MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver
Acting Executive Director

ESTIMATED TIME
5 HOURS

DATE: January 29, 2002

SUBJECT: Programmatic Groundfish SEIS Revision

ACTION REQUIRED
(a) Approve alternatives for analysis.
(b) Provide direction to Ecosystem Committee.

BACKGROUND

Alternatives for analysis

In December we were informed that NMFS had decided to revise the draft programmatic groundfish SEIS (DPSEIS), in an attempt to address three primary areas of concern - (1) alternatives should be structured shifting from single-focus to multi-objective; (2) additional analysis concerning environmental, economic, and cumulative impacts; and, (3) the DPSEIS should be edited to evaluate more concisely the proposed action. The ambitious schedule for this revision calls for the Council to specify the alternatives for analysis at this meeting.

Since the December meeting, NMFS staff and their contractors on this project, with input from Council staff, have worked at drafting new alternatives for analysis. These preliminary 'strawman' alternatives were reviewed by a workgroup of Council members, and were the subject of public meetings held by NMFS in late January. The strawman alternatives will be discussed and finalized at this meeting. Steve Davis, project leader, will review for the Council the draft alternatives as well as comments received during the public workshops, and the timelines for the analysis and Council action to select a preferred alternative.

Attached are the written reference materials developed for this agenda item. They consist of the following:

(1) Steve Davis' powerpoint presentation [Item C-1(a)(1)]
(2) PSEIS update and strawman alternatives as distributed at the public meetings [Item C-1(a)(2)] The strawman alternatives were originally posted on the NMFS and NPFMC websites. During the public meetings, various clarifications and corrections were made to the wording of the alternatives, while maintaining their original intent. The material included in this packet includes changes made at the meetings, which will be presented in marked-up version during Steve Davis' formal review. Additionally, two figures (4 and 5) have been added to the material, representing items hung as posters during the public meetings.
(3) Summary of the major concerns raised during the public meetings [Item C-1(a)(3)]
(4) Workplan and schedule [Item C-1(a)(4)]

Written comments submitted are under C-1(a)(5). Finally, C-1(a)(6) is a copy of the recent letter from the Council Chairman to Dr. Hogarth summarizing our lingering questions with regard to the DPSEIS process and the Council's role in that process.

Ecosystem Committee

In December the reconstituted Ecosystem Committee an organizational meeting and scheduled further discussion for this meeting to determine the role of that Committee relative to the DPSEIS and other issues.

ALASKA GROUNDFISH FISHERIES

Programmatic Supplemental Environmental Impact Statement

Proposed Alternatives for Revised Draft

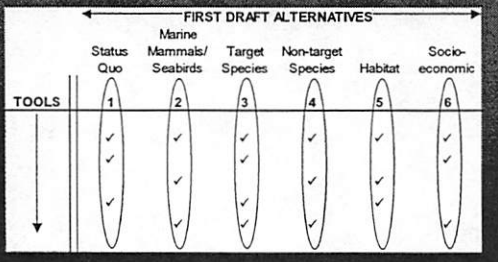
February 2002

PSEIS Update

- NMFS has determined that a revised draft PSEIS is necessary
  - Based primarily on a preliminary review of public comments by NMFS leadership and NOAA General Counsel
- Need to develop multi-objective alternatives
- Address public comments
  - Address issues, make edits, correct factual errors, and improve document readability

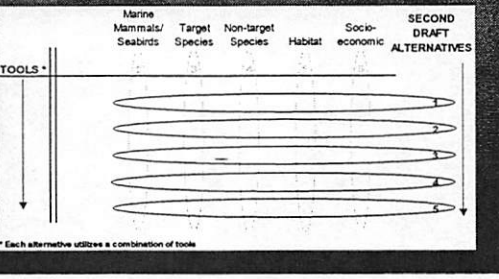
Development of Alternatives – First Draft

Problem with the First Draft: Alternatives centered on single issues



Development of Alternatives – Second Draft

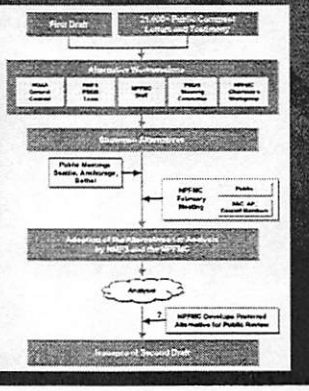
Solution to problem: Develop and analyze multi-objective alternatives that address many issues simultaneously



