackson. (ADF&G).

Public: Pat Carlson, Dave Fraser, Paul MacGregor, Mat Moier, Jay Stinson, Mike Martin, Julie Bonney, Rob Langdon, John Gruver, Geoff Schester, Martin Robards, Sandra Moller, Ed Richardson, Dave Wood, Harold Jones, Pat Carlson, Doug Hoedel, Greg Hathaway, Rob Langdon, Beth Stewart, Pam James, Eric Stirrup, Jeff Stephan.

The EFH Committee met on September 16-18th in Kodiak. The intent of the meeting was to complete final recommendations for the October Council meeting on alternatives for analysis in the EFH EIS: EFH designation, HAPC designation, and alternatives to minimize adverse effects of fishing. Staff provided reports on preliminary analysis on HAPC & EFH designation, the fishery impact analysis, and the strawman document for mitigation alternatives. A draft agenda was distributed prior to the meeting.

Committee Minutes: The Committee requests staff to provide a fuller set of meeting minutes that would include information leading up to motions and detailed information in regards to public testimony.

1. May 15-17th Sitka minutes. The Committee would like to update the May Committee minutes to bring forward the habitat protection concepts presented by NMFS Auke Bay Lab as Committee information. The Committee wants it clear that the May Committee Minutes should accurately reflect the agency's ideas (list of titles of ABL 'proposals') presented at the May meeting on the HAPC issue. *Motion carries 10-0.*

2. August 27th teleconference minutes. The Committee recommends changes in the minutes to reflect clarification on question structure, development of the mitigation strawman alternatives, and inserting public comment. *Motion carries 11-0.*

Stosh Anderson addressed the group on the procedure for public comment, the intent to have a comment period after the staff reports, and prior to Committee deliberation on each sub component of the alternatives.

NMFS Discussion of Alternatives vs. Alternative approaches for the EIS analysis:

Jon Kurland advised the Committee on the current structure for the EIS (based on the Hogarth memo of 1/01), including three actions: designation of EFH, designation of HAPC, and measures to reduce adverse impacts from fishing to habitat to the extent practicable. There has been discussion within the agency on how best to bundle the alternatives for the analysis. The discussion has focused on complying with NEPA and ensuring the structure of the analysis is rigorous and comprehensible for the Council and public. One option that was discussed is to analyze every possible combination of alternatives for the three actions, but this methodology could become cumbersome, because with 6 sets of EFH designation alternatives, 5 HAPC, and 6 or more

mitigation alternatives the number of combinations would be large. The agency wanted this methodology examined before proceeding with that type of analysis.

Glenn Reed commented that the discussion on mitigation measures to reduce potential adverse impacts from fishing on habitat must make a connection to impacts on productivity of FMP species.

Tom Meyer advised the EFH Committee that GC met on a national level to discuss this issue. A memorandum from GC addressing this issue is forthcoming. Until the memorandum is final, GC advises that if NMFS/the Council can, as a matter of policy, conclude that the three actions are not so interconnected that they must be analyzed as a whole, but can instead be meaningfully analyzed separately, and NMFS/the Council substantiates this conclusion on the record (in both the EIS and the administrative record). Then separate analyses of each action can be included in the same EIS given the following conditions: (1) The analyses are done sequentially, e.g., the recommended EFH designation preferred alternative is chosen prior to the recommended mitigation and HAPC alternatives. This sequential analysis is necessary given that both the mitigation and HAPC alternatives rely on first establishing EFH and the effects of these alternatives must be based on their application to the preferred EFH alternative; and (2) NOAA GC makes a final determination that the inclusion of the three actions and the use of separate, sequential analyses in the same NEPA document meet NEPA requirements. GC further advises that until the GC memorandum is final, and a policy decision is made by NMFS/the Council as to the "interconnectiveness" of the actions, the EFH Committee may proceed with its review of the alternatives for the three separate actions and may recommend to the Council a separate, preferred alternative for each component with the understanding that the alternatives can only remain segregated if the two conditions above are met and justification is provided in the record.

The Committee asked for some clarifications from the agency on this issue. Kurland advised the Committee that adverse effects would only need to be addressed for the FMP managed species, and that a sequential analysis appeared to be a logical approach for the alternatives currently under consideration. He also advised that doing a sequential analysis would not be a wasted effort if GC ultimately recommends analyzing some possible combinations of alternatives across the three actions, because the sequential analysis will help illustrate the different effects of the alternatives. Committee members asked whether the decisions for HAPC designation alternatives would need to come before the mitigation alternatives since some of the HAPC alternatives may have management measures to reduce adverse impacts from fishing. Kurland noted that the requirement to minimize adverse effects from fishing applies to all of EFH and that HAPC is not a mitigation tool in itself. However, it would be logical to designate HAPCs before deciding on mitigation alternatives since HAPCs may be designed to encompass areas that are susceptible to damage from fishing (or non-fishing activities

EFH and HAPC designation Alternatives: During the June Council meeting, the Council accepted the EFH Committee's recommended changes to the EFH and HAPC designation alternatives as outlined in the May 15- 17 EFH Committee meeting draft minutes. Staff began looking at methodologies for each EFH designation alternative and provided an update to the Committee. The analysis for the HAPC designation alternatives were directed by the June Council motion as outlined below.

EFH designation alternatives: Matt Eagleton gave the Committee a report on the EFH designation alternative and the methodology staff is finalizing for the analysis this fall.

The Committee recommends the EFH designation alternatives be forwarded to Council as final recommendation in the analysis with the following clarifications. Additional details are provided in summary document C-5(c) from the October 2002 Council meeting.

- Alternative 1: No Action - No EFH Designation
- Alternative 2: Status quo-General Distribution – EFH EA is not updated
- Alternative 3: Updated General Distribution
- Alternative 4: Highest Known Information
- Alternative 5: Eco-region Strategy
- Alternative 6: EFH Designation would only apply to Federal Waters

The Committee recommends that the analysis clarify methodologies for percentages for alternatives 3 & 5. Additionally, the analysis should clarify alternative 5 (ecoregions approach) to be consistent with species groupings and geology that may be different within each region. The depth strata should reflect the predominant species within each area. Additionally, for alternative 5, the Committee notes that there are limitations to using depth as the criteria and recommends that other physical and biological inputs be incorporated when data is available (ie use temperature data when available UAFs CTD data). *Motion carries 10-0.*

HAPC designation alternatives: Cathy Coon gave the Committee a report on the HAPC designation alternatives as presented to the Council during the June meeting. Council directed staff (within the SEIS analysis) to describe how each HAPC designation alternative would apply to each of the following four examples HAPC: pinnacles and seamounts, gorgonian corals, Bristol Bay Red King Crab habitat (or similar species habitat), and shelf break. The EFH Committee should develop examples mitigation measures for each case to help with understanding what the alternatives might do.

The Committee discussed whether using specific examples in the analysis without potential management measures identified in the EIS would cause difficulty, because the EIS is an action forcing document. Jon Kurland noted that HAPC designations do not have to have accompanying management measures. For example, HAPCs could be identified to recognize non-fishing threats to portions of EFH. However, any management measures evaluated in the EIS need to be specific implementable actions that could be codified in regulation. The Committee wanted it noted to the Council that if staff follows the June direction of the Council and analyzes example management measures that these could be moved forward and implemented at final action. The Committee discussed the source of the June Council motion for HAPC in terms of separating what could be in the EIS analysis for HAPC, and the HAPC public process that will be developed later this winter.

The Committee recommends the following HAPC designation alternatives be forwarded to Council as final recommendations for the analysis.

Alternative 1: No Action. Under this alternative there would be no designation of HAPC in the region.

Alternative 2: Status quo. HAPC would remain as defined and adopted under amendments 55/55/8/5/5: living substrates in shallow waters, living substrates in deep waters, and freshwater areas used by anadromous fish.

Alternative 3: Site- based concept. Individual sites meeting one or more of the considerations and selected to address an identified problem may be designated HAPC sites. It does not allow for designation of types of habitat but constrains HAPC designation to explicitly geographically defined sites or locations, such as a particular seamount.

Alternative 4: Type/site based concept. This alternative establishes HAPCs as individual sites selected as subsets of HAPC types. This is done as a two step process:

Step A) Types are selected based on the regulatory considerations.

Step B) All known sites or a subset of all known sites of those known types are selected as HAPCs

Alternative 5. Species core area. This alternative establishes HAPC areas will be defined for species based on the productivity of the habitat. It is based on the assumption that the data available on the distribution and abundance of an FMP species (and other species important to FMP species) is one of the factors that provides an indication of areas in which to examine the link between habitat and productivity. The Committee notes that HAPC core areas will only be designated as reliable information on the link between habitat and productivity becomes available. As more information on the interaction between habitat and FMP species/ecosystem productivity becomes available, HAPC could be refined to a core habitat that could be a type or a site that may be a bottleneck or key habitat. When low levels of information are available, this concept examines species distribution and abundance, compares the information with the four considerations and if one or more applies, HAPC may apply. As more information becomes available HAPC could be refined to a core habitat that could be a site designated to achieve specific management objectives.

Effects of Fishing on Fish Habitat off the waters of Alaska: Craig Rose, NMFS AFSC, summarized the draft analysis on the effects of groundfish fishing on benthic habitat. Dr. Rose described the habitat classes used in the analysis. The Bering Sea habitat types were based on sediment data, (sand, sand/mud and mudtypes) and those for the Aleutian Islands and Gulf of Alaska were based on depth strata with further division into non-geographic proportions of soft (mud-gravel) and hard (pebble rock) substrates. The habitat features were composed of four general classes: Infaunal prey, epifaunal prey, substrate shelter, biogenic shelter.

The Committee discussed the analysis at length, both in regards to the input to the model as well as determining mitigation alternatives.

The Committee was concerned about the difficulty of incorporating habitat features and habitat function in the model. Dr. Rose stated that much of the information is not yet available to incorporate this in the short term. For the model, he utilized reduction of features as a proxy for function. The analysis is meant to be an indicator of which fishery has more effects on habitat than others. However the model is unable to determine if the effect of fishing are significant to managed species.

The Committee asked Dr. Rose about how this draft document will be reviewed, and who he might include if it is reviewed externally. Dr. Rose mentioned his internal review would include staff with modeling expertise and could include Jeff Fujioka at Auke Bay Lab and Bernard Megrey at the Alaska Fisheries Science Center. An external review after a subsequent draft would have to include people of the same level of expertise outside of NMFS, including the SSC.

The Committee asked how the model captures globalized or localized problems. For example, the Bering Sea pollock fishery has a large foot print compared to other fisheries, and consequently, the fishery generates a relatively high effects value in the analysis, whereas a fishery with a smaller footprint appears to have no effects. Craig noted that his analysis is most useful at examining effects on a large scale, and was less useful for assessing localized effects.

John Gauvin raised concern on the methodology to incorporate the overlap of fishing effort. He looked at the vessel monitoring system (VMS) data for the Atka mackerel fishery, and when he had an outside GIS expert estimate the amount of hauls over a year including overlaps the results reduced the foot print, by 250%.

Gauvin asked how the results for mackerel fishery would be different if you considered more direct observations of overlap? Craig said that the overlap adjustment in the current analysis reflects less overlap than that found in the Atka mackerel VMS data. He plans further work with that and other VMS data to find better ways to accommodate overlap in the model.

Ben Enticknap raised concerns about bottom trawl effects. The model describes total area swept as trawl door to trawl door. Ben stated that the effects are greater than door to door, because according to the NRC report there are edge effects and sediment suspension. There needs to have consideration for the habitat outside the path of the trawl.

A committee member questioned how the model estimates fishery effect on different types of habitat without habitat distribution information. Dave Witherell noted that due to a paucity of habitat distribution data for the AI and GOA, the model assumes that each block contains both hard and soft bottom substrates. This assumption greatly affects model results. For example, in AI, the model assumes 80% of each block is hard bottom so that the trawl fisheries occur 80% of the time on hard substrate. Yet fisheries may be more likely to be prosecuted over soft substrates. Therefore, the model may overstate the effects of fisheries in the AI and GOA.

Public Comment: Comments were received by Ed Richardson, Paul MacGregor, Martin Robards, and Geoff Schester, and are summarized as follows:

Ed Richardson- Notes that the draft impact model is a good start, but is this the best available science to determine adverse impacts of fisheries? Are we too ahead of ourselves since this hasn't been reviewed?

Paul MacGregor- Notes that a point of equilibrium is noted in the model. At what point do we get there?

Martin Robards- - Notes that the analysis deals with uncertainty well in the text, and the values are good, but wants to know if there is a way to put confidence intervals in there? Craig- without having the exactness in the model now it will be difficult.

Geoff Schester- raised concerns about coral species, which don't fit into this model anywhere. He was wondering if the model could be adjusted to account for long lived coral species. He thinks its important to use this model to look at fishery impacts, but an important habitat is left out. He would like to put coral into the model or have considerations for coral protection for reasons outside the impact model. He requested confidence intervals be place on numbers, and to clarify which parameters are uncertain in the document.

Alternatives to minimize the effects of fishing on EFH: Council tasked staff in June to formulate a 'strawman' set of mitigation alternatives prior to the September EFH Committee meeting. The Committee was to use the 'strawman' as a starting point for developing mitigation alternatives for the October Council meeting.

A NMFS/Council/GC/ADF&G TEAM EFH met on September 4, 2002, to discuss the draft strawman Alternatives to minimize the effects of fishing on EFH and agreed on some additional considerations for the EFH Steering Committee. The team noted that the results from Craig's 8/11/02 paper are preliminary without the benefit of a scientific peer review. It was suggested that model results be looked at relatively rather than as a strict percentage because impacts may be serious even though they may be a small percentage of habitat impacted. The model points to things that may need mitigation, but it doesn't necessarily imply that other things don't need mitigation. Factors like habitat function, species sensitivity, and timing of impact can be important and were not considered in the model because of lack of information. The team thought that possible components of mitigation alternatives could also include gear configuration limitations, gear modifications, and performance reviews. Additionally a bycatch limit on coral could be examined to limit

the effects of fishing on vulnerable habitat. Mitigation alternatives should all have a research/monitoring component to see if management is having a positive effect. The team recommended that the Committee add research closure/open areas in all alternatives of at least 3 - 5 percent. These open/closed areas will be depicted on a map for Council consideration after the areas are defined by the EFH Committee.

Dave Witherell summarized the report on the draft strawman mitigation alternatives for the Committee. The results of the draft impact analysis are preliminary but the Team EFH believes it's the best science available. The Committee deliberated and agreed to use the draft strawman alternatives as a starting point for mitigation alternatives.

The Committee discussed the need for having research component within each mitigation alternative and agreed on the recommendations from agencies Team EFH workgroup. The Committee agreed to have the research component addressed in a preamble to all the mitigation alternatives and agreed upon it without a motion.

The Committee discussed whether or not the strawman represented a reasonable range of alternatives under NEPA. Jon Kurland NMFS reported that a wide range would encompass something from extremely precautionary back to no action. He's unsure if the current strawman alternatives 5 and 6 are extremely precautionary but wants to hear from the Committee.

There were questions in regard to the development of the different mitigation alternatives based on the adverse effects identified. Dave Witherell responded that the strawman alternatives were packaged to address the biggest impacts of the model first. He notes that there is no 'bar' to determine what is minimal and more than temporary. He understands that you want to have action in each region, but the rule specifies that we must consider action for fishing activities that have more than minimal and not temporary effects on EFH. Ben Enticknap expressed concern that the 'bar' is different for each region and habitat fished.

The Committee had several more questions as to the structure of the strawman before they begin to deliberate over these alternatives to append, amend or move forward. Ben Enticknap asked if you indeed were addressing fisheries with the largest impact first why did the Bering Sea Pollock fishery that has the largest footprint fall out of the alternatives. Witherell noted that he did address these fisheries within alternatives 5 & 6 but they did not fall under the open area approach for management because the fishery was widely dispersed so the open area concept would not be useful in this case.

Heather McCarty asked why rationalization wasn't included in any of the alternatives, as it was a mitigation tool discussed at length by the Committee. Witherell noted there are several reasons to implement a rationalization programs for our fisheries, and these programs may have positive effects on habitat but it the primary goal of rationalization isn't to reduce the effects from fishing gear on habitat. Essentially, a rationalization program did not seem to be a reasonable alternative to address the purpose and need for action. He thinks the EIS should have a full discussion on this concept, and capture the pros and cons of rationalization effects on habitat under the cumulative assessment.

Scott Smiley asked about a trigger mechanisms to be used for each of the mitigation alternatives to use tools to prevent adverse impacts stepwise based on a set of initial criteria. This concept would allow tools to change either direction to get more or less strict on habitat protection if needed. Witherell said it could be difficult to capture this in each alternative and then analyzed in comparison to each other in an EIS, but the Council could adjust measures in the future based on additional information.

Glenn Reed pointed out that the numbers in the draft impact analysis are in relationship to each other, within this North Pacific region. How about a comparison with other areas of the country? In Alaska there's not a problem with the status of the stocks for these fish for which we are trying to protect their habitat. Witherell noted that it's all on a relative scale, and that the Committee is in a difficult position to make these calls without knowing what is minimal and temporary. For example, if slope rockfish are 100% dependant on the bioshelter of the slope habitat, and by fishing we have a 9% reduction in that habitat, then we could model the fishing mortality that would be required to mitigate the effects on habitat.

Gordon Blue stated concern with respect to the closure areas under Alternative 6, because there seems to be a disconnect in the use of marine reserves as a mitigation tool. We have not addressed side effects the example maps provided from the DPSEIS. For example it appears that a 20% marine reserve in the Bering Sea area would affect most of the Red King Crab, hair crab, and the opilio crab fisheries. We need to consider these closures on a fishery by fishery basis.

Linda Behnken asked staff why no take marine reserve areas would also include total allowable catch (TAC) reductions. Witherell replied that the TAC reduction was suggested by Team EFH because there may be unanticipated effects on habitat inside the open areas as a result of increased effort.

Linda Behnken asked staff if we can incorporate corals or other habitats into the model. She was also interested in measures not based directly on model results. She also expressed a desire to create a new alternative using some of the components of other alternatives, and would address each region separately. Linda was also concerned about how the GOA rockfish longline fishery was defined.

John Gauvin asked questions in reference to strawman Alternative 3 open area concept for flatfish. His understanding from research on soft bottom trawl fishing is that it is the intensity of the fishing that imposes effects on benthic communities. Is there a way to look at TAC or catch reduction levels as an alternative to an open areas concept. Witherell noted that Alternative 3 was designed to have open areas around the places where the fishing already occurs. This protects other emergent epifauna in areas that aren't fished regularly, and would eliminate impacts to the outside areas. John asked if those are short-lived species is there no way to craft a metric of these things? Witherell responded that if you look at the history of the flatfish fishery in the BS for the last 40 years, the amount of fish removed is quite variable. The open area allows for increased effort, but the effects would only happen in a small area.

Scott Smiley stated the open area concept doesn't adjust for environmental change and the movement of fish. If the fish aren't in the open areas what are you going to do? Scott suggests it would be worthwhile to build more flexibility in the alternative with the triggering concept.

Public Testimony was given by Geoff Schester, Martin Robard, Paul MacGregor, Dave Fraser, Pat Carlson, Mike Martin, Ed Richardson, Julie Bonney, Jay Stinson, Matt Moier and is summarized as follows:

1. Geoff Schester (Oceana) Oceana recommends research be done on coral/sponges in AI, including habitat mapping, researching on habitat functioning, research on on pelagic trawling, pot, longline, and bottom trawl impacts. Further Oceana recommends full observer coverage (100%) with all hauls observed. Bycatch should be identified to lowest taxonomic level possible. He recommended that a habitat assessment report be prepared annually. He raises concern about AI coral bycatch. He state that northern and roughey rockfish have been over harvested in the Aleutians in the last 5 years. There has been major coral reef discovery there. Oceana recommends that in alternative 4 or elsewhere in the EIS to add State and federal waters closed to all bottom trawling for all fisheries in Aleutian Islands with the caveat fishing vessels under 60' be allowed and consideration of local communities and tow-specific open areas. Coral and sponge reefs are dense and dense concentrations

of coral/sponges would be closed to all bottom tending gear. Other things that should be considered are coral and sponge bycatch caps to deal with HAPC.

2. Martin Robards (Ocean Conservancy) Martin states that he likes the ecoregion (alternative 5) approach for EFH designation and commends staff for their work since the May Sitka meeting. In terms of HAPC, he recommends appointing a subcommittee to address specific recommendations about these. He requests the coral protection analysis incorporate other criteria instead of CPUE which could include abundance, biodiversity, sensitivity, and resilience. He believes it important for the Councils work to follow State of Alaska's MPA efforts. This includes setting the objectives of a MPA beforehand for economic and social issues. He has a manuscript he's giving to the Council he will forward onto the Committee this next week. He believes the strawman represents a wide range of alternatives for the analysis.

3. Paul MacGregor (At Sea Processors) Paul expressed some frustration in the task of the Committee trying to mitigate since there is no definition for what is more than minimal and less than temporary. He doesn't see proof that any of the managed species are exhibiting any signs of habitat stress. These essential decision points need to be clarified before you decide the mitigation measures.

4. Dave Fraser (Adak Fisheries). The Aleutian Islands are an assembly of microhabitats. He has fished there a long time. One favorite tow he makes for cod is only 2-3 boat widths between the shallow rocky habitat and very deep waters. In this region you need to look at data on the appropriate scale to do appropriate mitigation. Mitigation should factor in to the 80/20% hard and soft bottom concepts. He feels it essential to put more effort on habitat mapping in the AI. The coral bycatch data information that NMFS provided Oceana has not been destroyed and is being misrepresented. He feels the strawman contains appropriate measures in the Aleutians.

5. Pat Carlson (Kodiak Island Borough) He wants to point out his observations as this fishing communities municipal manager. Pat is concerned about economics and how these decisions effect small communities. He feels that if there are further management areas needed, than there should be triggering mechanism. The city of Kodiak has suffered greatly from the measures implemented for Steller sea lions. The work force in Kodiak had approximately 1,600 processors but after the seal lion measures 400 of these jobs evaporated. Kodiak has lost 4 fishing plants and the others are down to 5 months of processing time. He urges the Committee to go slow and look at the effects economically on the proposed closures. The Kodiak community revolves around some of the trawl fisheries being considered for mitigation alternatives.

6. Ed Richardson (Pollock Conservation Cooperative) Ed recommends the Committee drop alternative 6. He agrees with Gordon Blues's synopsis of the DPSEIS maps and how this effects a wider set of issues and fisheries besides those addressed in the impact analysis. Alternative 6 goes well beyond the MSA requirements. There needs to be a lot more science to be able to link impacts to habitat.

7. Mike Martin (Kodiak) His company employs about 140 people in Kodiak. The sea lion issue alone has serious devastated this town, now the environmental community is asking for more, and there is not a lot more to give. He urges the Committee not to randomly draw boxes to close fisheries for litigation purposes under the guise of maintaining and conserving habitat. To start drawing boxes is a great mistake. He is also concerned about the resources, as it is their livelihood. He recommends removing mitigation alternatives 2-6 and use the analysis to review the current management measures and how they benefit habitat.