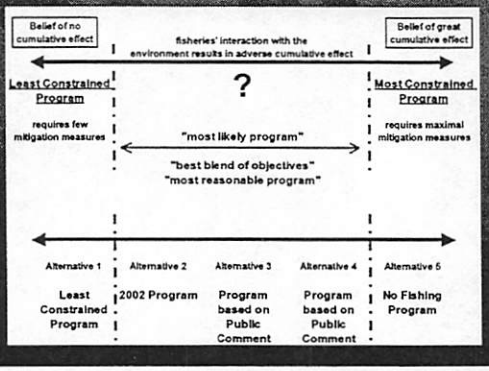
Programmatic Alternative Principles

- Development of alternatives is based on a matrix table approach
- Alternatives must address all management issues and able to be compared and contrasted
- Alternatives must provide some implementation guidance to NMFS and the Council

Development of New Alternatives



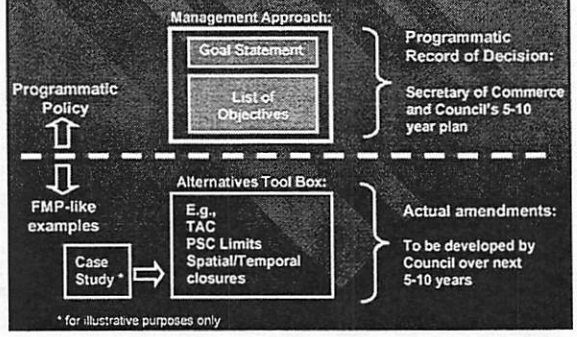
Conceptual Continuum



Structure of Alternatives

- Policy/management approach that reflects the location on the continuum
- Standard and comparable categories of objectives that provide differing degree of management guidance
- Management tools and case studies that are FMP-like to assess potential effects of implementing policy and objectives

Elements of Second Draft Alternatives



Pros and Cons of Crossing "the line"

Pros:

- Something we can analyze for NEPA
- Provides information on how we might achieve objectives
- Responsive to Court order

Cons:

- Choice of management tools is a best "guess"
- Council may choose to something different to implement policy at rulemaking

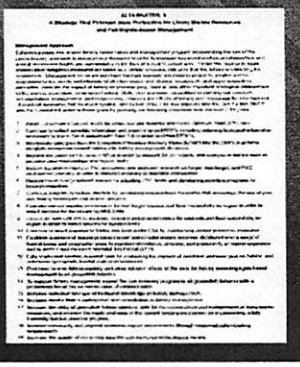
The Strawman Alternatives

- Alternative 1: OFL Harvest Strategy (Least Constrained Program)
- Alternative 2: Continue Conservative Harvest Strategy (2002 Fisheries)
- Alternative 3: A Strategy That Provides More Protection for Living Marine Resources
- Alternative 4: A Strategy That Provides Substantially More Protection for Living Marine Resources
- Alternative 5: Zero Harvest Strategy (No Fishing Program)

Format of the Alternatives

- Each alternative is a management approach consisting of two elements:
  - A goal statement in paragraph form
  - A list of nineteen objectives that are intended to help NMFS and the Council achieve that goal
- Differences between each alternative are highlighted
  - Alt 2 (2002 Fisheries) is the point of origin

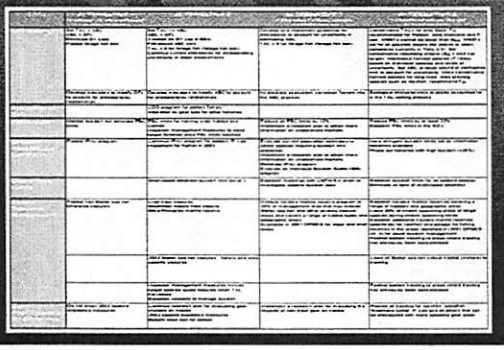
Format of the Alternatives



Case Study for Each Alternative

- The "below the line" case study analysis for illustrative purposes only
- A suggested combination of management tools to achieve the alternative's stated policy goals and objectives
- The case study management measures are not binding to decision-makers

Case Study Tools Table



Relationship of FMP Issues to Management Approach Objectives

FMP Issue:	Management approach objectives under each alternative: 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Marine Mammals	✓		✓	✓						✓	✓								
Seabirds	✓		✓	✓					✓		✓								
Target Species	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓			✓		
Non-Target Species	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓			✓		
Habitat	✓		✓	✓							✓	✓							
Economic and Socio-economic	✓		✓	✓			—						✓	✓				✓	
Alaska Native	✓		✓	✓									✓	✓	✓	✓			
Observer Program and Reporting Requirements			✓	✓													✓	✓	✓