8. Julie Bonney (Alaska Groundfish Data Bank) Julie is concerned that the GOA rockfish trawl fishery is in the tip of the list for mitigation measures. Over 50% of the rockfish trawl effort is from the shorebased sector off Kodiak. Acting too quickly in the name of habitat protection can be detrimental to the local economy. She feels that in all the alternatives there should be bottom trawl gear conversion allowed to pelagic gear or fixed gear. She feels that rationalization is a great tool for industry to work with the agency on achieving lot of goals some of which could be habitat based.

9. Jay Stinson (vessel owner in Kodiak/Pelagic Resources Inc.) If you are formulating a broad range of alternatives for mitigation for NEPA compliance he feels that Alternative 1 as it stands is not an end bracket.

He suggests the no action alternative to analyze an entirely open ocean before any of the management measures came into place. He also feels that climatic regimes need to be considered in the look at habitat effects. At one time the foreign fishery took 300,000 tons of rockfish, and removed the coral to make that fishery effective. That climatic regime is not there anymore it's gone. Is our intent to put into place a mitigation measure that will take 1000 of years to form as in an old growth forest. It is essential to establish the goal of having a sustainable fishery and have it based on possible habitat conservation measures. He feels EFH was not intended to be a land grab for habitat conservation organizations.

10. Matt Moier (plant manager) As a plant manager for one of the surviving plants he feels we need additional time to look at additional research on impacts before because the decisions have such a huge impact on coastal communities.

Formulating the recommended Mitigation Alternatives:

Stosh Anderson reiterated the task that the Committee has at hand is to bring forward recommended mitigation alternatives to the Council. He decided to split the Committee into two subgroups to deal with the strawman alternative concepts. The first group worked with Alternatives 2-4 and was composed of Stosh Anderson, Heather McCarty, Ben Enticknap, and John Gauvin, with David Witherell and Cindy Hartmann as staff. The second workgroup worked with Alternatives 5-6 and was composed of Linda Behnken, Scott Smiley, Michelle Ridgway, and Glenn Reed, and was staffed by Cathy Coon and Jon Kurland.

After the subcommittee reconvened, modified alternatives for 5-6 are addressed below in motions. It was decided that the workgroup for alternatives 3 and 4 would meet in Seattle Sunday September 29th to establish boundaries for the open area approach for the bottom trawl fisheries on flatfish for alternative 3 and alternative 4.

Committee discussion of Mitigation Alternatives:

Ben Enticknap recommended a procedure to provide a framework to the Council to pick different management measures for different areas. He would like to see the mitigation alternatives be grouped by region GOA, AI, and BS. Jon Kurland advised the he could envision coming up with a list of potential management measures for each area and from that list craft the alternatives. Other members of the Committee disagreed with that concept because we have a template to see which fisheries have the largest impact on habitat. The alternatives should be crafted from the results from the draft Impact Analysis. Starting from a general list management measures, and mixing and matching within a region, would move us backwards. Linda Behnken suggested that if Committee members have suggestions for additional mitigation alternatives to place them on the table.

John Gauvin would like to see an alternative that would address stock status and whether there is an adverse effect on habitat be based on current stock strengths. Linda Behnken reminded the Committee that the direction of the final rule says to mitigate habitat impacts not address stock declines. Scott Smiley stated that you need to have some connection with the status of the stocks to move forward with mitigation impacts on habitat.

John Gauvin suggests that in lieu of creating a new alternative for the Aleutian Islands region for coral protection, that the Committee suggest to Council using the HAPC process for this type of vulnerable habitat and to use the results of Craig's model for the mitigation alternatives. Ben Enticknap disagrees and thinks there should be a separate alternative for the Aleutian Islands with designated open areas for bottom trawl fisheries.

Heather McCarty requested clarification from the agency on whether HAPC and its associated management measures are mitigation measures. Jon Kurland clarified that HAPCs could have management measures that would be implementable after the EIS is completed.

Public Testimony was given by Geoff Schester, Paul MacGregor, Dave Fraser, Pat Carlson, Mike Martin, and is summarized as follows:

1. **Geoff Schester (Oceana)** In developing the mitigation alternatives, Geoff recommends that the Committee focus on alternatives that protect EFH rather than areas that are not fished. He strongly urges the Committee to protect coral and sponge habitat specifically in the AI. He recommends bycatch caps on HAPC's and using a site based approach for HAPC's that would include additional measures for coral where there are the highest concentrations of corals and sponges.
2. **Paul MacGregor (At Sea Processors)** Paul urges the Committee to identify what is more than minimal before determining mitigation measures. Additionally, he thinks the Committee need to identify adverse effects on managed species before it is possible to determine what mitigation measures are more practicable.
3. **Mike Martin (Kodiak)** Mike urges the Committee to consider the communities they are affecting and not just react to lawsuits.
4. **Pat Carlson (Kodiak Island Borough)** Pat has great concerns for the communities in the Gulf of Alaska area based on looking at the bottom trawl closures recommended in the mitigation alternatives combined with the existing regulatory areas closed for fishing. He recommends looking at the already existing management areas in relationship to the amount of protection already in place to the whole region. He thinks technology has changed a lot in the trawl industry to allow them to avoid impacts. He referred to the McDowell report for the effects the sea lion measures had on the community and stated that the community of Kodiak cannot lose any more of their workforce on top of the decline from the sea lion actions.
5. **Dave Fraser (Adak Fisheries)** Dave attended a meeting with the state of Alaska to discuss coral protection in the AI. He requests that the Council interweave their actions with that of the state's board of fisheries actions on this issue. He would like to see more information on populations estimates of corals and sponges and more research on their life history.

MOTION: Ben Enticknap motioned to add a new Alternative 4.5. Prohibit the use of bottom trawl gear for all fisheries in the GOA, Bering Sea, and Aleutian Islands except within designated open areas. *Motion failed*
5-5

Ben expanded with the following: Within the design of protecting essential fish habitat for coral, sponge, and the FMP species associated with those habitats, prohibit the use of bottom trawls in the AI region, except within designated open areas. In determining 'open areas' convene a working group of habitat experts, industry from the region and conservation organizations*. A comprehensive research program will accompany this alternative, including detailed mapping of habitat area, research on ecological function of coral and sponge habitat and FMP species, and research on fishing impacts in these habitats.

- **Reasoning:** With Council direction, this working group will meet in conjunction with the EFH Committee, after the October 2002 Council meeting and prior to the December 2002 Council meeting. In addition to committee members, the working group should include agency habitat scientists, council staff, bottom trawlers familiar with the AI area, representatives of conservation community. Council or NMFS staff should produce a GIS overlay showing recent trawl effort (1998-2001) and known coral and sponge locations based on bycatch data, surveys and submersible dives.

- * This alternative can be a placeholder until the working group and Committee determine appropriate 'open areas'.

Ben Enticknap says there are a number of reasons why this should be included in this analysis. The draft impact analysis doesn't adequately look at coral and sponges in the AI. Other Committee members expressed concern for having a separate motion for the Aleutian Islands. None of the fisheries in the Aleutians are classified as adverse in the draft impact analysis. Additionally this alternative should apply to all gear types not only bottom trawl gear. It was noted that perhaps the best place for coral and sponge protection (and habitats not addressed in the draft impact analysis) would be under the HAPC process.

MOTION: John Gauvin moved to amend Ben's motion (Alternative 4.5) to include longline and pot gear in the AI. *Motion failed 5-5.*

MOTION: Heather McCarty moves to add a new alternative to include rationalization for the Gulf of Alaska fisheries to be a tool to mitigate fishing impacts. *Motion fails 7-3.*

MOTION: Linda Behken moves to add a new alternative as follows:

Prohibit all directed fishing with bottom trawl gear for GOA slope rockfish, and modify provisions of the license limitation program to allow gear conversion. Under a gear conversion provision, vessels with license designations for trawl gear in these areas would get endorsements to fish for these stocks with pelagic trawl or fixed gear. Prohibit the use of bottom trawl gear for flatfish fisheries in the in the Bering Sea, except within designated open areas (develop designated open areas through Subcommittee work planned for Sunday, September 29). In the Aleutian Islands, prohibit all trawling within designated sites (based on concentrations of large emergent epifauna and in areas that have been only minimally effected by fishing), and reduce TACs based on the relative amount that historically (1998-2001) came out of the sites, if appropriate. *Motion carries 10-0.* An amendment to this motion was made by Scott Smiley specific to the Aleutian Islands component to replace bottom trawl gear with all bottom tending gear, for the subcommittee group replacement to alternative 5. *Motion carries 10-0*

MOTION: The Committee moves strawman alternative 1 as Mitigation Alternative 1. No Action/ Status Quo. No new management measures in addition to those already in place would be implemented at this time to minimize the effects of fishing on EFH. *Motion carries 10-0.*

MOTION: The Committee moves strawman alternative 2 as Mitigation Alternative 2. With the following language changes for gear conversion. Suggest under a gear conversion provision vessels licensed to trawl could convert to pelagic trawl or fixed gear. *Motion carries 10-0.*

MOTION: The Committee moves to remove strawman alternative 6 from analysis in the EFH EIS. *Motion fails 7-3.*

MOTION: The Committee moves strawman alternative 6 forward as Mitigation Alternative 6 requesting staff to clarify in the EIS how the maps were drawn in the DPSEIS. Additionally it moves forward the subcommittee reconfigured alternative 5, including a research component, and closures distributed through the spatial extent of the habitat based on biogenic shelter and substrate shelter habitat features. This would be in addition to the strawman mitigation Alternative 5. *Motion carries 10-0.*

MOTION: The Committee moves forward the concepts of strawman alternatives 3 & 4 to Mitigation measures 3 &4 with the following exceptions for the Bering Sea bottom trawl fisheries open area. The

specific approach for this concept will be identified by reconvening the subcommittee in Seattle on 9/29 to report back to the Committee prior to the Council meeting in October. *Motion carries 10-0.*

Recommended Mitigation Alternatives:

The following are the Committees recommended alternatives to minimize to the extent practicable adverse effects on EFH. The Committee notes that the available scientific information provides an analysis of fishing impacts on habitat features but does not relate those impacts on the health of managed species.

Alternative 1: No action/Status quo. No new management measures (in addition to those already in place) would be implemented at this time to minimize the effects of fishing on EFH.

Alternative 2: Prohibit all directed fishing with bottom trawl gear for GOA slope rockfish, and modify provisions of the license limitation program to allow gear conversion. Under a gear conversion provision, vessels with license designations for trawl gear in these areas would get endorsements to fish for these stocks with pelagic trawl or fixed gear.

Alternative 3: Prohibit all directed fishing with bottom trawl gear for GOA slope rockfish and Bering Sea flatfish, except within designated open areas.

Alternative 4: Prohibit the use of bottom trawl gear for all fisheries in the GOA slope area and in the Bering Sea, except within designated open areas.

Alternative 5: Establish no-take marine reserves (closures to all bottom tending gear, and all groundfish species including halibut) in slope areas of the Gulf of Alaska. TACs of FMP slope species (sablefish, slope rockfish, deepwater flatfish) would be reduced relative to their historic catch within these areas. In the Bering Sea and Aleutian Islands, prohibit all trawling within designated sites (based on concentrations of large emergent epifauna), and reduce TACs based on the relative amount that historically (1998-2001) came out of the sites. For the Bering sea sites, TAC reductions would be made for flatfish, cod, and pollock. For Aleutian Islands sites, TAC reductions would be made for mackerel, rockfish, and Pacific cod (trawl gear allocation).

Alternative 6: Establish no-take marine reserves (closures to all gear for all groundfish species including halibut) in each region. The primary purpose EFH reserves are to protect habitat in order to sustain productivity of FMP species.

A. GOA slope objective: To preserve relatively unimpacted Gulf slope habitat for the purpose of conserving biotic features of the seafloor and associated fish and shellfish assemblages typical of the Gulf of Alaska slope ecosystem.

B. Bering Sea objective: To preserve relatively unimpacted Bering Sea habitat for the purpose of conserving biotic features of the seafloor and associated fish and shellfish assemblages typical of the Bering Sea ecosystem. The marine reserves are tagged to address impacts from the flatfish and pollock fishery.

C. Aleutian Islands objective: To preserve relatively unimpacted Aleutian Island biogenic and substrate shelter habitat for the purpose of conserving biotic features of the seafloor and associated fish and shellfish assemblages typical of the biogenic and substrate shelter habitat in the Aleutian Island ecosystem.

Alternative 7: Establish at least 20% of the BS, AI, and GOA areas as no-take marine reserves (closures to all gear, and all species including halibut) across a range of habitat types, and reduce the TACs for all groundfish species by 20%.

Alternative 8: Implements three measures as follows:

A. Prohibit all directed fishing with bottom trawl gear for GOA slope rockfish, and modify provisions of the license limitation program to allow gear conversion. Under a gear conversion provision, vessels with license designations for trawl gear in these areas would get endorsements to fish for these stocks with pelagic trawl or non-trawl gear.

B. Prohibit the use of bottom trawl gear for flatfish fisheries in the Bering Sea, except within designated open areas.

C. Prohibit the use of bottom trawl gear within marine reserve areas within the Aleutian Island region. The objective is to preserve relatively unimpacted Aleutian Island biological and substrate shelter habitat for the purpose of conserving biotic features of the seafloor and associated fish and shellfish assemblages typical of the biological and substrate shelter habitat in the Aleutian Island ecosystem.

The EFH Committee recessed at about 3:30pm and will reconvene in Seattle prior to the Council meeting.

**1st Draft Addendum
EFH Committee Meeting
SeaTac Doubletree
Seattle, Washington
October 2, 2002**

Committee present: Stosh Anderson, Linda Behnken call in, Jon Kurland, Ben Enticknap, John Gauvin, Glenn Reed, Michelle Ridway, Heather McCarty, Earl Krygier. Gordon Blue (arrived late).

Staff present: Cathy Coon, Cindy Hartmann, David Witherell, Jon Hiefert, Steve Davis, Doug Woodby, Joe McCabe, Steve Lewis

After recessing the EFH Steering Committee meeting in Kodiak, Committee chair, Stosh Anderson, reconvened the EFH Committee at 6 pm October 2nd in the Evergreen Room at the Double Tree Hotel in Seattle, Washington. The Committee meeting was called to order and continued to work from the agenda for the Kodiak meeting.

The draft minutes from the September 16 - 18, 2002, meeting were distributed and discussed. Recommended changes were incorporated into the revised minutes that will be distributed to the AP and Council. A motion was made to approve the revised September 16-18th EFH draft Committee minutes. *Motion carries 10-0.*

During the September Committee meeting subgroups were formed to discuss the strawman alternative concepts. The group that worked with Alternatives 2-4 was composed of Stosh Anderson, Heather McCarty, John Gauvin, and Ben Enticknap. It became evident that further refinements were necessary to finalize an open area concept for the Bering Sea. The subcommittee reconvened on September 29, 2002 and worked on mitigation alternatives 3 and 4. Approximately 18 people attended the subcommittee meeting at SeaTac.

Stosh Anderson commended the participants, and noted that there was a better understanding of the task at hand. He commented on the size of the proposed open area, and that while it needed to be substantially different from status quo, the industry desired flexibility within the open areas to manage for bycatch levels. The subcommittee agreed that a core area would remain open with rolling open and closed areas. Since there was no written report by the subcommittee, Stosh asked subcommittee members to summarize what was discussed and accomplished at the work session.

Heather McCarty summarized that for Bering Sea open areas, lines were drawn on the map by both the industry and environmental groups. The open area concept was agreed upon by the subcommittee, but not the actual open area boundaries. Ben Enticknap presented his idea for crab habitat protection for opilio and red king crab within the open area framework. Heather noted that the committee did not come to an agreement on the boundaries.

Ben Enticknap noted that the discussion began with the core area map from strawman, which based on the highest effort in recent years. Others members wanted access to a larger area to avoid halibut bycatch. Rotating open areas were proposed, with closures for 5 year periods to allow for recovery of epifauna. Ben recommended a core area that would be open with 8 blocks along the border. These blocks would have rotating 5 year closures, for habitat protection, within each block. Ben showed a map that displayed

these 8 blocks subdivided into fifths with one fifth (one strip) closed within each block. In general, the areas requiring habitat protection would be in the rotating areas. Ben also proposed additional crab protection for brood stock habitat for opilio and red king crab. John and he came to a sense of agreement that the additional crab protection areas would work better as a HAPC.

John said that he had reservations for alternative 3 strawman open areas. He thinks that the open area is too small because of bycatch implications. He recommended looking at the CPUE data from the Fritz et al. technical memo which has historical CPUE data. Jon mapped the union of the upper 2/3's CPUE for flatfish in the Bering Sea (yellow fin sole, rock sole, flat head sole, Greenland turbot, and pacific cod) as the core fishing area for the flatfish fishery. He would like to see this area as the open area. He said that an open area can't be enforced if boats switch between targets (flatfish and cod). He recommended merging alternative 3 & 4. John said that the core area has to be the area that the fleet needs to catch the fish. The rotating closure areas in John's proposal would be north of the Pribilof closure area and perpendicular to the shelf (Blocks 1-3). The area John recommended to have rolling closures was smaller than the area recommended by Ben. John reported that gear modifications were discussed at the subcommittee meeting. One promising gear modification would be to get the sweep off the bottom to benefit habitat. Dave Fraser said that no vessels are using bobbins on the sweeps. If you space bobbins along the sweep you could reduce the foot print.

Committee Member Discussion:

John Gauvin was asked about the gear modification inside this alternative. John passed out gear diagrams and Lori Swanson discussed how the concept of gear modification. It involved using discs on the foot rope and sweeps that would allow less over all contact with the seafloor.

Heather was concerned that a 5 year recovery period was too long, based on epifauna recovery rates. Ben said he felt that was up to the analysts to decide but would be open to the change. Jon Kurland pointed out that lines on the map will be necessary for the analysis.

Committee Motions:

John Gauvin stated that he would like to combine alternatives 2 and 3 in regards to the gulf and made the following motion.

Motion: Make a new alternative 2 that would apply to only the GOA to the following language. Prohibit all directed fishing with bottom trawl for GOA slope rockfish except in designated open areas, and modify provisions of the license limitation program to allow gear conversion. Under a gear conversion provision, vessels with license designations for trawl gear in these areas would get endorsements to fish for these stocks with pelagic trawl or fixed gear. Earl ammended the motion to create an new alternative 9 inlieu of replacing 2. *Motion carries 5-4*

Ben Enticknap stated that he would like to create a substitue alternative 4 based on the subcommittees work. It would be based on the concept of prohibiting the use of bottom trawl gear for all fisheries in the GOA slope area and Bering Sea except within designated open areas.

Motion: Substitute alternative 4 Bering Sea open area, such that it would close 20% blocks 1,2,3,6 for 2-5 year rotational closures and require gear modification on trawl footropes and sweeps. The core area would be open all the area which would include 4,5,7,8 and the other area in blue squiggles 162 degrees west. Included (6 as friendly from Gordon), *Motion carries 7-2 (Behnken absent).*

Gordon Blue made an friendly Ammendment to vote on add block 4 into the rotational closure group.
Motion fails 6-4

Other Issues:

The Committee asked staff to finalize the draft minutes and incorporate the suggested changes for distribution to the AP, and include as an addendum the alternatives that came forward from tonights' meeting. Prior to the Council presentation the Committee members will have an opportunity to review tonights' minutes.

Jon Kurland reminded the Committee that we need to establish a process where we can clear up the remaining issues at hand. The Committee still needs to work on HAPC designation alternatives and request for Council guidance. We still need to define closure areas for the Aleutians and Gulf of Alaska . The Committee will meet again in Anchorage November 4-6th beginning at 10am. Additionally stakeholders and industry will have meetings to provide input for these areas.

Summary of new mitigation alternatives:

Alternative 9:

Prohibit all directed fishing with bottom trawl for GOA slope rockfish except in designated open areas, and modify provisions of the license limitation program to allow gear conversion. Under a gear conversion provision, vessels with license designations for trawl gear in these areas would get endorsements to fish for these stocks with pelagic trawl or fixed gear. *Motion carries 5-4.*

Alternative 4 (Replacement):

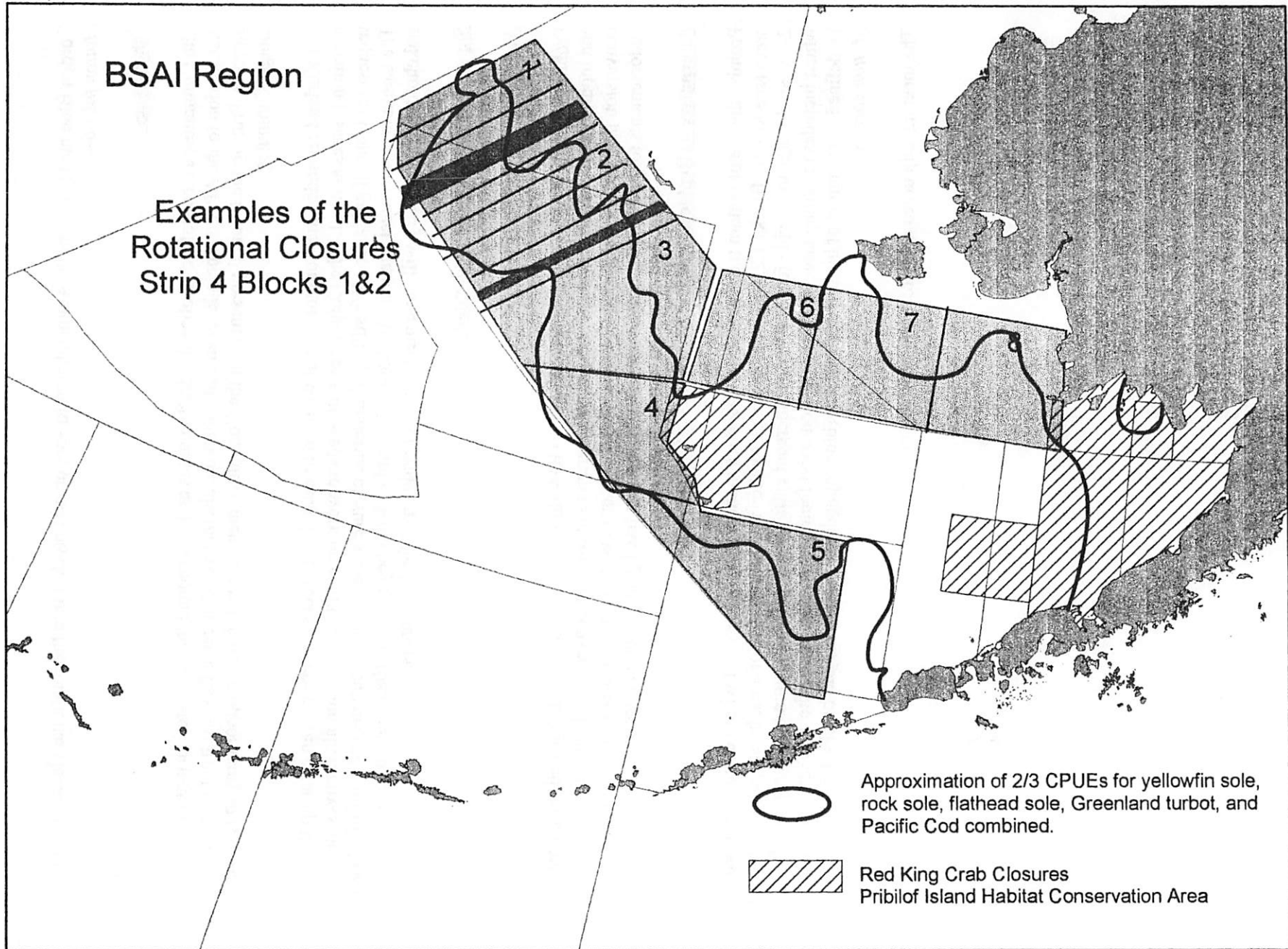
Prohibit the use of bottom trawl gear for all fisheries in the Bering Sea, except within designated open areas (see MAP). Blocks 1,2,3 and 6 would have rotational closures (20% of area, by strips) allowing for 2-5 year closures to provide for recovery of emergent epifauna. It requires bottom trawl gear modification which includes installing large diameter discs on trawl footropes and sweeps. The core open area would be defined as the union of historic fishing area (blue squiggles to 162^o west) and blocks 4,5,7 and 8.
Motion carries 7-2.

The meeting adjourned at approximately 10:15pm.

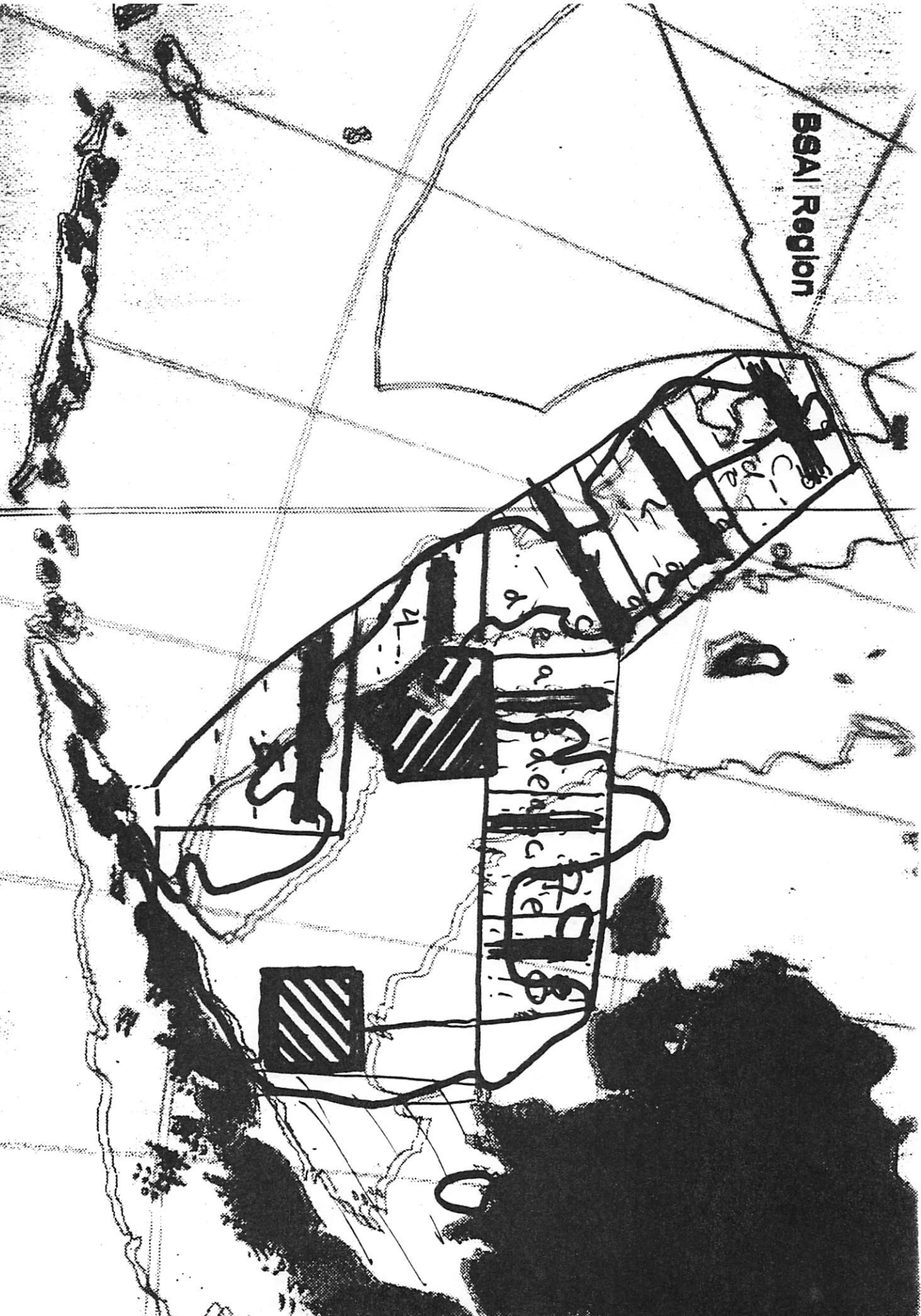
DRAFT

EFH Alternative 4 Bering Sea Open Area Concept

DRAFT



BSAI Region



of all CPUEs - YFS, RS, FHS, GLT, P. Cod combined

1994

Essential Fish Habitat



North Pacific Fishery Management
Council

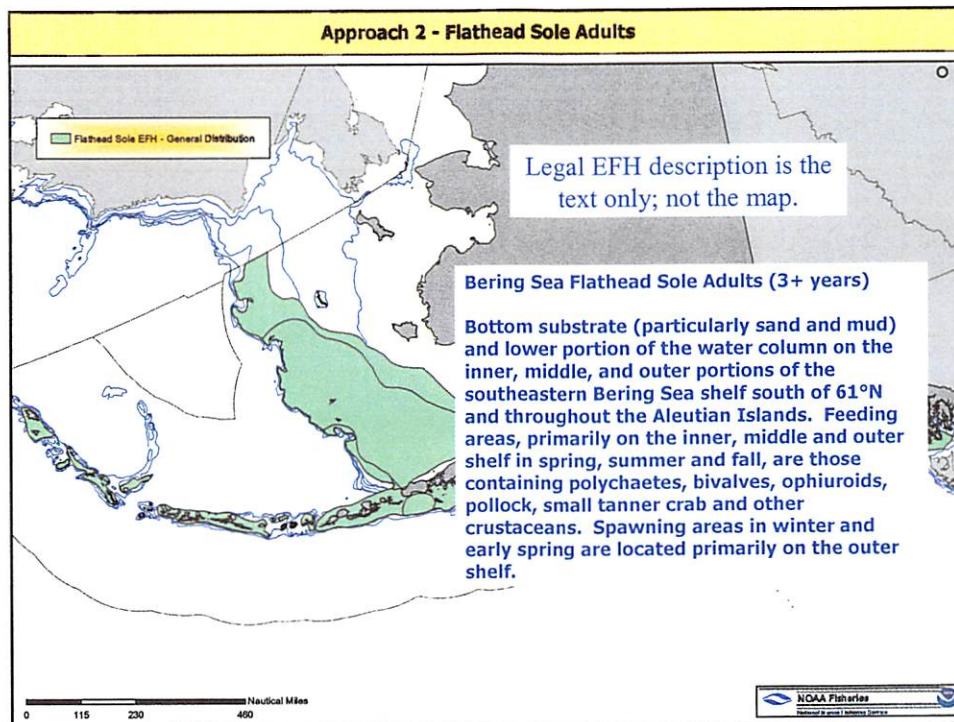


EFH Description Alternatives

- **Alternative 1: No Action. EFH not Identified or Described.**
- **Alternative 2: Status Quo. General Distribution – Existing EFH EA**
 - Text only; inconsistent with EFH Final Rule (50 CFR Part 600).
 - EFH is a subset of the overall species range and described as ~ 95% of this range.
- **Alternative 3 : General Distribution – EFH Updated**
 - EFH described by text and map
 - EFH will be a subset of all waters and the scientific interpretation of the area supporting 95% of the distribution for each particular life history stage.
- **Alternative 4: Highest Known Information**
 - EFH is the highest known level of scientific information available for each particular life history stage, if known.
 - EFH described at a higher density than general distribution will be based on a scientific interpretation of the area supporting 75% of that distribution.
- **Alternative 5: Eco-region Strategy**
 - EFH will be described as in Approach 3 for individual life history information.
 - EFH will be refined by habitat domains common for an assemblage of species.
- **Alternative 6: EFH only in EEZ**
 - EFH is the EEZ portion of Alternative 2.

Alternative 2: EFH is Not Updated

- EFH is *General Distribution*. General Distribution was selected to designate EFH even when a higher level of information existed.
- EFH is described by only text from the EFH EA.
- EFH was delineated by Stock Assessment Authors (SSA) and captures roughly 95% of the species distribution. (Computer analysis was limited at the time the EA was completed.)
- Based on best available scientific information, as well as fishery and specific knowledge of a life stage.
- Original EFH coverage was hand drawn by SSA's in 1998 and later digitized.



General Distribution Rationale Summary:

- Accounts for unpredictable annual differences in spatial distributions and natural long term shifts in oceanographic conditions.
- All habitats occupied by a species contribute to production at some level.
- A stock's long-term productivity is based on high and low levels of abundance.
- A concentration or higher density of a stock does not necessarily capture all habitat required to maintain healthy stocks within the ecosystem.
- From the scientific perspective, habitat related linkages to productivity are not available to justify a known concentration.
- NMFS guidance is to use best scientific information available in a risk averse fashion.

Alternative 3 : Updated General Distribution

- EFH will be described using General Distribution and updated to meet EFH Final Rule.
- EFH must be described by text and map (50 CFR 600.815;pg 2377).

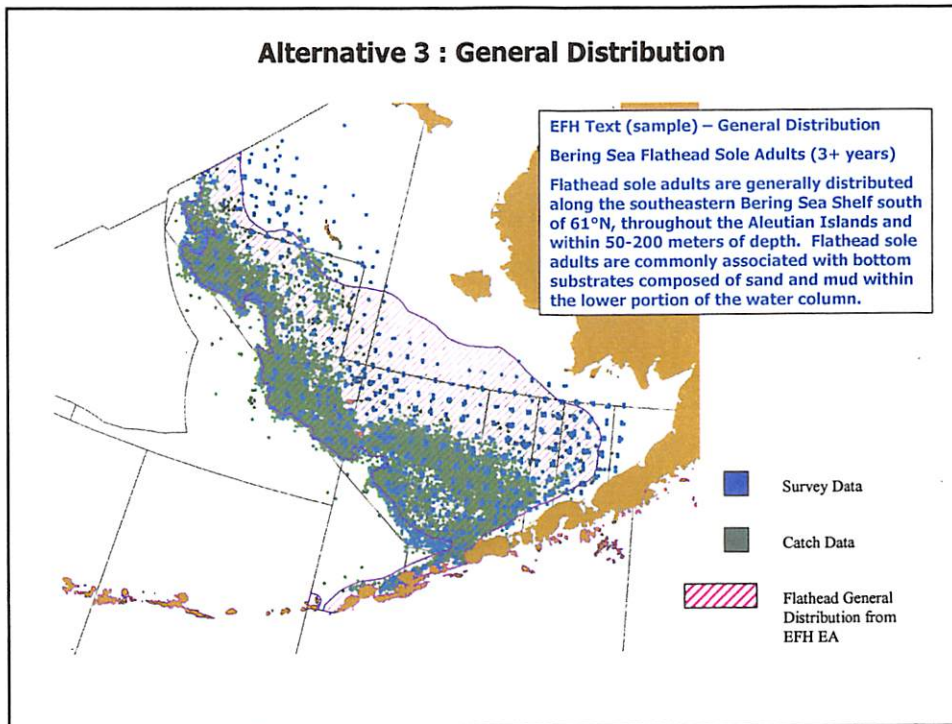
Alternative 3 : Updated General Distribution

- If data does not exist or cannot be inferred for a particular species' life stage, then EFH is not described.
- If presence/absence data is known, then EFH is *General Distribution*.
- *General Distribution* is defined as 95% of population and set by these criteria:
 - RACE (1961 to 2001) and NORPAC (1987-2002) databases queried.
 - CPUE then divided by total CPUE for each square for that species.
 - The result is abundance.
 - Abundance is then sorted from highest to lowest and is greater than or equal to (\geq) 95%
 - This GIS analysis is mapped and geo-referenced.

Alternative 3 : Updated General Distribution (continued)

- The GIS analysis and draft EFH descriptive text will then be made available for scientific review and professional judgment by the Stock Assessment Authors (SSA).
- SSA's will determine the recommended description of EFH.
The GIS coverage may be sufficient for EFH **OR**
SSA may interpret the data sets to depict EFH.
- EFH descriptive text will be drafted to match the GIS coverage area.
- The resulting EFH description will then be text and a map using the best available scientific information.

Alternative 3 : General Distribution



Why did we choose 95%?

- Reflects best professional scientific judgment of the areas needed by managed species.
 - Scientific Technical Teams chose roughly 95% of the species range to reflect General Distribution in the Original EFH EA.
 - Scientific or fishery information delineates where species has recruited to survey or directed fishery gear.
- A subset of all waters and substrate as EFH.
- Meets the rationales offered for *General Distribution*.

What does the 95% area exclude?

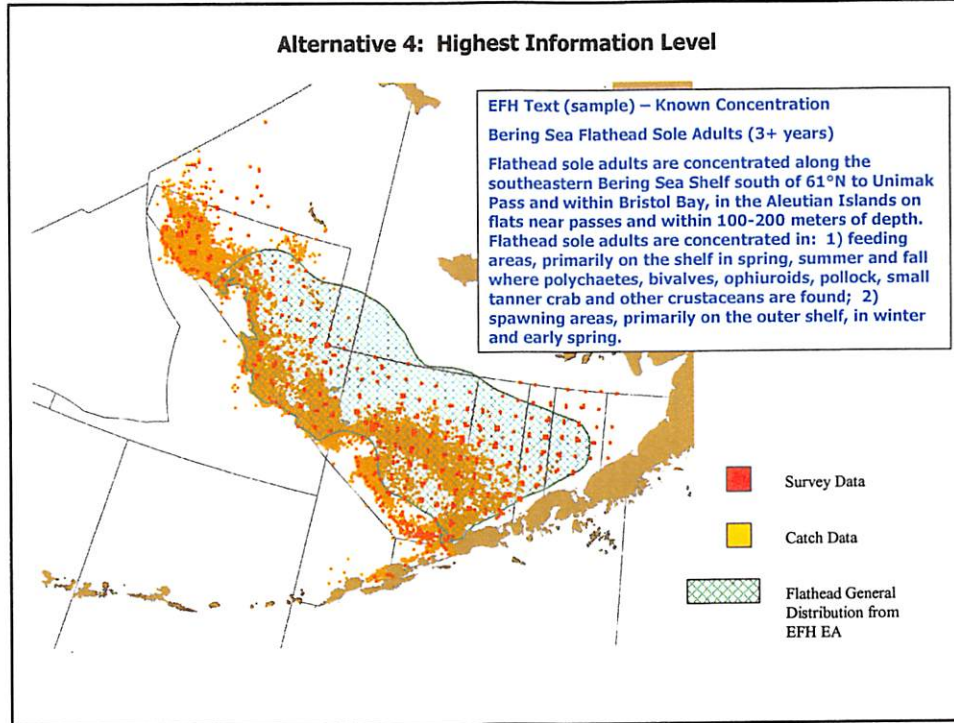
Any area excluded may represent:

- an area where the species marginally recruited to survey or directed gear type (<5%).
- an area where the species is not present at all.
- an area unproductive to fish.
- an area closed by regulation; fishery information is no longer available.

Alternative 4 – Highest Information Level

If information exists to refine EFH, then EFH is identified using the Highest Level of Information, if known:

- If data does not exist or cannot be inferred for a particular species' life stage, then EFH is not described.
- If only presence/absence (Level 1) data is available, then EFH is General Distribution (95%).
- The next level of information above *General Distribution* (presence/absence) will be *Known Concentration* and be based on 75% of the population.
- Level 3 information may be used for some life history stages of Pacific salmon.



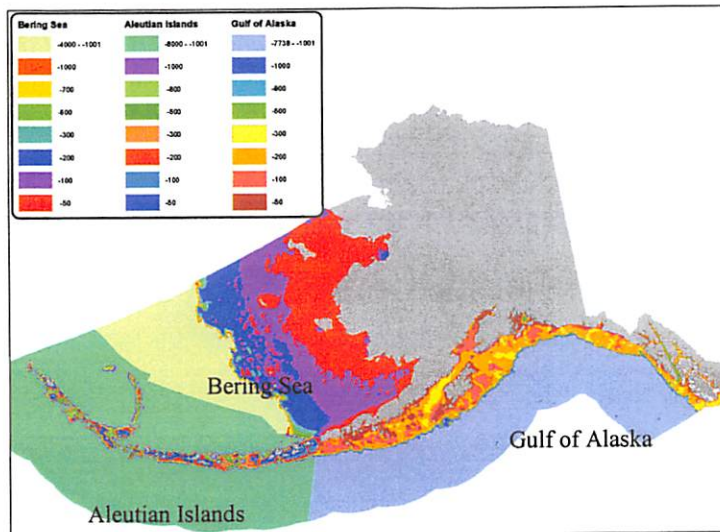
Why did analysts choose 75% ?

- Staff noticed a distinctly smaller area encompassed by 75% of the distribution.
- This distinction offered a clear contrast from General Distribution percentage of 95%.
 - At ~60 % abundance, EFH appeared small or indeterminable.
 - At ~85% abundance, EFH appeared similar to 95% abundance.

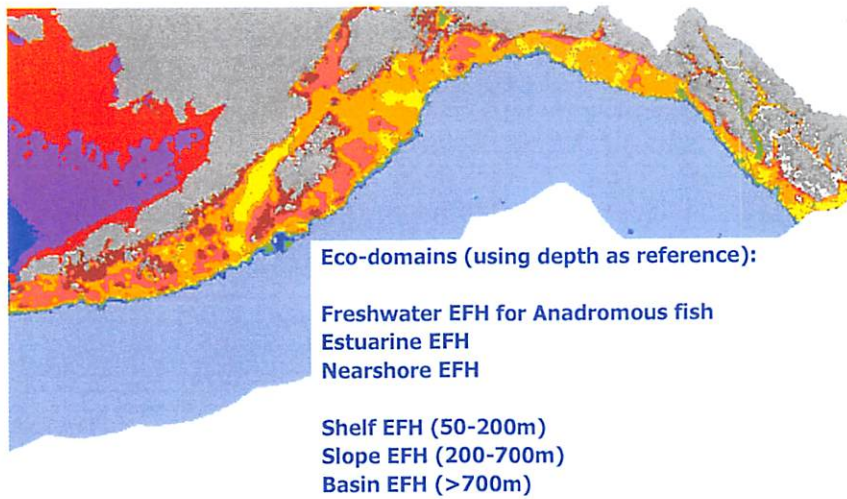
Alternative 5: Eco-region Strategy

- EFH will be described in three Eco-regions and refined by habitat domains for an assemblage of species.
- Best scientific information, if known, will be used to describe EFH such as life history information, temperature, substrate, depth, predator prey relationships, etc...
- Each domain will use habitat modifiers which are normally defined within its depth range. For example, Shelf EFH (50-200m) will include shallows, flats, banks, etc...
- EFH for species within these habitat types will be identified.

Alternative 5: Eco-regions



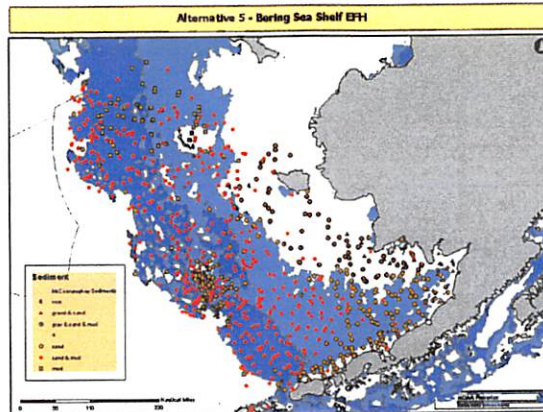
Alternative 5: GOA Eco-region



Alternative 5: Bering Sea Shelf EFH (50-200m)

EFH Species:

Walleye Pollock
 Arrowtooth flounder
 Rex sole
 Greenland turbot
 Dover sole
 Alaska plaice
 Flathead sole
 Dusky rockfish
 Northern rockfish
 Atka mackerel
 Red king crab
 Blue king crab
 Snow crab
 Tanner crab
 Weathervane scallop
 Chinook salmon
 Coho salmon
 Pink salmon
 Sockeye salmon
 Chum salmon
 Sculpins
 Skates
 Sharks
 Octopus
 Forage fish



Habitat Type: Shelf

Substrate: gravel, mud, sand, pebble, boulder

Special features: boulders, sand waves

Oceanographic Features: temperature, salinity, gyres, currents

Epifauna: star fish, soft corals, anemones, sea pens

Infauna: bivalves, polychaetes, amphipods, isopods

Non-living bio-structure: shell hash

Biomass species: herring, capelin, shrimps, plankton

Alternative 6: EFH only in EEZ

- Description of EFH will be limited to EEZ waters (3–200 nm).
- This alternative neglects important habitats in nearshore areas and anadromous fish streams.

EFH Alternatives : Challenges & Issues

- Which Alternative?
 - Is there enough information to refute the *General Distribution Rationales* and move towards higher densities of EFH?
 - Is there enough information to demonstrate the Ecosystem Alternative which links habitat to life history information?