Public Meetings on Alternatives

- NMFS posted strawman alternatives for public comment on its' website (1/15/02)
- NMFS sought public comment on the strawman alternatives at scheduled meetings in Seattle (1/22/02), Anchorage (1/24/02) and Bethel (1/25/02)

Summary of Issues from Public Meetings

Policy

- Who is making the decisions in this project, NMFS or the Council? Who decides on the alternatives? What is the relative authority of NMFS and the Council?
- How and when does the public get to provide input into these alternatives? Is their only opportunity through the Council process?
- Does this process result in rule-making or policy-making? What is the meaning of "action-forcing alternatives" as it relates to a programmatic EIS?

- How is this programmatic preferred alternative going to be implemented? Is any part of the Record of Decision going to be directly actionable, or will all elements need a second set of environmental analyses before they can be put into effect? For example, closure areas might be something that is immediately actionable while rationalization requires a second step of analysis
- If the ROD will not be implementable, is it possible to orient the Council so that they are identifying the implementable package concurrently with the preferred programmatic alternative?
- How will this document be used as a tiering document?

- What will the Council be legally required to implement?
- What is the timeline for putting into effect the Record of Decision?
- The time constraints on this PSEIS are unacceptable. It is impossible to serve the stakeholders adequately with this complex issue on the current schedule.

Alternatives

- How do socioeconomic impacts weigh into these alternatives? Are the Magnuson Steven Act National Standards being incorporated into the proposed new alternatives and the analysis of the second draft?
- The presentation of the alternatives does not recognize how conservative the current management regime has become over the last twenty years, and gives a misleading impression of the current regime.
- We are concerned about the use of "case studies", as opposed to referring to each policy + case study alternative as an FMP alternative.

- There is inconsistency in the degree of specificity of the various objectives. Certain objectives are much more prescriptive and action-oriented than they ought to be for a policy objective. People are not sure of the objective/action distinction in the alternatives.
- What degree of statutory change can we actually consider in this process? Some objectives as crafted would require statutory changes to implement; can we also consider changes that require repealing existing statutory requirements?
- We need to see more than one case study of each alternative, as the particular combination of tools will prejudge the policy, but is not necessarily the only way that policy can be implemented.

- We need more alternatives. Alternatives 1 and 5 are unrealistic sideboards, which leaves only two alternatives to the status quo in the 'reasonable' middle ground. This is insufficient.
  Counter Argument: We need our alternatives to remain contrastable, which will be more difficult as we add more alternatives.
- We need to clarify whether the Council has the opportunity to mix and match from the presented alternatives to formulate their own. How much mixing and matching can you do before new analysis is required?

- NMFS must clarify how they define the terms on the management policy continuum and accordingly place the current system and the proposed alternatives along this continuum.
- We need clarification as to whether we are looking at proposed fishery management plans or programs. What we're looking at should be a program at this policy level.
- We should include the upcoming changes to the TAC-setting process in the case study section of the alternatives analysis.

- The objective that reflects Alaska Native participation and consultation suggests that this is currently occurring. In fact, NMFS should be a great deal more proactive in consulting Alaska Natives, using examples from the National Park Service, and the advisory native consultation model used for the Alaska Board of Fish
- The proposed alternatives are not realistic. For example, each examines only one allocative process, whereas realistically the various groundfish fisheries will adopt multiple methods for allocating TAC. When you look at the alternatives, the is only one option to adopt in the ROD, making this an intellectual exercise

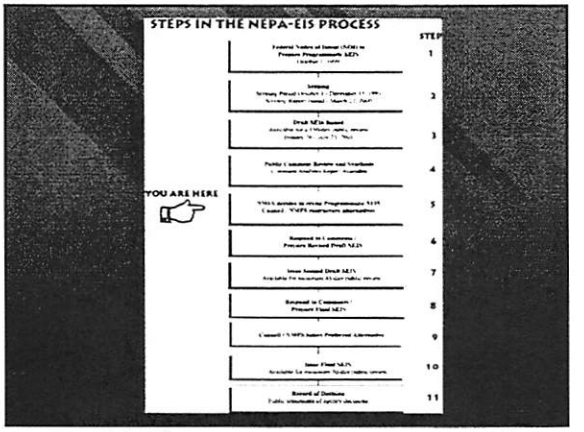
Analysis

- We should be analyzing whether the Council system is appropriate for the managing of the fisheries. If this topic is out of scope, we should at least be analyzing whether the NPFMC is an effective council, and whether it is representative (for example, the Advisory Panel) of all the constituents including conservation voices.
- We need to define ecosystem-based management in the second draft.
- The second draft ought to define government structure and responsibilities in such a way as to make clear where the authority lies between NMFS and the Council