DRAFT Fishery Effects Analysis

**For Species Managed by the North
Pacific Management Council**

Craig Rose, RACE Div, AFSC

Jeff Fujioka, Auke Bay Lab, AFSC



Why was it done - specifically this draft

**Provide Committee with some information to
continue EFH process**

**Assess the quality (or lack) of data necessary
to make such an analysis**

Develop and demonstrate an analysis method

**Stimulate feedback on potential parameter
estimates**

What it does NOT do

Provide definitive answers on any effects of fisheries on EFH

There are large uncertainties over both indicated effects and lacks of effects

Parameters and analysis methods need examination, testing and improvement

Some problems already identified

Order of Presentation

Outline of analysis methods and results

Problems detected

Responses to Committee questions (8/27)

New questions or clarifications

The Task -

Evaluations should:

Describe fishing activities

Discuss all available relevant information

**Provide conclusions whether and how
each fishing activity adversely affects EFH**

Relevant Information

**Intensity, extent and frequency of any
adverse effect on EFH**

Type of habitat that may be affected

Habitat functions that may be disturbed

Cumulative effects of multiple activities

Analysis Approach

Derive a measure that reflects the balance of disturbance and recovery

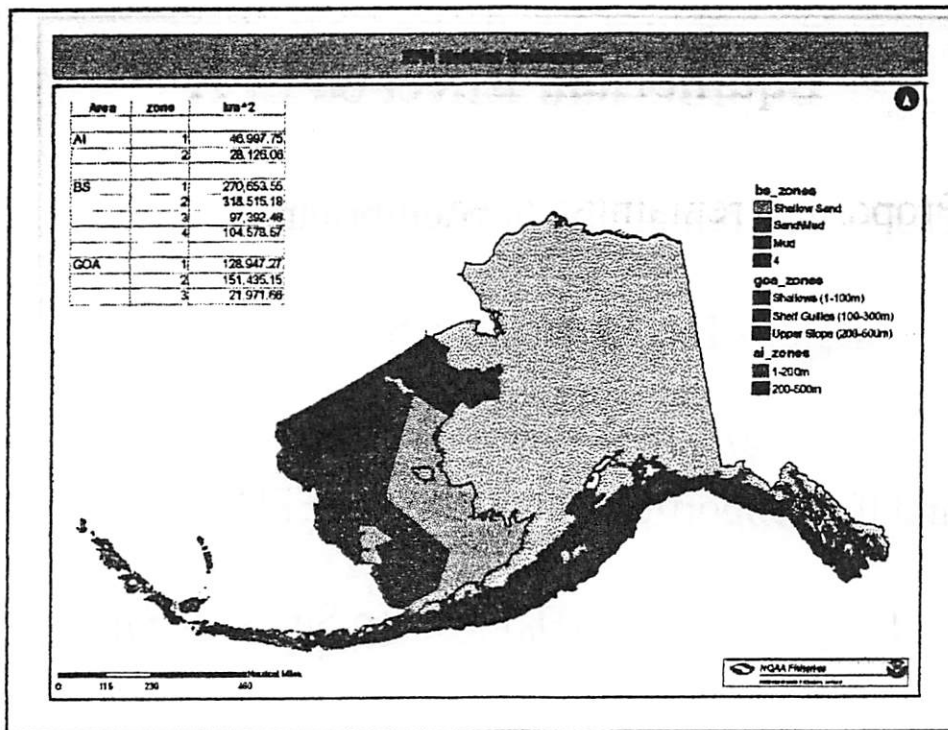
If less than a threshold, then effects are either minimal or temporary

Attribute proportional effects by fisheries and habitats

The Measure

The proportion by which EFH would be reduced if the fishery were continued at current levels to equilibrium (from an unaffected state)

**Current analysis only estimates reductions in features, not EFH -
Connection to functions not estimated**



Classification of Habitat Features

Infaunal Prey - clams, polychaetes

Epifaunal Prey - brittle stars, amphipods

Substrate Shelter - sand waves, rocks

Biogenic Shelter - Anemones, sponges

Equilibrium Effect on EFH

Proportion remaining at equilibrium

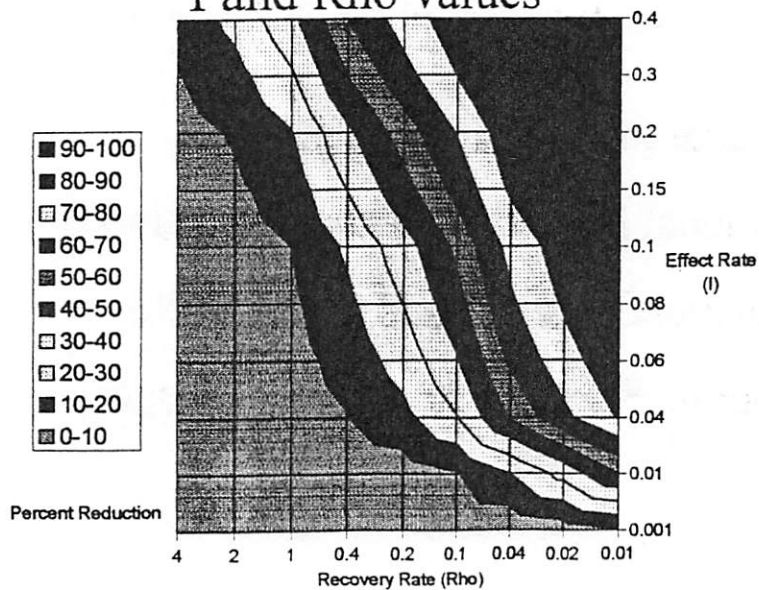
$$H_{\text{equil.}} / H_0 = \rho S / (I + \rho S)$$

Where $S = e^{-I}$

and the proportional reduction in EFH is:

$$E_{\text{equil}} = 1 - (H_{\text{equil.}} / H_0) = 1 - [\rho S / (I + \rho S)]$$

Percent Reductions for different I and Rho values



Modified Fishery Model

Continuous rates of disturbance and recovery

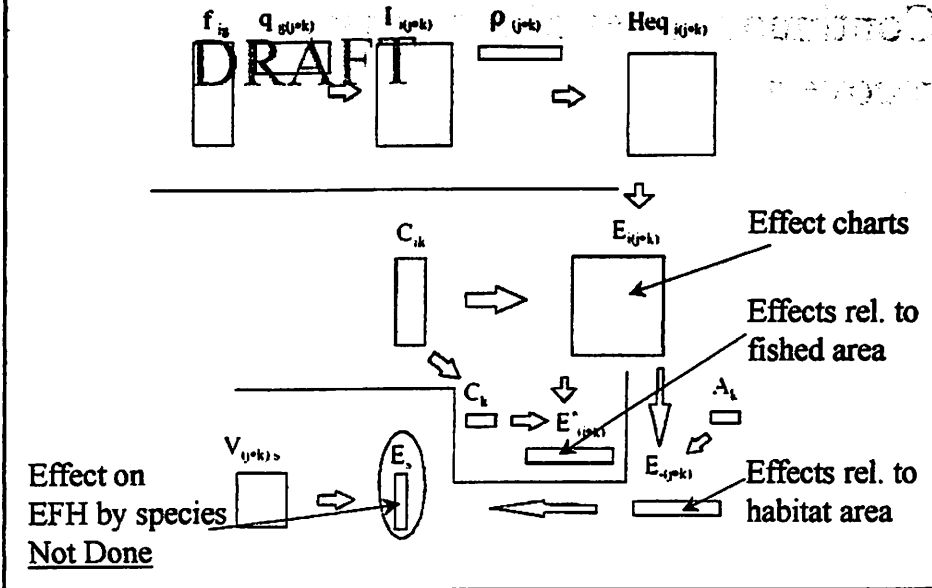
Rate of effect $I = qf$, where f is the proportion of habitat contacted and q is the proportion of contacted habitat that is altered (% reduction in feature)

Function (effect rate, recovery)

I = rate of adverse effects ($=qf$)
= Sum of qf for all fisheries in a block
= total removal potential

Rho = recovery rate = $1 / \text{Recovery Time}$
Separate value for each habitat feature
in each habitat type

Analysis Sequence



Information Quality

- Fishery distributions and intensities (f)
- Reductions in features from fishing (q)
- Gear descriptions
- Recovery rates for features (ρ)
- Habitat distributions (type proportions)
- Habitat functions for species

Parameters Estimated

- f - need breakdown by fishery
- q - experimental studies (median & 75th %ile)
- o - gear studies (Collie et al. and ?)
- C - habitat distributions (block assignments)
(subtypes in GOA and Aleutians)
- A - area estimates - need to designate regions

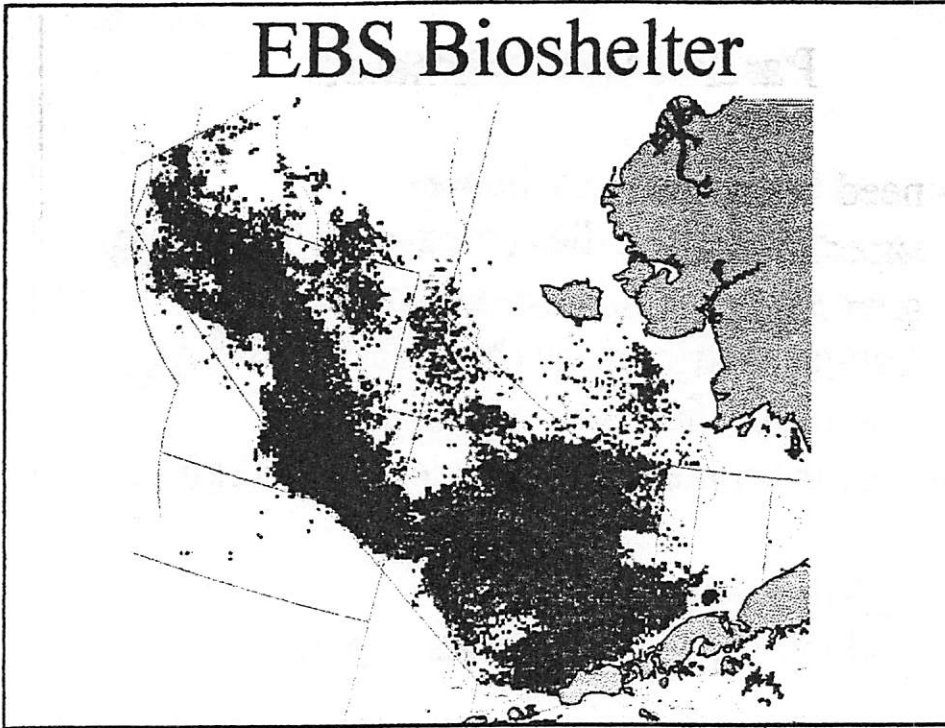
Not Estimated

- V - Value to species - species experts?

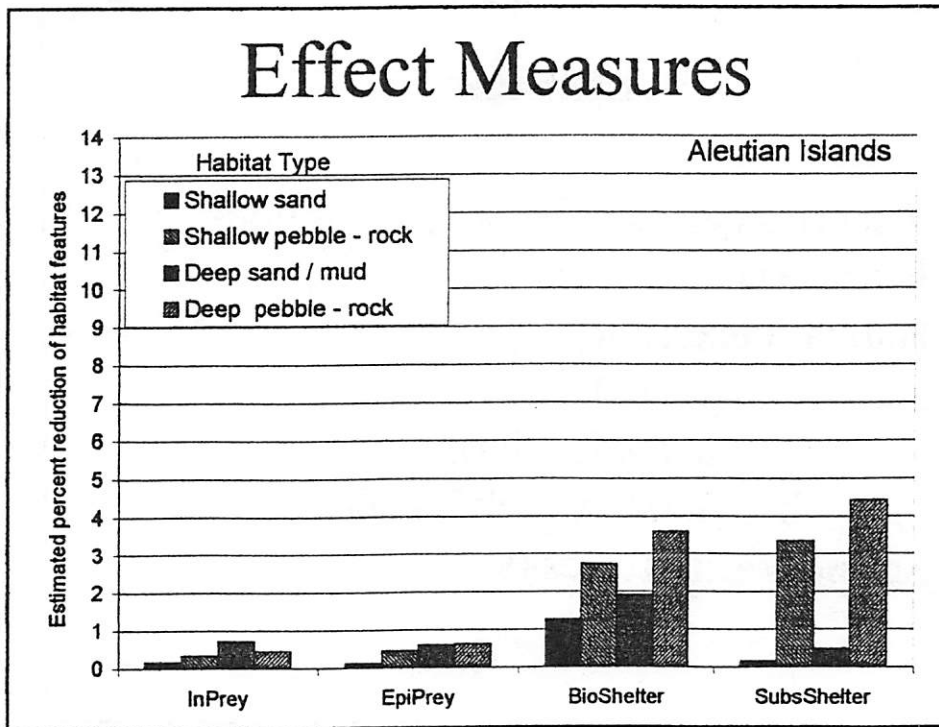
Indexes

- Fisheries (g) - see fishery descriptions
- Blocks (i) - 5 x 5 km
- Habitat Features (j)
- Habitat Types (k) -
 - sand, sand/silt, silt (mud),
 - pebble/cobble, rock/boulder
- Species / Life stages (s)

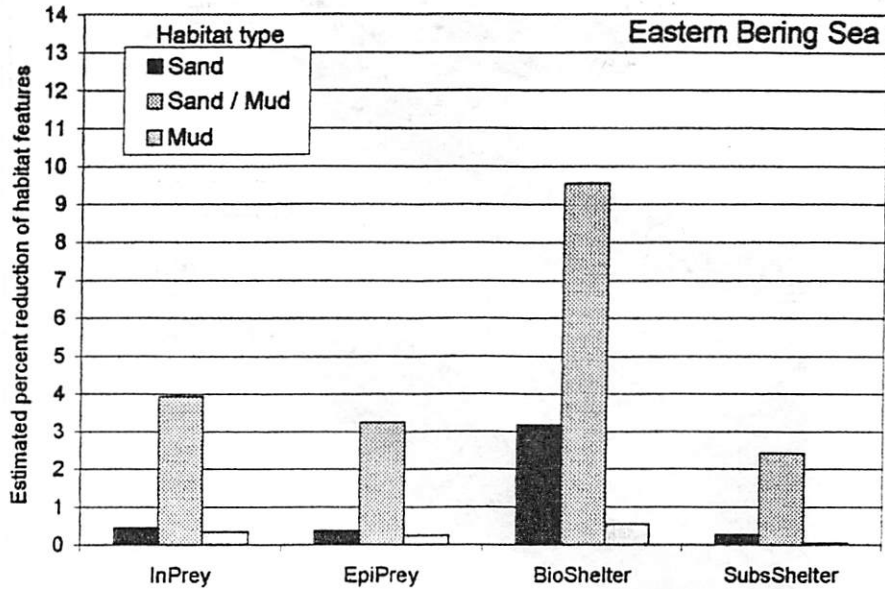
EBS Bioshelter



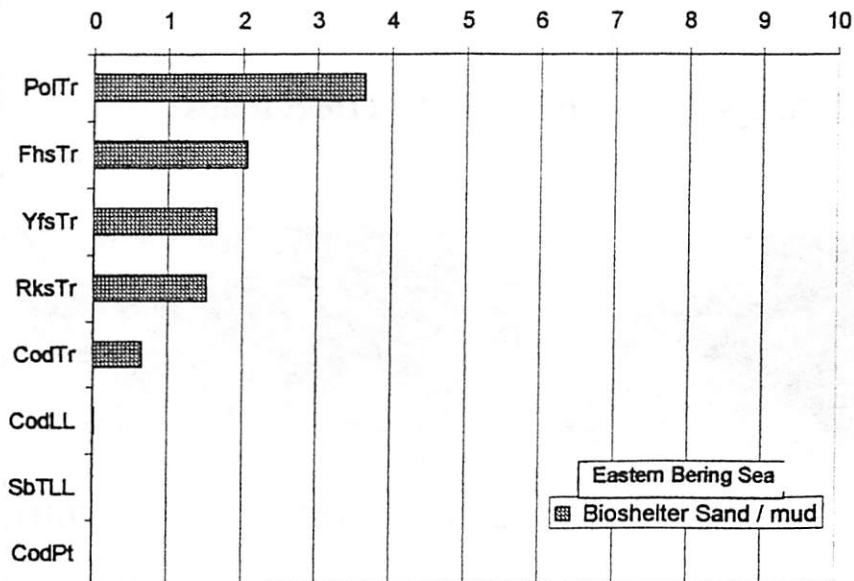
Effect Measures

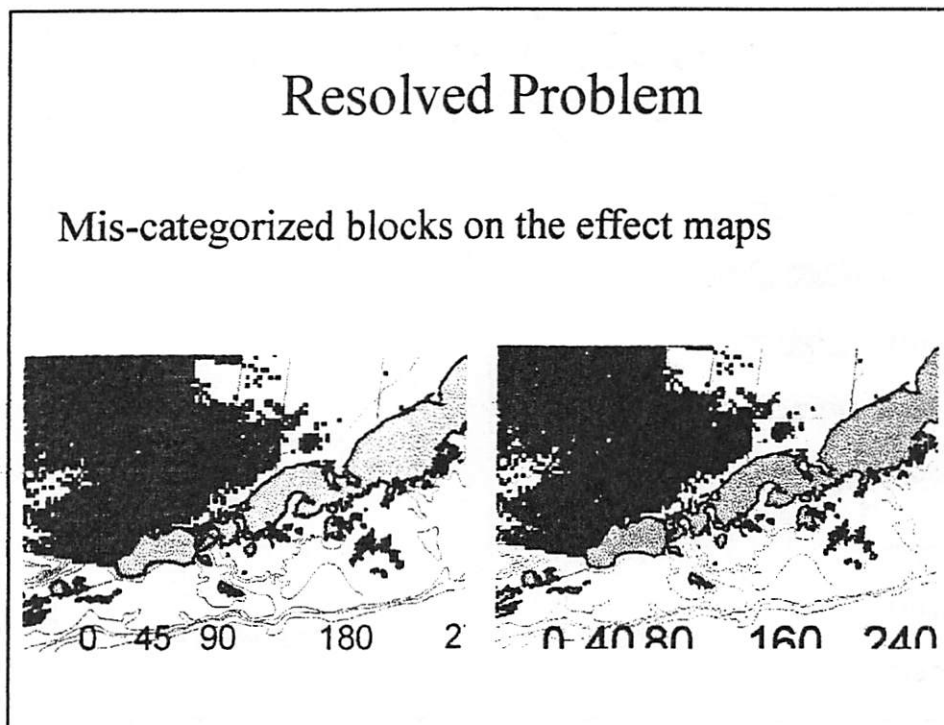
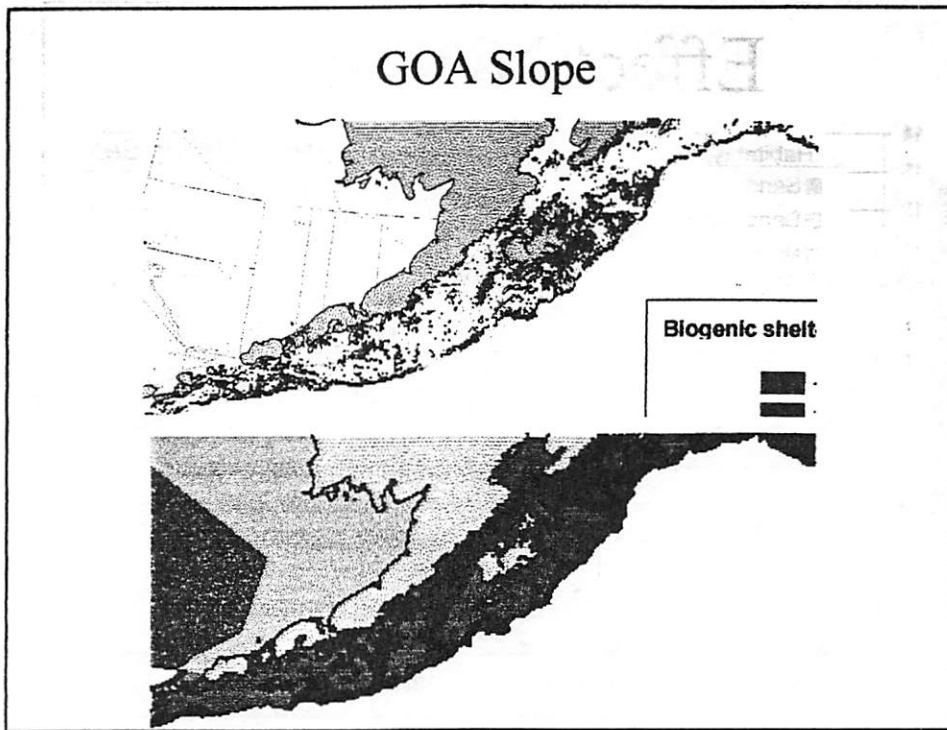


Effect Measures

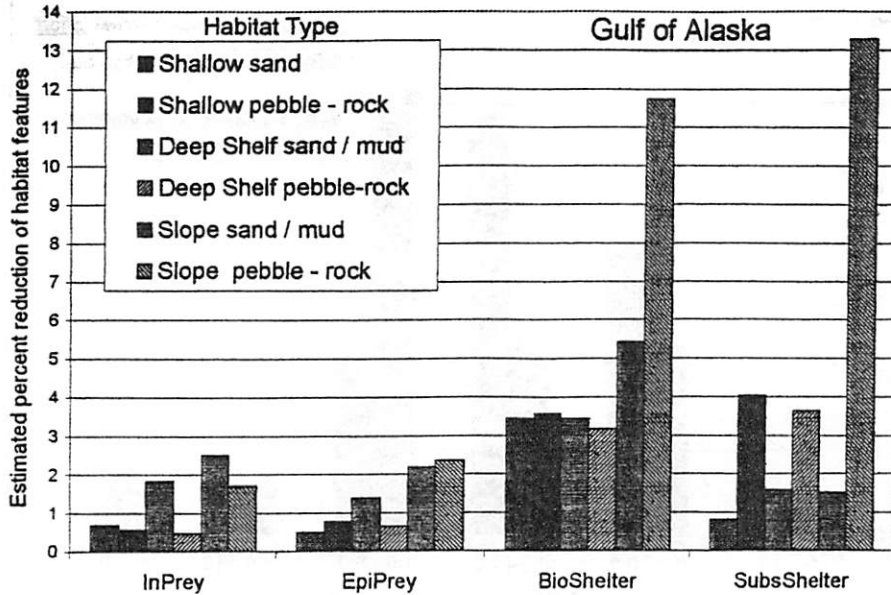


Effect Measures

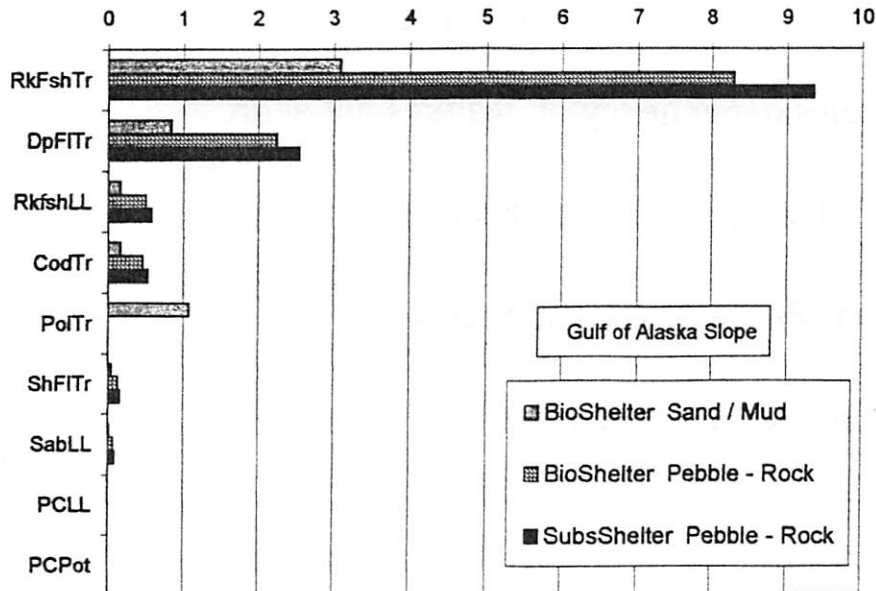




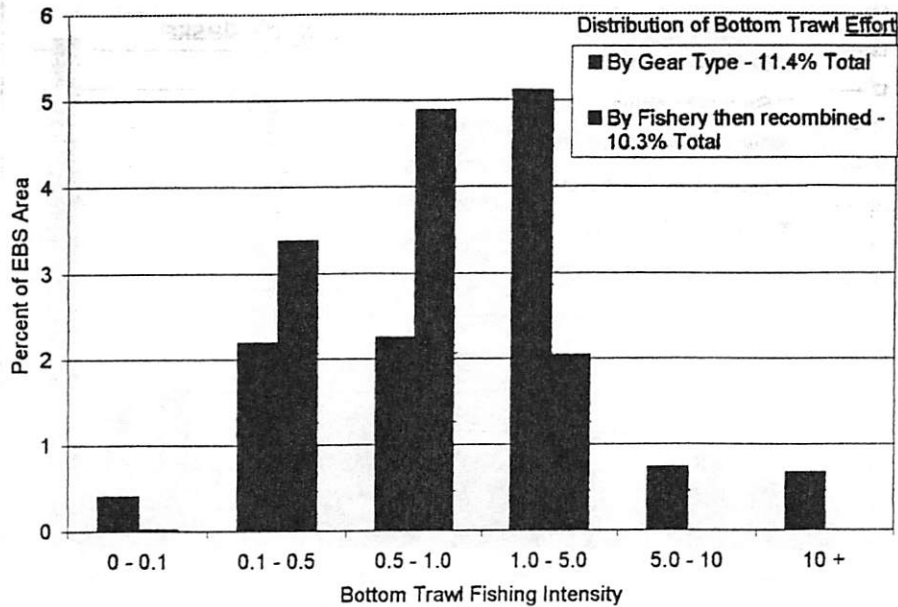
Effect Measures



Effect Measures



EBS Bioshelter - Effort Distribution



Unresolved Problems (Long Term)

Species dependency on features not addressed

No effect threshold has been set or justified

Quantify uncertainties of results

Parameter improvements

Unresolved Problems (Short Term)

Effort not meeting criteria of specific fisheries

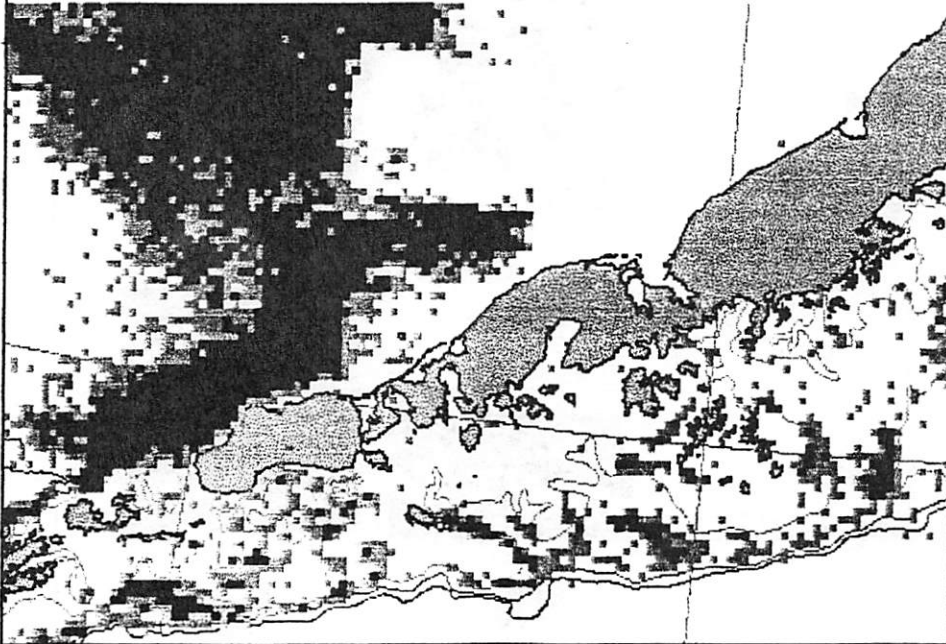
Fit of long-lived hard corals into a type / feature

Extrapolation from sampled tows to all observed tows

Weighting of fisheries by I

Use of habitat distribution of fisheries to improve effort assignment in GOA and Aleutians

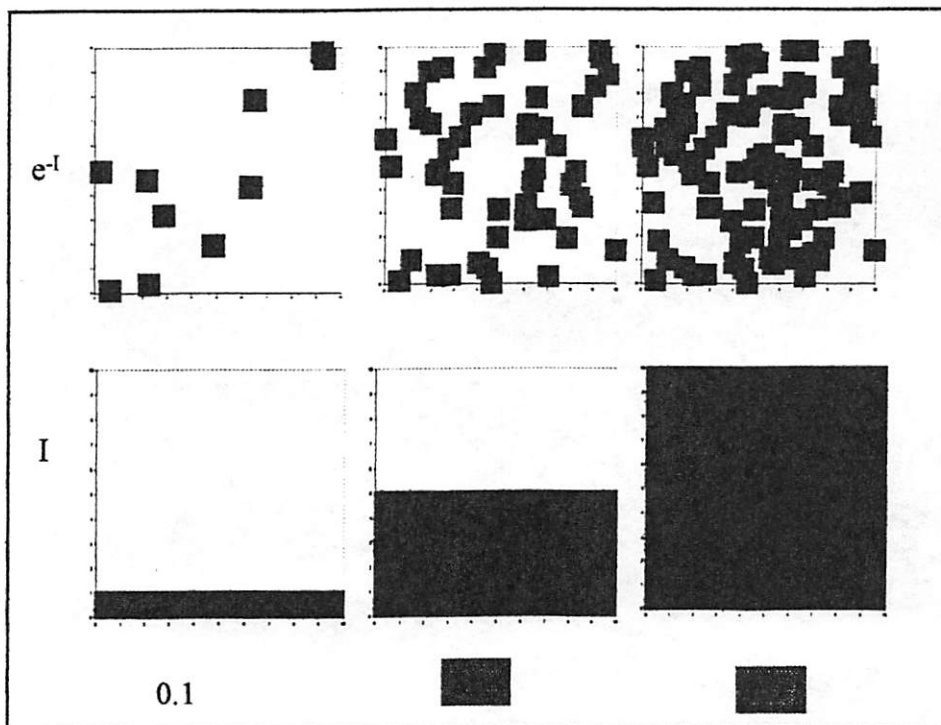
Effort Distribution from Spring 02



Adjustment for Overlapping Effort

Constant effect rate models, like this and most fishery models, must assume that each unit of effort has an equal chance of affecting each unit of the remaining population

For fixed habitat, this can be seen as random location of each unit of effort within the block



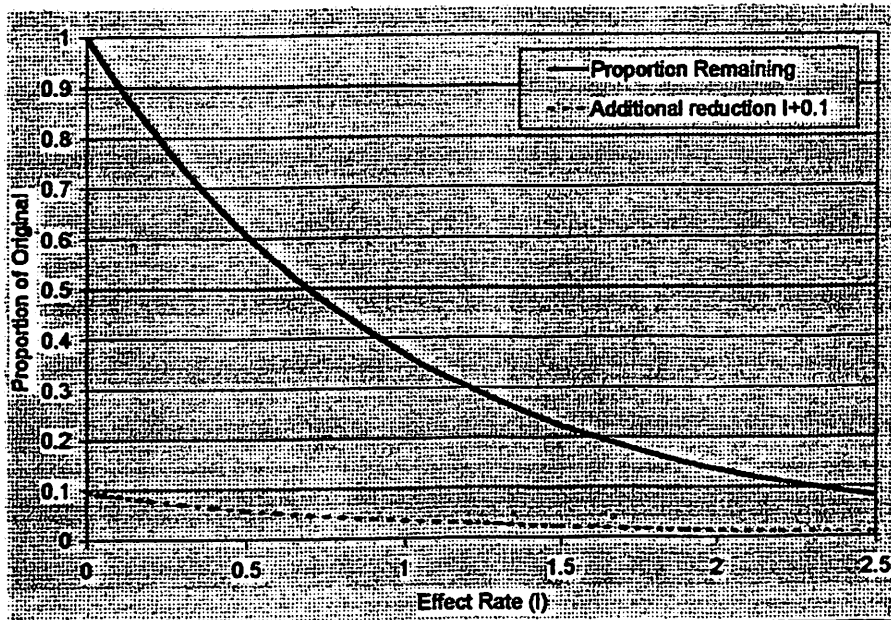
Adjustment for Overlapping Effort

All effect rates combine into a common I for each block (for each habitat feature)

I = total removal potential for each block - without overlap (Sum $q * f$ for all fisheries)

$S = e^{-I}$ results in lower marginal effects at higher I values

$$S = e^{-I}$$



Mitigation Consideration

For a fixed total catch, one of the most effective ways of taking it with minimal effort (and hence minimal effects of that effort) is to assure that fishing is done in times and places where the catch rate is high. Catches in low catch rate areas will require proportionally greater effort, resulting in greater effects.

PUBLIC TESTIMONY SIGN-UP SHEET FOR AGENDA ITEM C-5 EFH

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

	NAME	AFFILIATION
1.	Ron Clarke	Marine Conservation Alliance ✓
2.	Beth Stewart Stewart	AEB ✓
3.	Leri Swanson	Groundfish Forum ✓
4.	Ed Richardson	Pollock Conservation Coop ✓
5.	PAT Carlson	Kodiak Island Borough ✓
6.	Dorothy Childers)	AMEC ✓
7.	Ben Entichnap)	
8.	Whit Shears Shears	The Ocean Conservancy ✓
9.	Brent Paine & Donna Parker	UCB ✓
10.	JOHN GARVIN	Groundfish Forum ✓
11.	Geoff Shester	Oceana ✓
12.	Dave FRASER	Hr-Sea's Catcher Coop ✓
13.	Heather McCarty	CBSFA ✓
14.	Julie Bonnie	AGDB ✓
15.	Gordon Blue	✓
16.	Michelle Ridgeway	✓
17.	Glenn Reed	PSPA ✓
18.	Paul McGregor	APA ✓
19.		
20.		
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24.		
25.		

3
3



C-5
Geoff Shoster

175 South Franklin Street, Suite 418, Juneau, Alaska 99801 907-586-4050 www.oceana.org

Submitted to the North Pacific Fishery Management Council October 5, 2002

Oceana's Purpose

We are working to maintain fisheries while protecting Ocean habitat, reducing wasteful bycatch, and stopping toxic pollution. We believe that this is a mission that is consistent with and serves the interests of all people who rely on the ocean. We believe this is best accomplished through plans, strategies, and actions developed using scientific research, including local knowledge, and collegial forums (work sessions) comprised of fishermen, scientists, conservationists, and local community representatives.

Statement and Proposal Regarding EFH Mitigation Measures for the Aleutian Islands Archipelago

Most scientists, fishermen, local people and conservationists believe that the destruction of corals and sponges has significant and long-term adverse impacts on Essential Fish Habitat (EFH) in the Aleutian Islands. NOAA Fisheries has already designated corals and sponges as Habitat Areas of Particular Concern (HAPC) which is a subset of EFH warranting special protection. We request that the North Pacific Fishery Management Council develop a comprehensive series of alternatives for mitigation measures to minimize the impacts of fishing activities on this Essential Fish Habitat. These alternatives must satisfy two objectives: mitigating adverse impacts on Essential Fish Habitat in areas where they are more than minimal and temporary; and preventing further coral and sponge destruction until habitat mapping and research is completed. We submitted a proposal to do this which is included in the EFH Committee minutes from the September 16-18 meeting in Kodiak, but the EFH Committee never deliberated on our proposal. We have begun to work with fishing representatives, habitat scientists, and local communities, and believe we have developed an appropriate, balanced approach to EFH mitigation in the Aleutian Islands that minimizes habitat impacts, maintains fisheries, and fully incorporates habitat research. This proposal fits reasonably into the current range of alternatives and could be incorporated into Alternative 4. It is important for this proposal to be included so the public can see and comment on a precautionary approach to EFH mitigation in the Aleutian Islands.

Specifically, we are asking the Council to incorporate the following proposal in the mitigation alternatives in the EFH EIS and to solicit stakeholder input (including local communities, fishing industry representatives, habitat scientists, and conservation organizations) regarding specific areas to be treated by this proposal:

- A moratorium on bottom trawling in the Aleutian Islands region in all areas where coral and sponge and other sensitive essential fish habitat areas may possibly occur until habitat mapping occurs in each area* *. Upon completion of mapping in a specific area, all areas not containing corals, sponges, or other sensitive essential fish habitat would be reopened to bottom trawling, while areas containing these habitats would remain closed to bottom trawling. To provide fishing opportunities for the trawl fleet in the interim, there will be a series of small, tow-specific open areas where limited bottom trawling would be allowed.
- Maintain limited opportunities for vessels under 60 feet at minimal risk to coral and sponge and other important known habitat to the extent possible;
- Prohibit all bottom tending gear in specific known areas of high coral and sponge concentration and/or reef-like habitat (these may be HAPC sites);
- Set bycatch caps on corals and sponges for all fisheries in the Aleutians that reduce over time to target levels;
- Request that NMFS, ADF&G, the University of Alaska, and perhaps other research institutions initiate a 3- to 5-year comprehensive research project to determine how best to allow fishing opportunities while protecting the health of the marine ecosystem by:
 - Mapping the geographic distribution of corals, sponges, and other sensitive essential fish habitat in the Aleutian Islands region,
 - Further studying the ecological functions of corals and sponges,
 - Measuring the effects of all gear types used to catch groundfish on corals and sponges,
 - Identifying specific areas where respective gear types may be allowed, and
 - Submitting to the North Pacific Fishery Management Council an annual progress report regarding status of the research;
- Require NMFS to complete Annual Habitat Assessment Reports (similar to SAFE reports) that evaluate the effectiveness of EFH mitigation over time;
- Require Vessel Monitoring Systems and 100% of all catch and bycatch observed, counted, and reported by fisheries observers for all vessels with potential impacts to corals and sponges. Observers would identify corals and sponges to the lowest practicable taxonomic level.

**Currently NMFS onboard observer data indicates that bottom trawling is responsible for 97% of total reported coral and sponge bycatch in Alaska.

Scientific Justification for Mitigating Adverse Impacts on Essential Fish Habitat Containing Corals and Sponges

Key Species Known to Rely on Deepwater Coral			
Rougeye rockfish	Dusky rockfish	Atka mackerel	Walleye pollock
Redbanded rockfish	Yelloweye rockfish	Golden king crab	Greenling
Shortraker rockfish	Pacific ocean perch	Shrimp	Greenland turbot
Sharpchin rockfish	Northern rockfish	Pacific cod	Sablefish
Pacific ocean perch	Flatfish (several)		

(Freese 2000; Krieger and Wing 2002; Krieger 1999; Heifetz 1999; Heifetz 2000).

- Corals are used by adult and juvenile FMP species for shelter and protection from predators (Krieger and Wing 2002).
- Corals and sponges are documented to be important for other marine animals like shrimp, on which many FMP species depend (Krieger and Wing 2002).
- Large corals can be 3m high and 7m wide (Heifetz 2000).
- 50 percent of the red tree coral in the trawl path was broken or removed by a single bottom trawl tow in the Gulf of Alaska (Andrews et al. 2002; Krieger 2000). No sign of any recovery was evident seven years later.
- Reported ages of hard corals in Alaska range from 100 to 500 years old (Cimberg et al. 1981; Heikoop et al. 1998; Andrews et al. 2002). Some scientists believe they may be thousands of years old (Bob Stone pers. comm. 2002).
- Sponges create equally complex habitat to hard corals and are more widespread than corals in Alaska (Jon Heifetz pers. comm. 2002). Freese (in press) found that bottom trawling damages 47%-67% of large sponges in a trawl path. Sponges in Alaska have slow recovery rates and growth rates with no recovery one year after trawling (Freese, in press).
- Bottom trawling is responsible for 97% of all observed and reported coral and sponge bycatch (Jon Heifetz pers. comm. 2002).
- Bottom trawling reduces the complexity, productivity, and biodiversity of benthic habitats and damage is more severe in areas of coral and sponge (National Academy of Sciences 2002).
- 88 of 90 studies on mobile gear show that bottom trawl gear reduces habitat complexity, changes community structure, and affects ecosystem processes (Auster and Langton 1999).
- Over 1 million pounds of coral and sponge are reported as bycatch in Alaska annually, over half of which comes from the Aleutian Islands region (NMFS 2001 Tables 4.7-4&5).
- Coral and sponge bioherms were discovered in summer 2002 in state and federal waters off the Aleutians, with damage from fishing gear (Bob Stone, pers. comm. 2002).
- There is a significant void in scientific understanding of the geographic distribution of ocean habitat types off Alaska.
- NOAA Fisheries has designated corals and sponges as Habitat Areas of Particular Concern, a subset of EFH warranting special protection (Dr. Bill Hogarth, pers. comm. 2002)
- Corals and sponges together form a critical part of the world-renowned Aleutian marine ecosystem which provides fisheries and subsistence resources that are crucial to local communities' economy, cultural heritage, and way of life.
- If we wait to see decreased productivity of fish stocks before protecting corals and sponges, it will already be too late, as there is no way to restore or replace the complex habitat they produce.

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- NMFS. 2001. *Alaska Groundfish Fisheries Draft Programmatic Supplemental Environmental Impact Statement*. January 2001.
- Witherell, David and Cathy Coon. 2000. *Protecting Gorgonian Corals off Alaska from Fishing Impacts*. Report to NPFMC. (<http://www.fakr.noaa.gov/npfmc/Reports/coralpaper.pdf>)

C-5
Brent Payne
Donna Parker

EFH Problem Statement

The productivity of the North Pacific ecosystem is acknowledged to be among the highest in the world. The Council intends to ensure the continued sustainability of FMP species by considering additional, precautionary and reasonable management measures. Recognizing potential changes in productivity are caused by fluctuations in natural oceanographic conditions and other, non-fishing activities, the Council intends to take action in compliance with the requirements of the Magnuson-Stevens Act to protect the productivity of FMP species by considering additional measures to reduce adverse effects of fishing and non-fishing activities on habitat essential to managed species.

To accomplish this task the Council will undertake an EIS analysis to:

- 1) Identify and designate Essential Fish Habitat,
- 2) Develop designation criteria for identification of Habitat Areas of Particular Concern, and
- 3) Consider implementation of additional management measures to mitigate, to the extent practicable, identified adverse impacts of fishing on habitat essential to the continued productivity of FMP species. The intent of these actions is to address fishery effects, using the best scientific information available, that have been identified to impact habitat in such a way that they have a high probability of adversely impacting the productivity of FMP species.

Essential Fish Habitat
for
Bering Sea Snow Crab (*C. opilio*)

Objective: Assist in the rebuilding of *C. opilio* snow crab by protecting habitat in areas exhibiting high densities of mature females. Create a long-term experimental design to evaluate the success of these closures.

EFH or HAPC?

Option 1) Analyze habitat protection areas under EFH Mitigation Alt. 6 (10/2/02):

Clean up language in alternative 6: Change language in alternative 6 to allow for marine protected areas and no take marine reserves. Under 6b; Change last sentence to read: Marine Reserves or protected areas are designed to address trawl impacts.

Option 2) Analyze as a Habitat Area of Particular Concern in the draft EFH SEIS.

Snow Crab EFH Protection Sites: Two sites along the outer eastern Bering Sea shelf/shelf-edge:

- 1) Between 172⁰ and 174⁰ W. longitude and 58⁰ and 59⁰ N. latitudes
- 2) Between 174⁰ and 177⁰ W. longitude and 59⁰ and 60⁰ N. latitudes. (See Figures 1-3).

Mitigation Tools:

Option 1) Bottom trawls prohibited within the snow crab EFH protection sites. Design a research plan to monitor and evaluate the effectiveness of the habitat conservation areas.

Option 2) Prohibit the use of bottom trawls and pelagic trawls in the snow crab EFH protection sites. Design a research plan to monitor and evaluate the effectiveness of the habitat conservation areas.

Background: Since 1999 Bering Sea snow crab stocks have been designated as overfished and are presently near historic levels of low abundance. The Pribilof Island Habitat Conservation Area and Red King crab savings area protect a small portion of the snow crab essential fish habitat from adverse fishing effects, but account for only a minute portion of mature female habitat. The NPFMC has taken past effort to protect juvenile red king crab habitat from trawl effort (Nearshore Bristol Bay Closure) but has not taken similar actions for the overfished stocks of *C. opilio*.

Ecological Importance/ Rarity: Jie Zheng et al. (2001) found that just east of Zhemchug Canyon plus further north, between the 200-meter contour to west of the 100-meter contour, there are significant concentrations of mature female oldshell snow crab (Figure

Alaska Marine Conservation Council
EFH Proposal October 4, 2002

4). In "Spatial Distributions and Recruitment Patterns of Snow Crab in the Eastern Bering Sea" (2001), Zheng et al state:

"Although snow crab distributions in the eastern Bering Sea expand and contract as a function of overall abundance, their population centers change over time. The closest fit to the "basin model" is mature females since the early 1980s with its center around the northwestern part of the standard survey area." pg 248. And "Oldshell mature females, which generally have been mature for at least 1 year, mostly occur in deep water and concentrate within a smaller area than other groups of crabs." pg 238.

These EFH protection areas are intended to provide conservation measures for large densities of mature female snow crab. However they will also benefit other components of a healthy ecosystem such as herring winter grounds, other FMP species, and benthic organisms such as sponges and sea pens that provide vertical relief to the soft bottom habitat.

Sensitivity to human disturbance: Bottom trawl fisheries for Pacific cod and flatfish occur in these proposed areas but account only for a small percentage of the total area fished by these fisheries. Direct physical effects of bottom trawls on living seafloor communities include damage and mortality of target and nontarget species. Indirectly, bottom trawls affect marine animals and their associated habitat by resuspending sediments, toxins, and nutrients into the water column by scraping and plowing 1cm – 30cm into the seafloor (Vining, Witherell, Heifetz 1997). In the "Effects of Trawling and Dredging on Seafloor Habitats", the National Research Council (2002) states, "Mobile fishing gears are a major cause for concern because of the size of the affected fishing grounds, the associated modification of the substrate, disturbance of benthic communities, and removal of non-target species." And "Direct alterations of habitat can cause a general decline in the abundance of benthic organisms as well as species shifts. Even species that are not directly exploited by a fishery are likely to be affected by the removal or disturbance of benthic and demersal (bottom-dwelling) biomass."