- The analysis must clearly address the accumulated impact of the twenty years of fishery management. This includes the impacts of the FMPs and their amendments.
- It should be clarified that socioeconomic concerns (not just biological resource concerns) are being analyzed and considered.
- The importance of salmon bycatch in groundfish fisheries to Native communities and particularly the Yukon Kuskokwim delta region, needs to be adequately analyzed in the alternatives

Revised PSEIS Schedule

- NMFS will develop and analyze revised multi-objective alternatives in consultation with the NPFMC
- NMFS will issue a revised draft PSEIS in Fall of 2002 for public comment
- NMFS will respond to public comment and prepare final PSEIS during 2003
- NMFS will complete PSEIS and issue Record of Decision in late-2003



NATIONAL MARINE FISHERIES SERVICE

Alaska Region

Strawman Alternatives for the Second Draft PSEIS
Presented for Public Discussion

CONTENTS:

- PSEIS Update and figures
- Alternatives 1-5 Management Approach and Case Study Tools

PSEIS Update and figures (update.pdf) **VERY IMPORTANT!!**

The PSEIS update file lays out the conceptual approach undertaken in the development of strawman alternatives for the second draft PSEIS, and the process of public meetings and Council hearings that will result in the eventual adoption of alternatives for analysis.

Alternatives 1-5 Management Approach and Case Study Tools (alternatives.pdf)

The Alternatives document has two parts. The first five pages list the management approach, consisting of policy goals and objectives, for each of the five strawman alternatives developed for discussion. Each of the alternatives uses Alternative 2 (2002 fisheries) as a comparison point. The highlighted text in each alternative other than Alternative 2 indicates that the text is changed from Alternative 2.

The final two pages of this document is the case study tools table. This table lays out a sample case study for each management approach. The case study represents one example only of a management approach that could be achieved in multiple ways. Referring to the explanatory narrative and graphic (Figure 1) in the PSEIS Update file, this table represents analysis that falls below the line.

Public Meetings January 22, 24 and 25, 2002

Public meetings provide an informal opportunity to ask questions about the PSEIS or obtain information and clarification. Comments on the suggested management approaches or case studies can be provided to NMFS at the meetings and to NMFS and the Council on February 6, 2002 at the Anchorage Council meeting. Dates and times of the public meetings are listed in the PSEIS Update file.

Alaska Groundfish Fisheries Programmatic SEIS Update
January 15, 2002

The National Marine Fisheries Service (NMFS), in a collaborative effort with North Pacific Fishery Management Council (NPFMC) staff and NOAA General Counsel, has developed "strawman" programmatic alternatives for public and NPFMC consideration at the February 6, 2002 NPFMC meeting in Anchorage, AK.

These multi-objective alternatives are for discussion purposes at this time and are intended to focus the public's and Council's attention on those elements that are being considered by NMFS for analysis. If approved by the Council, they will be analyzed and the environmental effects will be described and presented in the second draft Programmatic SEIS scheduled for release in the fall of 2002.

These multi-objective alternatives represent a range of management policies, options, and potential fishery management plans aimed at simultaneously addressing a number of environmental concerns including: fishery impacts on marine mammals and seabirds; fishery impacts on target groundfish and non-target groundfish species; impacts on prohibited species such as Pacific salmon, halibut, herring, and king and Tanner crab; fishery impacts on marine habitat; and impacts on the human environment including social and economic effects of the groundfish fishery on fishing communities, Alaska Natives, Alaskan and non-Alaskan residents, and the nation as a whole.

NMFS and the NPFMC intend to approve a range of multi-objective alternatives on February 6, 2002 for analysis in the second draft PSEIS. To prepare for this meeting, NMFS is soliciting public comment on the alternative management approaches (policy goals and objectives) as well as on the case study examples to be used to analyze how managers might accomplish such a policy.

NMFS has scheduled a series of public meetings in January 2002. These meetings are to provide the public with information concerning the PSEIS, and to answer questions on the strawman alternatives and overall work schedule. Information and comments collected at the public meetings will be summarized and presented to the NPFMC prior to any decision being made on what alternatives are to be advanced for study in the PSEIS.