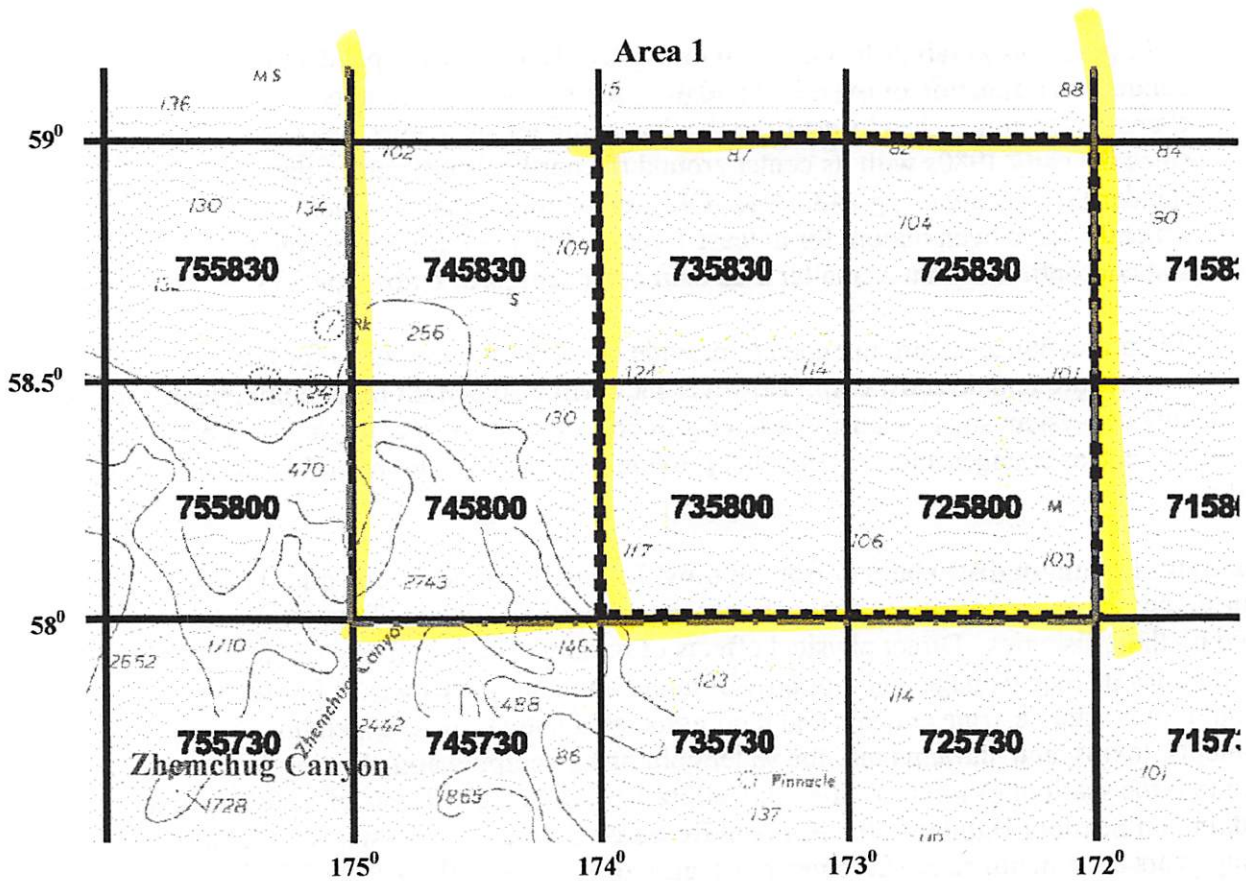
Literature Cited:

NRC. 2002. Effects of Trawling and Dredging on Seafloor Habitat. National Research Council, National Academy Press, Washington D.C. pgs 21-29.

Vining, I., Witherell, D., Heifetz, J. 1997. The Effects of Fishing Gear on Benthic Communities. North Pacific Fisheries Management Council. Ecosystem Considerations for 1998.

Zheng, J., Kruse, G., Ackley, D. 2001. Spatial Distribution and Recruitment Patterns of Snow Crab in the eastern Bering Sea. In: Spatial Process and Management of Marine Populations, Alaska Sea Grant, AK-SG-01-02, 2001, pp. 233-255

Figure 1

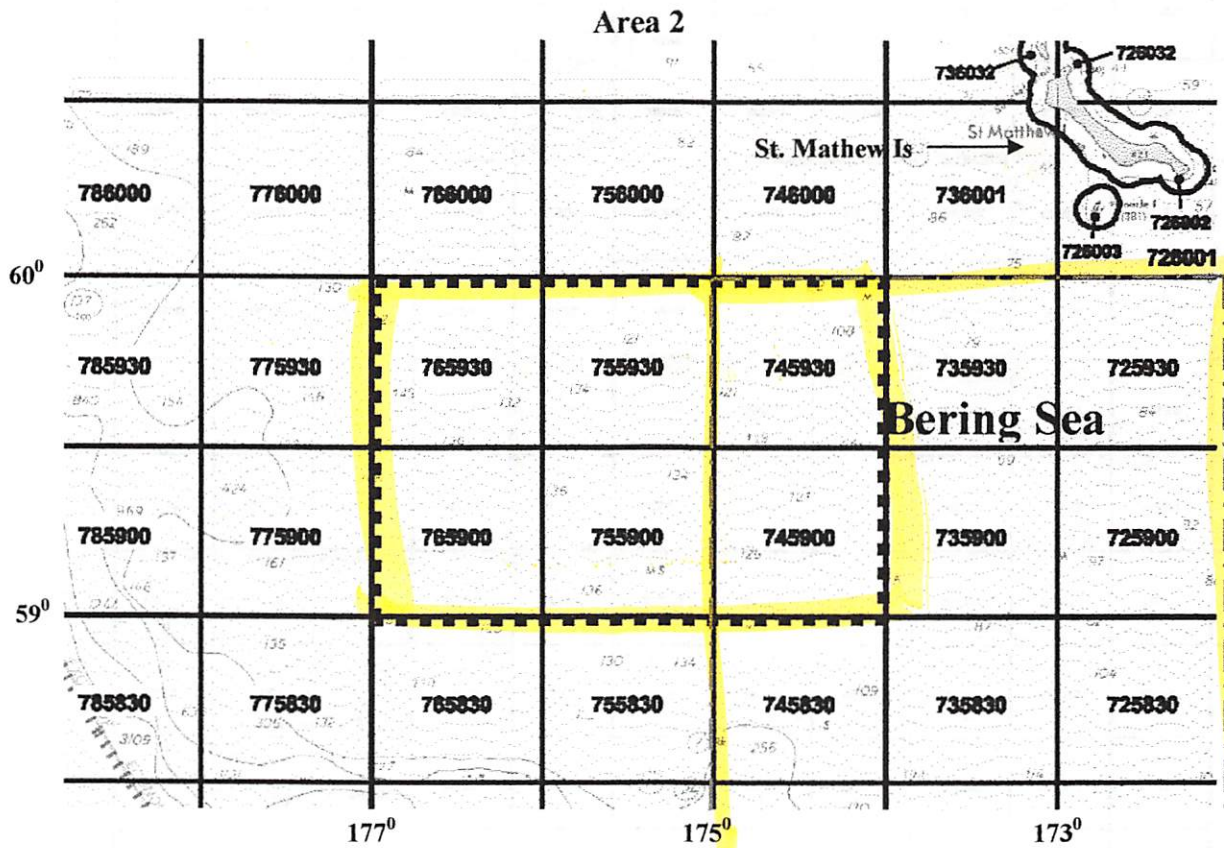


Bering Sea with Groundfish/ Shellfish statistical areas
 Depth in meters
 Coordinates are approximate

- ■ ■ Proposed EFH protection area for Snow Crab (*C. opilio*), mature female oldshell crab based on spatial distribution data as in:
 Zheng, J., Kruse, G., Ackley, D. 2001. Spatial Distribution and Recruitment Patterns of Snow Crab in the eastern Bering Sea. In: Spatial Process and Management of Marine Populations, Alaska Sea Grant, AK-SG-01-02, 2001, pp. 233-255
 Area between 172° and 174° W. longitude and 58° and 59° N. latitudes

- ■ Winter Herring Savings Area: area between 58° and 60° N. latitudes and between 172° and 175° W. longitudes from 12 noon ALT September 1 through 12 noon ALT March 1 of the succeeding fishing year. Attainment of PSC cap triggers closures to trawl fisheries. (NMFS 2001)

Figure 2

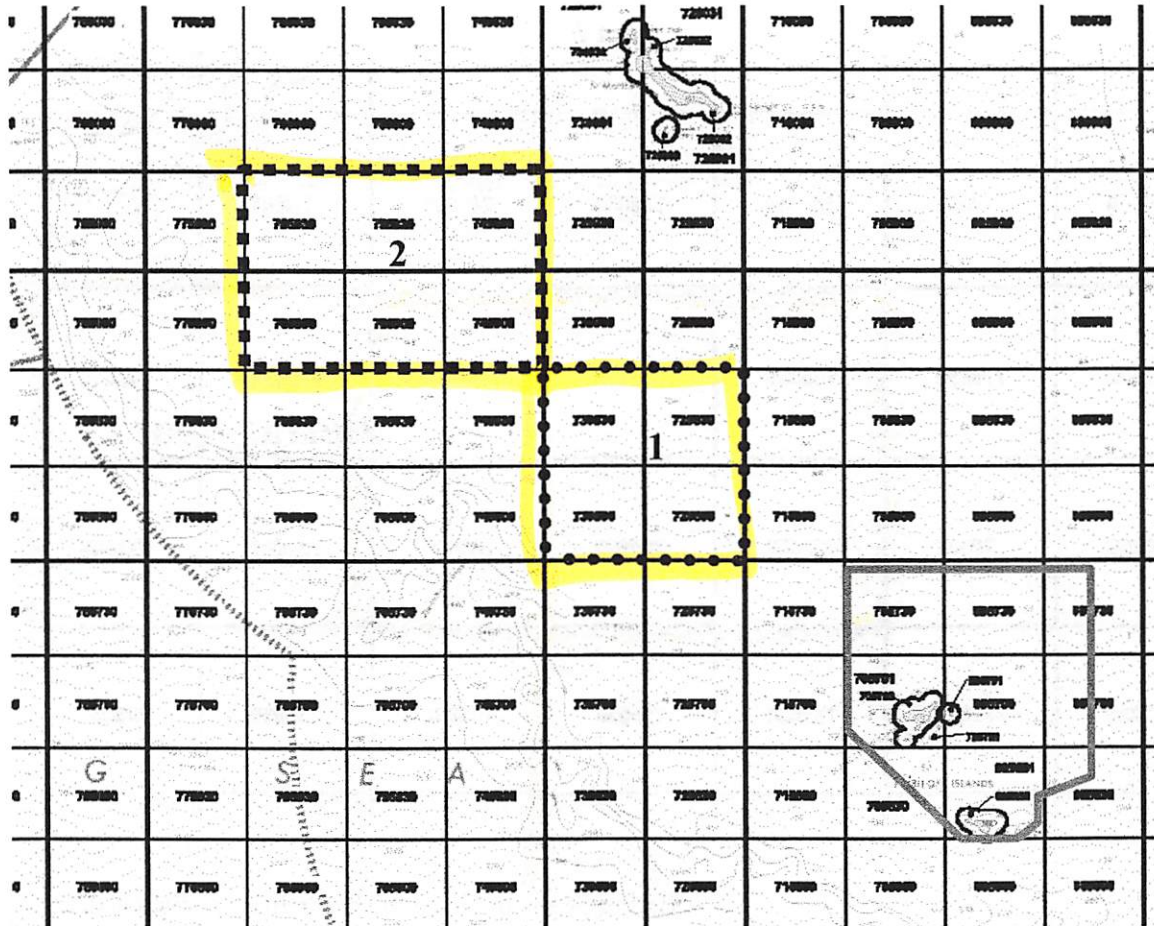


Bering Sea with Groundfish/ Shellfish statistical areas
 Depth in meters
 Coordinates are approximate

- ■ ■ Proposed EFH protection area for Snow Crab (*C. opilio*), mature female oldshell crab based on spatial distribution data as in:
 Zheng, J., Kruse, G., Ackley, D. 2001. Spatial Distribution and Recruitment Patterns of Snow Crab in the eastern Bering Sea. In: Spatial Process and Management of Marine Populations, Alaska Sea Grant, AK-SG-01-02, 2001, pp. 233-255
 - Area between 174° and 177° W. longitude and 59° and 60° N. latitudes.

- ■ Winter Herring Savings Area: area between 58° and 60° N. latitudes and between 172° and 175° W. longitudes from 12 noon ALT September 1 through 12 noon ALT March 1 of the succeeding fishing year. Attainment of PSC cap triggers closures to trawl fisheries.

Figure 3



Bering Sea Groundfish/ Shellfish statistical charts- Enlarged view - with proposed EFH protection areas 1 and 2, experimental areas, and existing Pribilof Island Habitat Conservation Area.

■ ■ ■ Proposed EFH protection areas for Snow Crab (*C. opilio*)

----- Pribilof Island Habitat Conservation Area

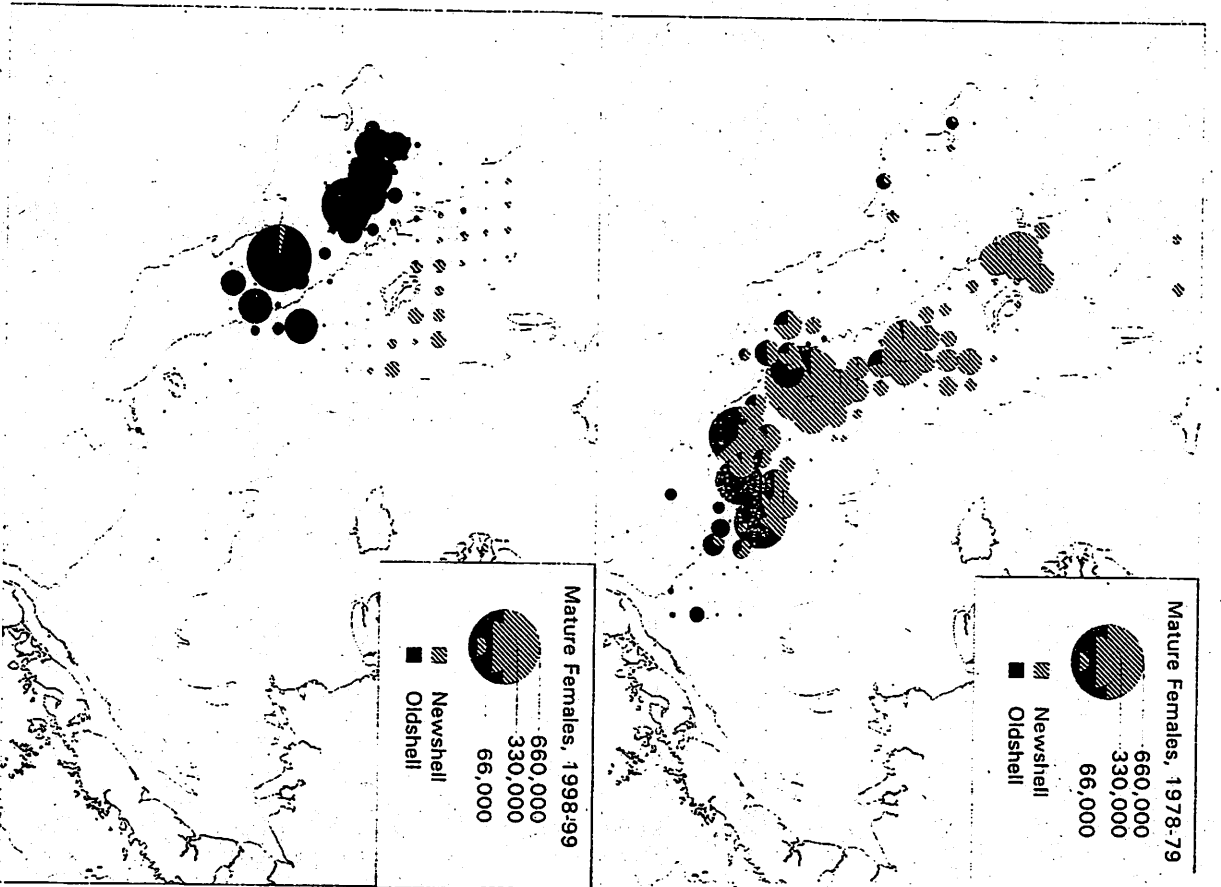


Figure 6. Distributions of mature female snow crabs in 1978 and 1979 (upper panel) and in 1998 and 1999 (lower panel) in the eastern Bering Sea derived from NMFS summer trawl survey data. Crab density is expressed as the number of crabs per square nautical mile. The three depth contour lines represent 50, 100, and 200 m.

Habitat Features Potential Fisheries Impacts — GOA Management Area

<u>GOA</u>	<u>Fishery</u>	<u>Habitat Feature</u>	<u>Long-Term Percentage Loss</u> (Relative to Total Habitat Area)
	Rockfish trawl	Slope Pebble-Rock SubsShelter	-9.4 %
	Rockfish trawl	Slope Pebble-Rock BioShelter	-6.2 %
	Deep Fltfish trawl	Slope Pebble-Rock SubsShelter	-2.6 %
	Cod trawl	Shallow Pebble-Rock SubsShelter	-2.3 %
	Rockfish trawl	Slope Sand-Mud BioShelter	-2.3 %
	Rockfish trawl	Deep-Shelf Pebble-Rock SubsShelter	-2.0 %
	Deep Fltfish trawl	Slope Pebble-Rock BioShelter	-1.7 %
	Pollock trawl	Deep-Shelf Sand-Mud BioShelter	-1.7 %
	Pollock trawl	Shallow Sand BioShelter	-1.5 %
	Rockfish trawl	Slope Pebble-Rock Epifaunal Prey	-1.5 %
	Pollock trawl	Deep-Shelf Sand-Mud Infaunal Prey	-0.9 %

All Fisheries Cumulative Habitat Features Impacts

Slope Pebble-Rock SubsShelter	-12.7 %
Slope Pebble-Rock BioShelter	-8.7 %
Shallow Pebble-Rock SubsShelter	-4.0 %
Slope Sand-Mud BioShelter	-3.9 %
Deep-Shelf Pebble-Rock SubsShelter	-3.6 %
Shallow Pebble-Rock BioShelter	-2.7 %
Deep-Shelf Sand-Mud BioShelter	-2.5 %
Shallow Sand BioShelter	-2.5 %
Deep-Shelf Pebble-Rock BioShelter	-2.3 %
Slope Pebble-Rock Epifaunal Prey	-2.0 %

All Other Features with Cumulative Impacts Less Than -2.0%

Source: An Analysis of the Effects of Fishing on Fish Habitats of the Waters Off Alaska, Craig Rose et al. 8/11/02.

Habitat Features Potential Fisheries Impacts — EBS Management Area

<u>EBS</u>	<u>Fishery</u>	<u>Habitat Feature</u>	<u>Long-Term Percentage Loss</u> (Relative to Total Habitat Area)
	Pollock trawl	Sand-Mud BioShelter	-2.5 %
	FltHS trawl	Sand-Mud BioShelter	-1.5 %
	Pollock trawl	Sand-Mud SubsShelter	-1.4 %
	YFS trawl	Sand-Mud BioShelter	-1.2 %
	Rock Sole trawl	Sand-Mud BioShelter	-1.1 %
	Pollock trawl	Sand-Mud Infaunal Prey	-1.1 %
	Rock Sole trawl	Sand BioShelter	-0.9 %
	Pollock trawl	Sand-Mud Epifaunal Prey	-0.9 %
	FltHS trawl	Sand-Mud Epifaunal Prey	-0.5 %
	Pollock trawl	Sand BioShelter	-0.5 %
All Fisheries Cumulative Habitat Features Impacts			
		Sand-Mud BioShelter	-6.9 %
		Sand-Mud Infaunal Prey	-2.4 %
		Sand-Mud Epifaunal Prey	-2.4 %
		Sand BioShelter	-2.3 %
		Sand-Mud SubsShelter	-1.7 %
All Other Features with Cumulative Impacts Less Than -0.5%			

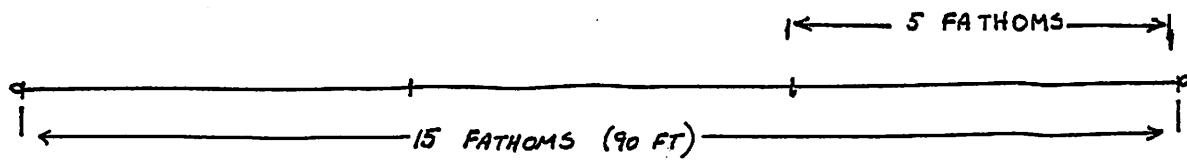
Source: An Analysis of the Effects of Fishing on Fish Habitats of the Waters Off Alaska,
Craig Rose et al. 8/11/02.

Habitat Features Potential Fisheries Impacts — AI Management Area

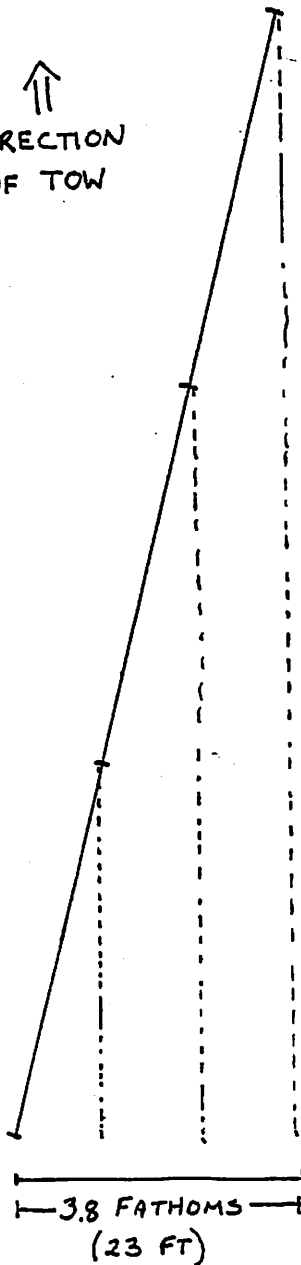
<u>AI</u>	<u>Fishery</u>	<u>Habitat Feature</u>	<u>Long-Term Percentage Loss</u> (Relative to Total Habitat Area)
	Cod trawl	Shallow Pebble-Rock SubsShelter	-1.7 %
	N. Rockfish trawl	Deep Pebble-Rock SubsShelter	-1.5 %
	Cod trawl	Deep Pebble-Rock SubsShelter	-1.1 %
	Atka Mack. trawl	Deep Pebble-Rock SubsShelter	-1.0 %
	Cod trawl	Shallow Pebble-Rock BioShelter	-0.9 %
	POP trawl	Deep Pebble-Rock SubsShelter	-0.8 %
	N. Rockfish trawl	Deep Pebble-Rock BioShelter	-0.8 %
	Pollock trawl	Deep Sand-Mud BioShelter	-0.5 %
All Fisheries Cumulative Habitat Features Impacts			
		Deep Pebble-Rock SubsShelter	-4.4 %
		Shallow Pebble-Rock SubsShelter	-3.3 %
		Deep Pebble-Rock BioShelter	-2.5 %
		Shallow Pebble-Rock BioShelter	-1.9 %
		Deep Sand-Mud BioShelter	-1.3 %
All Other Features with Cumulative Impacts Less Than -1.0%			

Source: An Analysis of the Effects of Fishing on Fish abitats of the Waters Off Alaska,
Craig Rose et al. 8/11/02.

C-5
Lori Swanson



↑↑
DIRECTION
OF TOW



ASSUMING THE
SWEEPS ARE AT A
15° ANGLE (TYPICAL),
ACTUAL CONTACT
FROM LARGER DISCS
WILL BE APPROXIMATELY
ONE FOOT AND SUSPENDED
MUDGEAR WILL COVER
APPROXIMATELY 22 FEET.

MARINE CONSERVATION ALLIANCE

P O Box 20676
JUNEAU, AK 99802

(907) 523-0731
FAX (907) 523-0732

Ron Clarke

Agenda C-5, EFH

Mr. David Benton
Chairman
North Pacific Fishery Management Council
605 West 4th Ave., Suite 306
Anchorage, AK 99501

October 4, 2002

Dear Chairman Benton,

The members of the Marine Conservation Alliance (MCA) are concerned that the terms of the privately negotiated Essential Fish Habitat (EFH) settlement between the National Marine Fisheries Service (NMFS) and Oceana may trigger continued litigation unless the North Pacific Fishery Management Council (Council) takes action at this meeting to immediately begin analysis of EFH/Habitat Areas of Particular Concern (HAPC) and mitigation measure alternatives. That analysis should include specific decision-making tools which will allow the Council to make a decision in compliance with the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and the National Environmental Policy Act (NEPA).

As you recall, the Council acted in 1998 to comply with MSA's EFH requirements. As part of blanket litigation against most of the regional councils, environmental groups challenged the Council's actions. Judge Kessler ruled the Council had acted reasonably based on the information available and was in compliance with MSA. However, the court found the Council did not consider an adequate range of alternatives in its Environmental Assessment and was not in compliance with NEPA. When Oceana threatened to appeal the MSA ruling that supported Council action, NMFS agreed to enter into private negotiations with Oceana. Those negotiations concluded in an agreement that now requires you to act concurrently on identification of EFH/HAPC and mitigation measures that "minimize, to the extent practicable, the adverse impacts of fishing on EFH." According to the agreement, the Council/NMFS must complete the SEIS analysis by August, 2003, file a Record of Decision by August, 2004 and complete implementation in 2005.

Since the private settlement was negotiated, NMFS Director Dr. William Hogarth issued an official memorandum providing guidance to

ALYESKA SEAFOODS
ALASKA DRAGGERS
ASSOC.
ALASKA GROUND FISH
DATA BANK
ALASKA PACIFIC
SEAFOODS
ALEUTIAN PRIBILOF
ISLAND COMMUNITY
DEVELOPMENT ASSOC.
AKUTAN, ATKA, FALSE PASS, NELSON
LAGOON, NIKOLSKI, ST. GEORGE
MID-WATER TRAWLERS
COOPERATIVE
AT-SEA PROCESSORS
ASSOC.
BRISTOL BAY
ECONOMIC
DEVELOPMENT CORP.
ALEKNAGIK, CLARK'S POINT,
DILLINGHAM, EGEVIG, ERUK, EAWOK,
KING SALMON, LEVELOCK, MANOKOTAK,
NANKEK, PILOT POINT, PORT HEIDEN,
POINT OF CHIEF, SOUTH NANKEK,
TOGIAK, TWIN HILLS, UASHIK
CENTRAL BERING SEA
FISHERMEN'S ASSOC.
SAINT PAUL
CITY OF UNALASKA
COASTAL VILLAGES
REGION FUND
CHEFORNAK, CHEVAK, EEK, GOODNEWS
BAY, HOOVER BAY, KIPNUIK,
KONVIGANAK, KWILLERNOOK,
MENDRYUK, NAPASAK, NAPASAKAK,
NEWTOK, NIGHTMITE, OSCARVILLE,
PLATINUM, QUINHAGAK, SCAMMON BAY,
TOSOOK BAY, TUTTUTULAK, TUNUNAK
GROUND FISH FORUM
HIGH SEAS CATCHERS
COOPERATIVE
ICELANDIC SEAFOODS
ALASKA LEADER
FISHERIES
NORTH PACIFIC
FISHERIES RESEARCH
FOUNDATION
NORTH PACIFIC
LONGLINE
ASSOCIATION
NORTON SOUND
ECONOMIC
DEVELOPMENT CORP.
BREVIA MISSION, DIDMEDE, ELIM,
GAMBELL, GOLOVIN, KOTIK, NOME,
SAINT MICHAEL, SAVONKA,
SHATPOOLIK, STERBINS, TELLER,
UNALASKALET, WALES, WHITE MOUNTAIN
OUNALASHKA CORP.
PROWLER FISHERIES
TRIDENT SEAFOODS
CORP.
SEAFOOD COLD
STORAGE ASSOC.
SOUTHWEST ALASKA
MUNICIPAL
CONFERENCE
UNITED CATCHER
BOATS
AKUTAN CATCHER VESSEL ASSOC.
ARCTIC ENTERPRISE ASSOC.
NORTHERN VICTOR FLEET
PETER PAN FLEET COOPERATIVE
UNALASKA COOP
UNISEA FLEET COOPERATIVE
WESTWARD FLEET COOPERATIVE
MOTHERSHIP GROUP
PV EXCELLENCE
PV OCEAN PHOENIX
PV GOLDEN ALASKA
WESTERN ALASKA
FISHERIES, INC.
YUKON DELTA
FISHERIES
DEVELOPMENT ASSOC.
ALASKA, ANAK, GRAYLING,
KOTLIK, MAIN VILLAGE, NUNAM,
IQUA

Councils for developing an Environmental Impact Statement (EIS) for EFH. In his memo, Dr. Hogarth provided NMFS with specific requirements to be included in the EIS, and reminded Councils that the plaintiffs in *AOC v. Daley* “challenged whether, among other things, NMFS adequately evaluated the effects of fishing on EFH and minimized to the extent practicable the adverse effects of fishing on EFH.”

While Craig Rose’s analysis makes a heroic effort to use the scant available literature and existing data to determine effects of fishing on North Pacific habitat, it in no way attempts to determine if those effects negatively impact the productivity of Fishery Management Program (FMP) species. In fact, to the extent that the Rose analysis does make a determination, it is that less than 5% of North Pacific EFH is affected by commercial fishing.

Dr. Hogarth’s memo specifically advises, “If there is evidence that a fishing practice is having an identifiable adverse effect on EFH, and/or if the available information is unclear as to whether there may be an adverse impact that is both more than minimal and not temporary in nature, for NEPA purposes the analysis of alternatives needs to consider explicitly a range of management measures for minimizing potential adverse effects, and the practicability and consequences of adopting those measures.”

Because of settlement deadlines, the Council again finds itself in the uncomfortable predicament of completing a complex analysis which, being out of sequence, seems irrational to the participants in the process. Specifically, we wonder how the Council and NMFS can prescribe a habitat mitigation measure before identifying any adverse effect on the productivity of FMP species caused by fishing.

MCA does not wish to impede the process which, apparently, requires concurrent evaluations rather than the usual sequential process to comply with the out-of-court settlement deadline. However, we seek assurance that the EIS will contain the information allowing the Council and NMFS to make, at some point in the future, a rational, sequential determination on whether fishing has caused essential habitat degradation that has adversely impacted the productivity of FMP species and whether the proposed measures properly mitigate the problem.

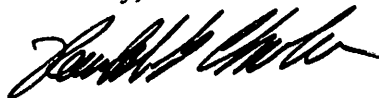
Such a determination should be based on the best scientific evidence available that 1) identifies specific adverse impacts and 2) links them to commercial fishing. Proposed mitigation measures should be evaluated to determine 1) the level of effective mitigation they will provide in each specific and unique circumstance, and 2) the financial burden they will impose.

To accomplish these goals in a way that the Council, NMFS, and the public can best evaluate the proposed measures, we ask that the EIS include the following:

- 1) Clarification that the task of EFH mitigation measures is to reduce habitat degradation that has or has the high probability of negatively affecting the productivity of FMP species;
- 2) An assessment of the productivity of the FMP species using Stock Assessment and Fishery Evaluation (SAFE) documents and other available information;
- 3) Information or evidence linking any adverse effects on the productivity of FMP species to fishing;
- 4) Evidence that proposed measures will properly mitigate specific adverse impacts to FMP species;
- 5) An assessment of the level of certainty of information used to determine adverse impacts, linkages to fishing, and effectiveness of proposed measures to mitigate specific adverse effect;
- 6) An evaluation of the costs and benefits of proposed mitigation measures to determine the "practicability and consequences" of adopting proposed alternatives, including an assessment of unintended consequences, such as increased bycatch and bycatch-triggered closures;
- 7) An assessment of the habitat protection benefits of measures already installed to protect FMP species including the Bering Sea Crab Protection Zones, Pribilof Islands Habitat Conservation Area, salmon and herring savings areas, walrus and Steller sea lion closures, and similar closures in the Gulf of Alaska (GOA), including the Eastern GOA trawl closure, the Cape Edgecumbe Pinnacles Reserve, and any other closed areas that restrict impact on local habitat;
- 8) Factoring in the two million metric ton cap in the Bering Sea/Aleutian Islands as an existing mitigation measure, since the proposed alternatives recommend that Total Allowable Catch (TAC) reductions should accompany area closures to further protect habitat by reducing fishing effort;
- 9) A table quantifiably comparing the proposed mitigation measures, any adverse impacts to FMP species, certainty of scientific information used to determine adverse impact, projected effectiveness and cost of measures to coastal communities and industry participants, and projected unintended consequences;
- 10) An evaluation and comparison of each alternative to the requirements of the National Standards.

We ask that the Council support a motion directing staff to include the above described evaluation tools in the EIS to insure compliance with MSA and NEPA. We also strongly urge that the Council send out the EFH, HAPC, and mitigation measure alternatives for analysis at this meeting so as to avoid increased vulnerability to continued EFH litigation by failure to meet settlement deadlines.

Sincerely,



Ronald G. Clarke
Executive Director



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
1315 East-West Highway
Silver Spring, MD 20910

THE DIRECTOR

DEC 18 2001

MEMORANDUM FOR: Regional Administrators
FROM: *William T. Hogarth*
William T. Hogarth, Ph.D.
SUBJECT: Settlement of the AOC v. Daley Lawsuit

On December 5, 2001, the Department of Justice filed with the United States District Court for the District of Columbia a signed settlement agreement (attached) in the case of *American Oceans Campaign, et al., v. Evans, et al.*, also known as *AOC v. Daley*. The settlement, if approved by the court, offers significant benefits to NMFS and the Councils. It provides a three-year schedule for completion of the EISs required by the court order, which should be a sufficient amount of time to complete these documents while allowing for the public process and thorough analysis that is required by NEPA. This is significant, because in the absence of an agreed-upon schedule, the court likely would have imposed a more rigorous time frame. The stipulation also contains some specifications as to the contents of the EISs (e.g., the analyses of alternatives) as required by NEPA and its implementing regulations, and thus provides some clarity as to the expectations of the parties. The agreement would dissolve the injunction against "enforcement" of the EFH amendments, thus removing the ambiguity presented by that injunction. Finally, the agreement would result in the dismissal of the plaintiffs' Magnuson-Stevens Act appeal, which, if they had prevailed, could have posed more serious problems for the agency and the Councils.

I am sending the attached letter to the affected Councils to inform them of the settlement. Additionally, I request that you discuss the settlement agreement during the Regional Administrator's report at the next meeting of each of the five affected Councils. Through my letter and your discussion, I hope we can ensure that the Councils understand the terms of the settlement as well as NMFS' intent to work closely with the Councils throughout this process.

Attachment

THE ASSISTANT ADMINISTRATOR
FOR FISHERIES



adverse effects of fishing on EFH;

WHEREAS, the Texas Shrimp Association and Wilma Anderson (defendant-intervenors) intervened to defend the partial approval of the Gulf of Mexico EFH Amendment;

WHEREAS, in a Memorandum Opinion and Order filed on September 14, 2000, the Court denied defendant-intervenors' motion to dismiss plaintiffs' Magnuson-Stevens Act claim as to the Gulf of Mexico EFH Amendment, and granted federal defendants' and defendant-intervenors' summary judgment motions as to plaintiffs' Magnuson-Stevens Act claims;

WHEREAS, in its September 14, 2000, Memorandum Opinion and Order, the Court granted plaintiffs' summary judgment motion as to the NEPA claims relating to the EFH Amendments at issue in this case;

WHEREAS, in its September 14, 2000, Memorandum Opinion and Order, the Court remanded the EFH Amendments at issue in this case to the federal defendants to comply with NEPA; and

WHEREAS, in its September 14, 2000, Memorandum Opinion and Order, the Court enjoined federal defendants "from enforcing the EFH Amendments until such time as they perform a new, thorough, and legally adequate EA [environmental assessment] or EIS [environmental impact statement] for each EFH Amendment";

NOW, THEREFORE, IT IS HEREBY STIPULATED AND ORDERED AS FOLLOWS:

I. JURISDICTION AND SCOPE

1. This Court has jurisdiction over the parties and subject matter of this action pursuant to 16 U.S.C. §§ 1855(f) and 1861(d) and 28 U.S.C. §§ 1331 and 1361.
2. This Joint Stipulation and Order constitutes full settlement of all of plaintiffs' claims

RECEIVED
IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF COLUMBIA

REC -5 PM 5:07

HANCY M.
MAYER-WHITTINGTON
CLERK

AMERICAN OCEANS CAMPAIGN, et al.,

Plaintiffs,

v.

DONALD EVANS, Secretary of Commerce,
et al.,

Defendants.

Civil No. 99-982 GK

JOINT STIPULATION AND [PROPOSED] ORDER

WHEREAS, plaintiffs in this case challenged the federal defendants' approval (in whole or in part) of certain fishery management plan amendments concerning essential fish habitat (EFH) in the following fishery management regions: Caribbean, Gulf of Mexico, New England, North Pacific, and Pacific (hereinafter "the EFH Amendments");

WHEREAS, plaintiffs alleged that federal defendants' approval of the EFH Amendments violated the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) and federal defendants' own regulations, because federal defendants had (1) failed to analyze adequately the potential adverse effects of fishing gear on EFH; (2) failed to analyze adequately whether there were any practicable steps to minimize any such adverse effects of fishing on EFH; and (3) failed to take all practicable steps to minimize any such adverse effects of fishing on EFH;

WHEREAS, plaintiffs also alleged that federal defendants' approval of the EFH Amendments violated the National Environmental Policy Act (NEPA), because federal defendants had failed to analyze adequately the potential direct and indirect environmental impacts of fishing on EFH and to develop and analyze adequately a range of alternatives for minimizing any such

on EFH, including potential adverse effects. This range of alternatives will include "no action" or status quo alternatives and alternatives setting forth specific fishery management actions that can be taken by NMFS under the Magnuson-Stevens Act. The alternatives may include a suite of fishery management measures, and the same fishery management measures may appear in more than one alternative.

7. Each draft and final EIS prepared pursuant to this Joint Stipulation and Order will identify one preferred alternative, except that, in the draft EIS, NMFS may elect, if it deems appropriate, to designate a subset of the alternatives considered in the draft EIS, as the preferred range of alternatives, instead of designating only one preferred alternative.

8. Each draft and final EIS (or, where appropriate, the portions thereof relating to EFH) prepared pursuant to this Joint Stipulation and Order will present the environmental impacts of the proposed action and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among the options, as set forth in CEQ regulation 40 C.F.R. § 1502.14.

B. EIS Preparation Schedule

9. NMFS will prepare the EISs pursuant to this Joint Stipulation and Order in accordance with the schedule attached hereto as Attachment 1. NMFS will make good-faith efforts to complete EIS preparation tasks prior to the milestones set forth in Attachment 1 and to stagger the comment periods for the EISs so as to facilitate the provision of public comment.

C. NMFS Decisionmaking Based on EISs and RODs

10. In the Record of Decision (ROD) for each EIS prepared pursuant to this Joint Stipulation and Order, NMFS will determine either that action is necessary or that action is not

under the Magnuson-Stevens Act and NEPA in this case. Further, the Joint Stipulation and Order provides the basis for plaintiffs' dismissal of their appeal of the Court's summary judgment ruling on their Magnuson-Stevens Act claims. Additionally, the Joint Stipulation and Order does not constitute a settlement of plaintiffs' claims for litigation costs, including attorney fees.

II. ENVIRONMENTAL IMPACT STATEMENTS

A. General EIS Provisions

3. Federal defendants, acting through the National Marine Fisheries Service (NMFS), will prepare EISs for all of the fisheries that were challenged in this lawsuit.

4. In preparing the EISs pursuant to this Joint Stipulation and Order, NMFS will comply with the requirements of all applicable statutes and regulations, including NEPA; the Council on Environmental Quality (CEQ) NEPA implementing regulations, 40 C.F.R. Parts 1500-1508; and National Oceanic and Atmospheric Administration (NOAA) Administrative Order 216-6.

5. Each EFH Amendment amends one or more fishery management plans (FMPs). For each EFH Amendment, the scope of the EISs prepared pursuant to this Joint Stipulation and Order will include analyses of the environmental impacts of fishing on EFH, including direct and indirect effects, as defined in the EFH regulations at 50 C.F.R. § 600.810, and analyses of the environmental impacts of alternatives for implementing the requirement of the Magnuson-Stevens Act, 16 U.S.C. § 1853(a)(7), that the FMP "minimize, to the extent practicable, adverse effects on [EFH] caused by fishing."

6. Each EIS (or, where appropriate, the portions thereof relating to EFH) prepared pursuant to this Joint Stipulation and Order will consider a range of reasonable alternatives for minimizing the adverse effects (as defined by the EFH regulations at 50 C.F.R. § 600.810) of fishing

If NMFS determines in a ROD that action other than an FMP amendment is necessary, NMFS will confer with plaintiffs, the appropriate Council, and other members of the interested public, regarding the schedule for the Council to take that other action. Based in part on the comments of plaintiffs, the Council, and other members of the interested public, NMFS will develop and recommend a schedule to the Council that will enable NMFS to take that other action, as quickly as practicable, but, in any event, no later than 24 months from the date of the ROD, pursuant to the appropriate decisions made in accordance with the provisions of Paragraphs 11(b) and (c) below.

b. If the Council transmits a proposed FMP amendment and implementing regulations to NMFS in accordance with the schedule that NMFS recommends to the Council pursuant to Paragraph 11(a) above, NMFS will evaluate the FMP amendment and implementing regulations pursuant to the standards and deadlines set forth in 16 U.S.C. §§ 1851 and 1854(a)-(b). If the Council transmits a proposed action other than an FMP amendment to NMFS, in accordance with the schedule that NMFS recommends to the Council pursuant to Paragraph 11(a) above, NMFS will review; approve, disapprove, or partially approve; and, if appropriate, implement such action pursuant to the standards and time-frames established by the Magnuson-Stevens Act and other applicable law.

c. If NMFS disapproves, in whole or in part, the EFH provisions of a proposed FMP amendment and/or proposed implementing regulations submitted to NMFS pursuant to Paragraph 11(b) above, or if the Council fails to comply with the schedule recommended by NMFS pursuant to Paragraph 11(a) above, NMFS will issue a written determination, stating either that NMFS will develop an FMP amendment and/or implementing regulations or other appropriate action, or that an FMP amendment and/or implementing regulations or other actions are no longer

necessary to comply with the requirements of Section 303(a)(7) of the Magnuson-Stevens Act. If NMFS determines that action is necessary to comply with the requirements of Section 303(a)(7) of the Magnuson-Stevens Act, NMFS will determine whether the FMP will be amended in accordance with the preferred alternative identified in the Final EIS, and, if not, what other action, if any, is necessary.

11. Except as provided in Paragraph 12 below, if NMFS determines in a ROD that action is necessary and that the applicable FMP will be amended so as to comply with the requirements of Section 303(a)(7) of the Magnuson-Stevens Act, NMFS will approve an FMP amendment and implementing regulations no later than 24 months after the date of the ROD, unless the Secretary subsequently determines that an FMP amendment and implementing regulations are no longer necessary. If NMFS determines that action other than an FMP amendment and implementing regulations is necessary, NMFS will approve that other action no later than 24 months after the date of the ROD, unless the Secretary subsequently determines that such other action is no longer necessary.

a. If NMFS determines in a ROD that an FMP will be amended, NMFS will confer with plaintiffs, the appropriate Council, and other members of the interested public, regarding the schedule for the Council to develop and submit to NMFS an FMP amendment and implementing regulations. Based in part on the comments of plaintiffs, the Council, and other members of the interested public, NMFS will develop and recommend a schedule to the Council that will enable NMFS to approve an FMP amendment and any necessary implementing regulations, as quickly as practicable, but, in any event, no later than 24 months from the date of the ROD, pursuant to the appropriate decisions made in accordance with the provisions of Paragraphs 11(b) and (c) below.

2005, for the herring, monkfish, and salmon fisheries, unless the Secretary subsequently determines that such other action is no longer necessary.

a. If the Council transmits a proposed FMP amendment and implementing regulations to NMFS in a timely manner that would allow NMFS to meet its schedule for approving an FMP amendment and implementing regulations by no later than February 1, 2005, for the groundfish and the scallop fisheries, and by no later than September 10, 2005, for the herring, monkfish, and salmon fisheries, NMFS will evaluate the FMP amendment and implementing regulations pursuant to the standards and deadlines set forth in 16 U.S.C. §§ 1851 and 1854(a)-(b). If the Council transmits a proposed action other than an FMP amendment to NMFS in a timely manner that would allow NMFS to meet its schedule for approving that other action by no later than February 1, 2005, for the groundfish and the scallop fisheries, and by no later than September 10, 2005, for the herring, monkfish, and salmon fisheries, NMFS will review; approve, disapprove, or partially approve; and, if appropriate, implement such action pursuant to the standards and timeframes established by the Magnuson-Stevens Act and other applicable law.

b. If NMFS disapproves, in whole or in part, the EFH provisions of a proposed FMP amendment and/or proposed implementing regulations submitted to NMFS pursuant to Paragraph 12(a) above, or if the Council fails to act in a timely manner that would allow NMFS to meet its schedule for approving an FMP amendment and implementing regulations by no later than February 1, 2005, for the groundfish and the scallop fisheries, and by no later than September 10, 2005, for the herring, monkfish, and salmon fisheries, NMFS will issue a written determination, stating either that NMFS will develop an FMP amendment and/or implementing regulations or other appropriate action, or that an FMP amendment and/or implementing regulations or other actions are

necessary within the timeframe proposed. If NMFS disapproves, in whole or in part, an action other than an FMP amendment submitted to NMFS pursuant to Paragraph 11(b) above, or if the Council fails to comply with the schedule recommended by NMFS pursuant to Paragraph 11(a) above for such other action, NMFS will issue a written determination, stating either that NMFS will develop an appropriate action or that no action is necessary within the timeframe proposed.

d. Nothing in this Joint Stipulation and Order will limit the discretion of NMFS to decide to issue the EISs prepared pursuant to this Joint Stipulation and Order in combination with other FMP amendments. In the event that it decides to do so, NMFS will notify the Court and plaintiffs in writing within seven days after making such a decision. Further, NMFS will not exceed the EIS preparation schedule set forth in Paragraph 9 above and Attachment 1 hereto. Nothing in this sub-paragraph will be construed to limit plaintiffs' right to sue on any grounds, including NEPA, regardless of whether NMFS decides to integrate the EISs prepared pursuant to this Joint Stipulation and Order into an EIS already being prepared for an FMP amendment.