It is important to understand that these alternatives are only intended to capture a range of thought, social values, and management philosophies, so as to provide the NPFMC and NMFS with information that will result in a concrete set of policy goals and objectives for the next 5-10 years. This "vision for the future" is to guide the NPFMC and NMFS in the years ahead as to how they manage the groundfish fishery and what improvements need to be made to the current Bering Sea and Aleutian Islands and Gulf of Alaska Groundfish Fishery Management Plans. The intention of this PSEIS is to capture a representative range of management policies, ideals, and social values. Federal guidelines for producing a PSEIS allow NMFS to limit the number of alternatives as long as they fully capture a reasonable range of management approaches that are viable and truly represent the wide range of existing views.

The public meetings have been scheduled at the following times and locations:

- **January 22, 2002 9am** **Seattle, Washington**
  Building 9, Room A/B, Alaska Fisheries Science Center
  7600 Sand Point Way, N.E.
  Seattle Washington
- **January 24, 2002 9am** **Anchorage, Alaska**
  Room #154, Federal Courthouse
  222 West 7th Avenue
  Anchorage, Alaska
- **January 25, 2002 9am** **Bethel, Alaska**
  The Log Cabin, 326 Akiachuk
  Bethel, Alaska

Provided with this PSEIS Update are a number of attached files in pdf (Adobe Acrobat) format. They are a total of 13 pages and should be easily downloaded and printed. If you have a problem doing so, contact Marina Lindsey at (907) 586-7213 for assistance.

The attached files provide the following:

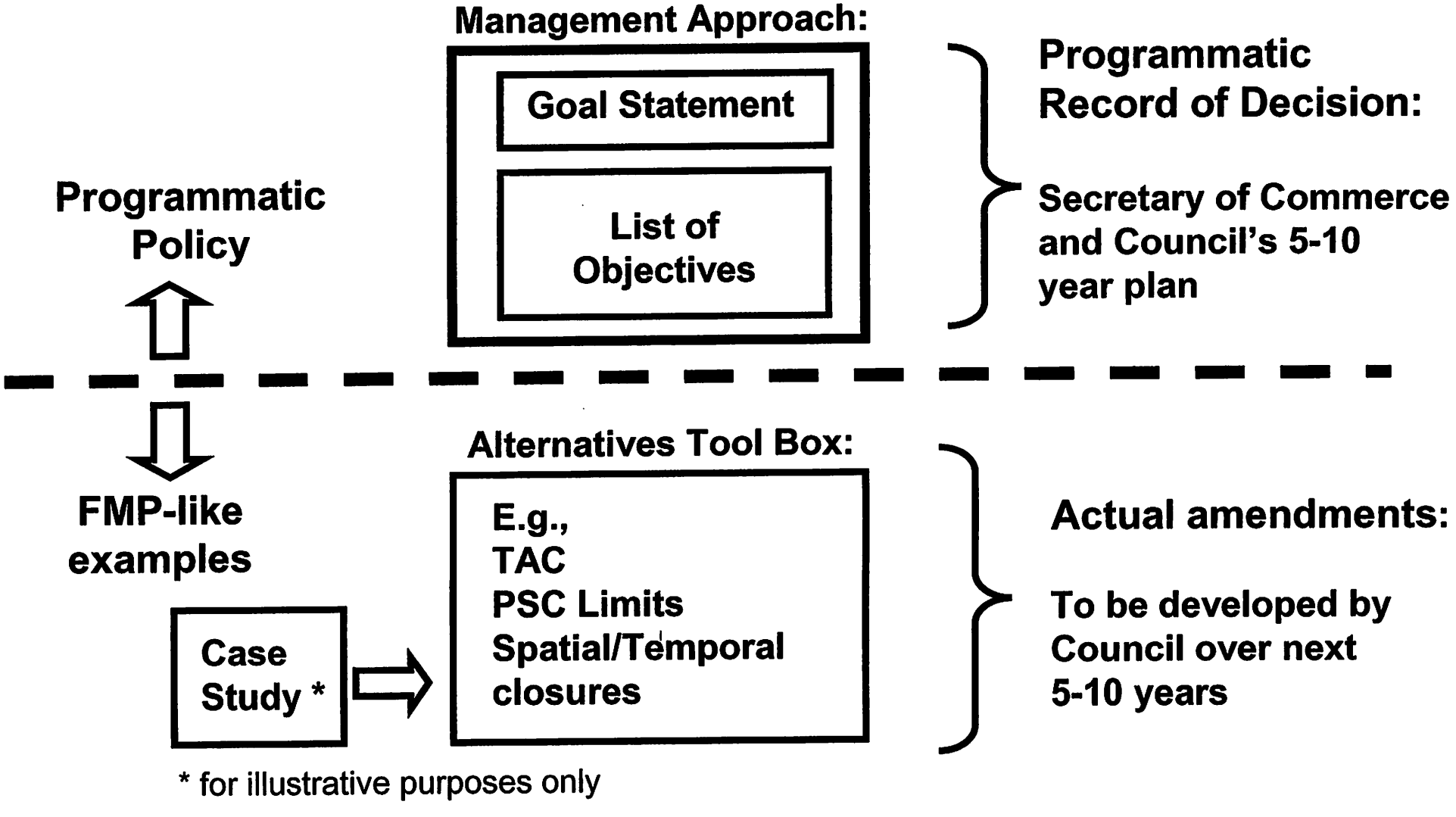
1. A conceptual framework for the alternatives. VERY IMPORTANT!!
   - Figure 1. Elements of Second Draft Alternatives
     This diagram should answer questions concerning the structure of the alternatives (i.e. elements), and the framework for the eventual policy decisions concerning future management of the Alaskan groundfish fishery (e.g. the Record of Decision).
   - Figure 2. Comparison of First and Second Draft Alternatives
     Shows the major problem with the alternatives developed in the first draft of the PSEIS. The new multi-objective alternatives are intended to represent a range of management policies that address a number of environmental concerns simultaneously.