12. As to the New England Fishery Management Council, if NMFS determines in a ROD that action is necessary and that the applicable FMP will be amended so as to comply with the requirements of Section 303(a)(7) of the Magnuson-Stevens Act, NMFS will approve an FMP amendment and implementing regulations by no later than February 1, 2005, for the groundfish and the scallop fisheries, and by no later than September 10, 2005, for the herring, monkfish, and salmon fisheries, unless the Secretary subsequently determines that an FMP amendment and implementing regulations are no longer necessary. If NMFS determines that action other than an FMP amendment and implementing regulations is necessary, NMFS will approve that other action by no later than February 1, 2005, for the groundfish and the scallop fisheries, and by no later than September 10,

and Order will be served on counsel for the parties at the following addresses and, whenever appropriate, by facsimile, at the following facsimile numbers, unless otherwise provided herein:

For Plaintiffs:

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For Federal Defendants:

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For Intervenor-Defendants:

Richard L. Cys
James P. Walsh
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no longer necessary within the timeframe proposed. If NMFS disapproves, in whole or in part, an action other than an FMP amendment submitted to NMFS pursuant to Paragraph 12(a) above, or if the Council fails to act in a timely manner that would allow NMFS to meet its schedule for approving such other action by no later than February 1, 2005, for the groundfish and the scallop fisheries, and by no later than September 10, 2005, for the herring, monkfish, and salmon fisheries, NMFS will issue a written determination, stating either that NMFS will develop an appropriate action or that no action is necessary within the timeframe proposed.

III. STATUS REPORTS AND NOTIFICATIONS

13. For each EFH Amendment that is the subject of the Joint Stipulation and Order, NMFS will provide notice to the Court and plaintiffs, as soon as possible, upon the occurrence of each of the events specified in Sections II.B. and II.C. of this Joint Stipulation and Order.

14. NMFS will send to plaintiffs, by regular, first-class United States mail only, ten copies of each of the following documents, on the date of their release to the public: the Draft EIS, the Final EIS, the ROD, the proposed FMP Amendment and implementing regulations (if any), and the Final FMP Amendment and implementing regulations (if any). NMFS may provide the documents to plaintiffs on CD-ROM in a mutually acceptable file format, instead of paper copies.

15. Every 90 days, NMFS will file a status report with the Court describing the work that has been done by NMFS and the Councils, and the milestones that have been achieved, in preparing the EISs and, if applicable, the FMP Amendments, that are the subject of this Joint Stipulation and Order. NMFS will file the first status report within 90 days of the date of the entry of this Joint Stipulation as an Order of the Court.

16. All written notices, status reports, and documents referenced in this Joint Stipulation

23. Plaintiffs expressly reserve the right to apply to the Court for litigation costs, including attorney fees and expenses. Federal defendants expressly reserve all rights and defenses regarding plaintiffs' application(s) for costs.

24. The Court will retain jurisdiction over this case for the purpose of enabling the parties to this Joint Stipulation and Order to apply to the Court for any further order that may be necessary to construe, carry out, or enforce the terms of this Joint Stipulation and Order.

25. Upon formal written request by plaintiffs, transmitted by facsimile and mail, NMFS will produce, within 45 days of the date on which the agency receives the written request by facsimile, any document that pertains to the EISs, RODs, and any applicable FMP amendments prepared pursuant to this Joint Stipulation and Order, that is not already in the possession of plaintiffs or that is not already readily available to plaintiffs, unless the requested document is deemed by federal defendants to be protected from disclosure by privilege and/or unless the parties have agreed to a separate production schedule, as provided in this paragraph below. Federal defendants expressly reserve the right to assert the applicable privilege(s) as to any document(s) requested by plaintiffs and, based on that assertion, withhold the document(s) from production. In the event that federal defendants withhold from disclosure a document or documents requested by plaintiffs based upon their assertion of privilege, federal defendants will inform plaintiffs of their action and explain the basis for their action, promptly and in writing. In the event that plaintiffs' request for production of documents and/or NMFS's response thereto is complex or voluminous, the parties will confer and, if appropriate, agree to a period longer than 45 days for NMFS to produce the requested documents.

26. No term or provision of this Joint Stipulation and Order will constitute or will be

IV. GENERAL PROVISIONS

17. This Joint Stipulation will become effective upon the date of its entry as an Order of the Court. On that date, the injunction that is set forth in the Court's Memorandum Opinion and Order filed on September 14, 2000, and that prohibits federal defendants from enforcing the EFH Amendments is dissolved. Also, upon entry of this Joint Stipulation as an Order of the Court, plaintiffs will dismiss their appeal of the Court's summary judgment ruling on their Magnuson-Stevens Act claims.

18. The terms and provisions of this Joint Stipulation and Order will apply to and be binding upon the parties hereto.

19. If there is a dispute over compliance with any term or provision of this Joint Stipulation and Order, the disputing party will notify the other parties in writing of the dispute. The parties will attempt to work out the dispute informally before seeking judicial review by this Court.

20. The disputing party will engage the other parties in informal dispute resolution. During this informal dispute resolution period, which will not exceed 21 days (unless the parties agree to an extension of the period), the parties will meet as many times as both deem necessary to discuss and attempt to resolve the dispute.

21. If the parties are unable to resolve the dispute through informal dispute resolution, either party may file a motion asking that the Court enforce the relevant term(s) and provision(s) of the Joint Stipulation and Order.

22. Each party expressly reserves the right to move the Court for relief from the provisions of this Joint Stipulation and Order, pursuant to Rule 60 of the Federal Rules of Civil Procedure.



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Attorneys for Texas Shrimp Association and
Wilma Anderson

PROPOSED ORDER

APPROVED and ENTERED as an Order of this Court, on this _____ day of _____, 2001.

HON. GLADYS KESSLER
United States District Judge

The following counsel should be notified of the entry of this Order.

Stephen E. Roady
Eric Bilsky
Monica B. Goldberg
Oceana, Inc.
2501 M Street, N.W.
Suite 300
Washington, D.C. 20037

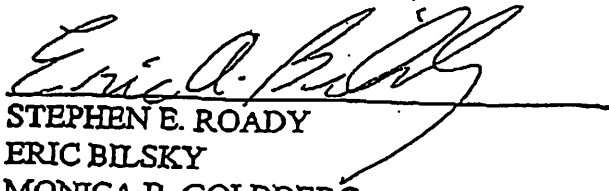
Richard L. Cys
James P. Walsh
DAVIS WRIGHT TREMAINE, L.L.P.
1155 Connecticut Avenue, N.W.,
Suite 700

construed as a commitment or a requirement that federal defendants obligate or pay funds in contravention of the Anti-Deficiency Act, 31 U.S.C. § 1341, and any other applicable law or regulation.

27. This Joint Stipulation and Order is the entire agreement between the parties in this case. All prior conversations, meetings, discussions, drafts, and writings of any kind are specifically superseded by this Joint Stipulation and Order. The terms of this Joint Stipulation and Order will not be changed, revised, or modified, except as provided (1) by a written instrument signed by the parties to this Joint Stipulation and Order and approved and entered by this Court as an Order; or (2) by an Order of the Court based on a party's motion for relief pursuant to Rule 60 of the Federal Rules of Civil Procedure, as set forth in Paragraph 22 above.

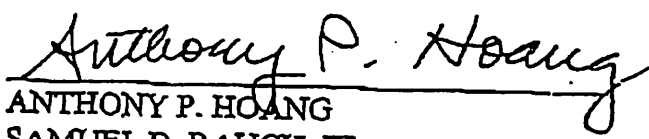
28. The undersigned representative(s) for each party certifies that he or she is fully authorized by the party or parties whom he or she represents to enter into the terms and conditions of this Joint Stipulation and Order and to bind such party or parties legally to it.

Respectfully submitted this 5th day of December, 2001,


STEPHEN E. ROADY
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Attorneys for Federal Defendants

<u>Council / Fisheries</u>	<u>Notice of Intent to Prepare EIS Published in Federal Register</u>	<u>Scoping Period</u>	<u>Scoping Meetings</u>	<u>Draft EIS Published</u>	<u>Draft EIS Public Comment Period</u>	<u>Issuance of Final EIS</u>	<u>Issuance of Record of Decision</u>
NEFMC / groundfish	2/1/01	2/1/01 - 4/4/01	Gloucester 2/22/01	10/31/03	10/31/03 - 1/30/04	5/31/04	7/1/04
NEFMC / scallops	2/1/01	2/1/01 - 4/4/01	Gloucester 2/22/01	10/31/03	10/31/03 - 1/30/04	5/31/04	7/1/04
NEFMC / herring, monkfish, salmon	9/10/01	9/10/01 - 11/21/01	Gloucester 11/7/01	10/31/03	10/31/03 - 1/30/04	5/31/04	7/1/04
CFMC / all fisheries challenged in <u>AOC v. Daley</u>	3/19/01	3/19/01 - 4/18/01 and 6/4/01 - 6/27/01	St. John 6/12/01 St. Thomas 6/13/01 St. Croix 6/14/01 Hato Rey 6/18/01 Arecibo 6/19/01 Mayaguez 6/20/01 Ponce 6/21/01 Culebra 6/25/01 Vieques 6/26/01 Fajardo 6/27/01	12/30/02	12/30/02 - 3/31/03	9/30/03	10/30/03
GMFMC / all fisheries challenged in <u>AOC v. Daley</u>	3/19/01	3/19/01 - 4/18/01 and 6/8/01 - 6/30/01	Corpus Christi 6/14/01 Houston 6/15/01 Kenner 6/18/01 Biloxi 6/19/01 Panama City 6/21/01 Key West 6/25/01 Tampa 6/28/01	1/30/03	1/30/03 - 4/30/03	11/28/03	12/30/03
PFMC / groundfish	4/10/01	4/10/01 - 6/30/01	Newport 5/22/01 Astoria 5/23/01 Eureka 5/29/01 Los Alamitos 5/30/01 Seattle 6/5/01 Burlingame 6/12/01	8/8/03	8/8/03 - 11/10/03	4/2/04	5/3/04
NPFMC / all fisheries challenged in <u>AOC v. Daley</u>	6/6/01	6/6/01 - 7/21/01	Kodiak 6/4/01 Unalaska 6/8/01 Anchorage 6/11/01 Seattle 6/19/01 Juneau 6/20/01 Sitka 6/21/01	8/1/03	8/1/03 - 10/31/03	6/1/04	8/13/04

Washington, D.C. 20036

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U.S. Department of Justice
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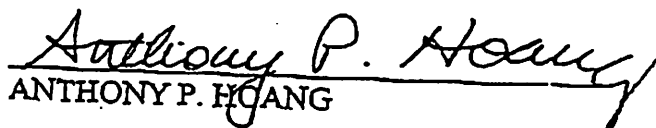
Anthony P. Hoang
U.S. Department of Justice
Environment and Natural Resources Division
P.O. Box 663
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CERTIFICATE OF SERVICE

I hereby certify that a true and accurate copy of the foregoing JOINT STIPULATION AND [PROPOSED] ORDER was served on December 5, 2001, by regular, first-class United States mail, postage pre-paid, on the following counsel:

Stephen E. Roady
Eric Bilsky
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ANTHONY P. HOANG

Richardson Testimony — C-5 Essential Fish Habitat

October 6, 2002

Good Afternoon Mr. Chairman and Members of the Council,

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

Mr. Chairman, the subject of my testimony today concerns the alternatives for analysis developed by the Council's EFH committee and described in the EFH committee presentation. Mr. Chairman, it is the opinion of the member companies of the Pollock Conservation Cooperative that:

- 1) the alternatives developed by the EFH committee go far beyond the intent of EFH law as it is defined and described in the EFH Final Rule;
- 2) the alternatives outrun the policy-making process established by the NPFMC and reflected in the draft programmatic SEIS for the BSAI and GOA FMPs; and
- 3) the alternatives encompass a set of potential actions that significantly exceeds what could reasonably be viewed as appropriate based on the very preliminary analysis of potential fishery effects on habitat features on which they were supposedly based.

Mr. Chairman, the members of the PCC recommend that the NPFMC consider and decide upon a shorter list of EFH mitigation alternatives to analyze. In our opinion, this short list should contain the no action and status quo alternative from the EFH committee recommendation as well as AT MOST two additional alternatives.

The first of these additional alternatives should consider only those potential fishery impacts that could be viewed at this point as the most severe. In other words, only those that would appear to likely be evaluated, with some high probability, to be more than minimal and-or not temporary. Mr. Chairman, in this regard I've provided for the Council a

summary of the results tables from the Rose analysis. This summary simply lists the estimated potential fishery impacts on habitat features from that analysis in order, from highest to lowest, by fishery and habitat feature. The information in the summary tables that I have provided reflects the median-value habitat "sensitivity-to-gear-impacts" estimates and reports the long-term percentage loss estimates relative to the total habitat areas in the BSAI and GOA management areas. Mr. Chairman, from this summary information, and also considering the very preliminary and incomplete nature of the Rose model (am here I'm thinking of the absence of any consideration of links to the productivity of managed species), it appears to us that this third EFH mitigation alternative should involve ONLY measures to limit impacts to slope pebble-rock habitat in the Gulf of Alaska.

The final alternative should expand on the previous alternative via the co-implementation of a precautionary approach to avoiding further damages to VULNERABLE (i.e., slow recovery) habitats in very lightly fished areas as well as a rough experimental design that would allow and, in effect, make easier, research to determine the effects of fishing on habitat features and ecosystem function. Here I'm talking about research that would allow comparisons and evaluations of fishery effects on habitat features and ecosystem productivity over the long term. The Council should view these EFH refugia as appropriately being relatively small areas, situated throughout the BSAI and GOA management areas, where potentially all fishing activities would be excluded. In essence, these areas could also be called a network of HAPC areas, a necklace of MPAs, or whatever other habitat mitigation concept is being hyped when the Council makes its final decision.

But the key here is to focus the analysis on a SMALL number of SMALL candidate areas that are characterized by the overlap of the vulnerable habitats desired for study and very light levels of fishing. In particular, these candidate areas should not be large, should not be located in areas of upwelling and high ecosystem productivity (for example the EBS submarine canyons), or in areas where fishing is commonly conducted. Ideally, these refugia should span a wide depth range (i.e., they should be oriented perpendicular to the continental slope or encompass pinnacles) and their shore-ward extent should be limited to only very small portions of the outer edges of the soft-bottom shelf areas in the BSAI and GOA. The rationale for limiting their extent on the soft-

bottom shelf areas is that these areas are relatively large and habitat features that may be affected by fishing recover relatively rapidly.

Mr. Chairman, now that I've laid out some thoughts on what a tight set of EFH mitigation analysis alternatives could look like, I'd like to also mention two issues that have cropped up in the committee process that has been used to develop the EFH identification and mitigation alternatives, and how these issues may lead to future difficulties in the development of an EFH amendment for the BSAI and GOA FMPs.

One issue is the use of fishery data to define the existence or extent of EFH. I can't caution the Council enough about how the use of commercial fishery catch and bycatch data to define EFH, either directly or indirectly, is likely to cause problems. Basically, going down this road will parallel the early methods used to define Steller sea lion Critical Habitat, where sea lion location observations obtained from platform of opportunity vessels, mainly offshore pollock boats with heavy discards of fish offal, were used to define the at-sea foraging areas of these animals. Put very simply, fishing boats and gear are designed and operated to catch fish, not habitat. If data on habitat is not available, or is limited, well then a data gap exists. But Mr. Chairman, we would argue that its not appropriate to just substitute commercial fishery data solely because its available.

As such, we strongly encourage the Council to inform the analysts of a preference for the use of resource survey data sets or other available data in defining the extent and or concentration of EFH. The analysts should be told, for example, to avoid using CPUEs of, say, flatfish, to define local concentrations of habitat features that are essential to flatfish. EFH locations should correspond to the locations of habitat features, and not strictly to the locations of fish. The commercial fisheries catch data involves or integrates a lot of information about where the processing plants and gas stations are, how long it takes fish to spoil, what the weather is like at a particular time of year, what gear is being used, etc., etc. that have little or nothing to do with the extent of particular types of underwater habitats. The Bering Sea bottom trawl survey provides information on habitat features from a standard grid that covers a large area of the Bering Sea. Its this type of information that should be used to define habitat as far as it can be defined via sampling with a bottom trawl.

A second issue that we feel the Council should be wary of is the inconsistency of a mandated two-year process time line for the EFH amendment process and the recommendations of the NMFS EFH process experts and lawyers as regards the need to identify a range of alternatives that includes everything but the kitchen sink. A particular example here is EFH committee alternative seven, which mandates an analysis of no-take MPAs that cover 20% of the BSAI and GOA management areas but which have no relationship to any potential habitat effects outlined in the Rose analysis. Mr. Chairman, inclusion of such an alternative presupposes that the Council has adopted such a MPA policy, but as far as we are aware, such a policy is part of the subject matter of the draft programmatic SEIS, and this document and Council decision-making associated with it will not be finalized until early 1995, after the scheduled August 2004 ROD for the EFH EIS. We strongly encourage the Council to keep the EFH process focused on the EFH issue, and not allow the EFH analysis to be hijacked by those seeking to use the EFH process to further non-EFH objectives.

Thanks Mr. Chairman for providing us an opportunity to provide our views.

EFH Concepts in the Rose Model

Areas

Total Fished Area —

Total Habitat Area —

Habitat Types by Management Area

<u>EBS</u>	<u>AI</u>	<u>GOA</u>
Sand	Shallow Sand	Shallow Sand
Sand-Mud	Shallow Pebble-Rock	Shallow Pebble-Rock
Mud	Deep Sand-Mud	Slope Sand-Mud
	Deep Pebble Rock	Slope Pebble-Rock
		Deep-Shelf Sand-Mud
		Deep-Shelf Pebble-Rock

Ecosystem Functions (Apply to All Management Areas)

Infaunal Prey

— worms, clams, amphipods (fauna that lives IN the sea bottom)

Epifaunal Prey

— sea stars, crabs, sculpins (fauna that lives ON the sea bottom)

Bio(logical) Shelter

— tree corals, sponges, sea whips (fauna that grows vertically ON the bottom)

Substrate Shelter

— rocks, cobble, old clam shells (non-living material ON the sea bottom)

Habitat Features — Combinations of Habitat Types and Ecosystem Functions (Example Habitat Features Below Are Those Impacted by the Pollock Fisheries)

AI

Shallow Sand BioShelter -0.3 %
Deep Sand-Mud BioShelter -0.5 %

EBS

Sand-Mud BioShelter -2.5 %
Sand-Mud SubShelter -1.4 %
Sand-Mud Infaunal Prey -1.1 %
Sand-Mud Epifaunal Prey -0.9 %
Sand BioShelter -0.5 %

Habitat Features Potential Fisheries Impacts — GOA Management Area

<u>GOA</u> <u>Fishery</u>	<u>Habitat Feature</u>	<u>Long-Term Percentage Loss</u> (Relative to Total Habitat Area)
Rockfish trawl	Slope Pebble-Rock SubsShelter	-9.4 %
Rockfish trawl	Slope Pebble-Rock BioShelter	-6.2 %
Deep Fltfish trawl	Slope Pebble-Rock SubsShelter	-2.6 %
Cod trawl	Shallow Pebble-Rock SubsShelter	-2.3 %
Rockfish trawl	Slope Sand-Mud BioShelter	-2.3 %
Rockfish trawl	Deep-Shelf Pebble-Rock SubsShelter	-2.0 %
Deep Fltfish trawl	Slope Pebble-Rock BioShelter	-1.7 %
Pollock trawl	Deep-Shelf Sand-Mud BioShelter	-1.7 %
Pollock trawl	Shallow Sand BioShelter	-1.5 %
Rockfish trawl	Slope Pebble-Rock Epifaunal Prey	-1.5 %
Pollock trawl	Deep-Shelf Sand-Mud Infaunal Prey	-0.9 %

All Fisheries Cumulative Habitat Features Impacts

Slope Pebble-Rock SubsShelter	-12.7 %
Slope Pebble-Rock BioShelter	-8.7 %
Shallow Pebble-Rock SubsShelter	-4.0 %
Slope Sand-Mud BioShelter	-3.9 %
Deep-Shelf Pebble-Rock SubsShelter	-3.6 %
Shallow Pebble-Rock BioShelter	-2.7 %
Deep-Shelf Sand-Mud BioShelter	-2.5 %
Shallow Sand BioShelter	-2.5 %
Deep-Shelf Pebble-Rock BioShelter	-2.3 %
Slope Pebble-Rock Epifaunal Prey	-2.0 %

All Other Features with Cumulative Impacts Less Than -2.0%

Source: An Analysis of the Effects of Fishing on Fish Habitats of the Waters Off Alaska,
Craig Rose et al. 8/11/02.

Habitat Features Potential Fisheries Impacts — EBS Management Area

<u>EBS</u>	<u>Fishery</u>	<u>Habitat Feature</u>	<u>Long-Term Percentage Loss</u> (Relative to Total Habitat Area)
	Pollock trawl	Sand-Mud BioShelter	-2.5 %
	FltHS trawl	Sand-Mud BioShelter	-1.5 %
	Pollock trawl	Sand-Mud SubsShelter	-1.4 %
	YFS trawl	Sand-Mud BioShelter	-1.2 %
	Rock Sole trawl	Sand-Mud BioShelter	-1.1 %
	Pollock trawl	Sand-Mud Infaunal Prey	-1.1 %
	Rock Sole trawl	Sand BioShelter	-0.9 %
	Pollock trawl	Sand-Mud Epifaunal Prey	-0.9 %
	FltHS trawl	Sand-Mud Epifaunal Prey	-0.5 %
	Pollock trawl	Sand BioShelter	-0.5 %

All Fisheries Cumulative Habitat Features Impacts

Sand-Mud BioShelter	-6.9 %
Sand-Mud Infaunal Prey	-2.4 %
Sand-Mud Epifaunal Prey	-2.4 %
Sand BioShelter	-2.3 %
Sand-Mud SubsShelter	-1.7 %

All Other Features with Cumulative Impacts Less Than -0.5%

Source: An Analysis of the Effects of Fishing on Fish Habitats of the Waters Off Alaska,
Craig Rose et al. 8/11/02.

Habitat Features Potential Fisheries Impacts — AI Management Area

<u>AI</u>	<u>Fishery</u>	<u>Habitat Feature</u>	<u>Long-Term Percentage Loss</u> (Relative to Total Habitat Area)
	Cod trawl	Shallow Pebble-Rock SubShelter	-1.7 %
	N. Rockfish trawl	Deep Pebble-Rock SubShelter	-1.5 %
	Cod trawl	Deep Pebble-Rock SubShelter	-1.1 %
	Atka Mack. trawl	Deep Pebble-Rock SubShelter	-1.0 %
	Cod trawl	Shallow Pebble-Rock BioShelter	-0.9 %
	POP trawl	Deep Pebble-Rock SubShelter	-0.8 %
	N. Rockfish trawl	Deep Pebble-Rock BioShelter	-0.8 %
	Pollock trawl	Deep Sand-Mud BioShelter	-0.5 %

All Fisheries Cumulative Habitat Features Impacts

Deep Pebble-Rock SubShelter	-4.4 %
Shallow Pebble-Rock SubShelter	-3.3 %
Deep Pebble-Rock BioShelter	-2.5 %
Shallow Pebble-Rock BioShelter	-1.9 %
Deep Sand-Mud BioShelter	-1.3 %

All Other Features with Cumulative Impacts Less Than -1.0%

Source: An Analysis of the Effects of Fishing on Fish Habitats of the Waters Off Alaska,
Craig Rose et al. 8/11/02.