2. The Range of Alternatives. The strawman alternatives are to illustrate to the public the intended range of alternatives to be studied in the second draft PSEIS. They range from a liberal management plan (Alternative 1) to a very restrictive management plan (Alternative 5). In addition to the current 2002 management plan (Alternative 2), two other alternatives (Alternative 3 & 4) are based on public comment received on the first draft.

   - Figure 3. Range of Alternatives
     This diagram demonstrates the reasonable range of alternatives that NMFS has proposed as strawman alternatives for discussion at the public meetings and the February NPFMC meetings.
   - Alternatives.pdf (separate file)
     Description of management approach and case study for each alternative.

For more information concerning the development of these multi-objective alternatives and the public meetings, feel free to contact Steve Davis, PSEIS Project Manager at (907) 271-3523.

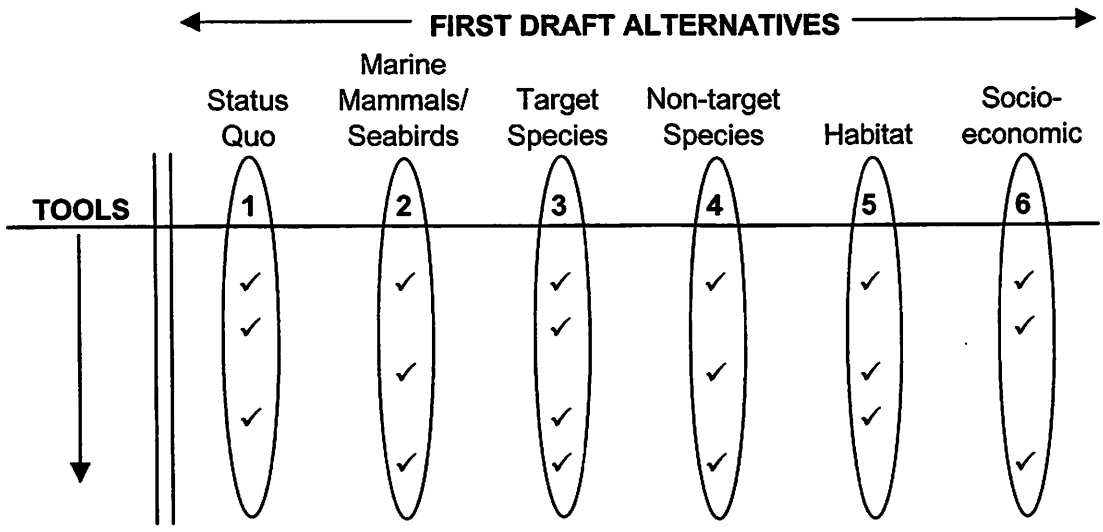
Figure 1: Elements of Second Draft Alternatives



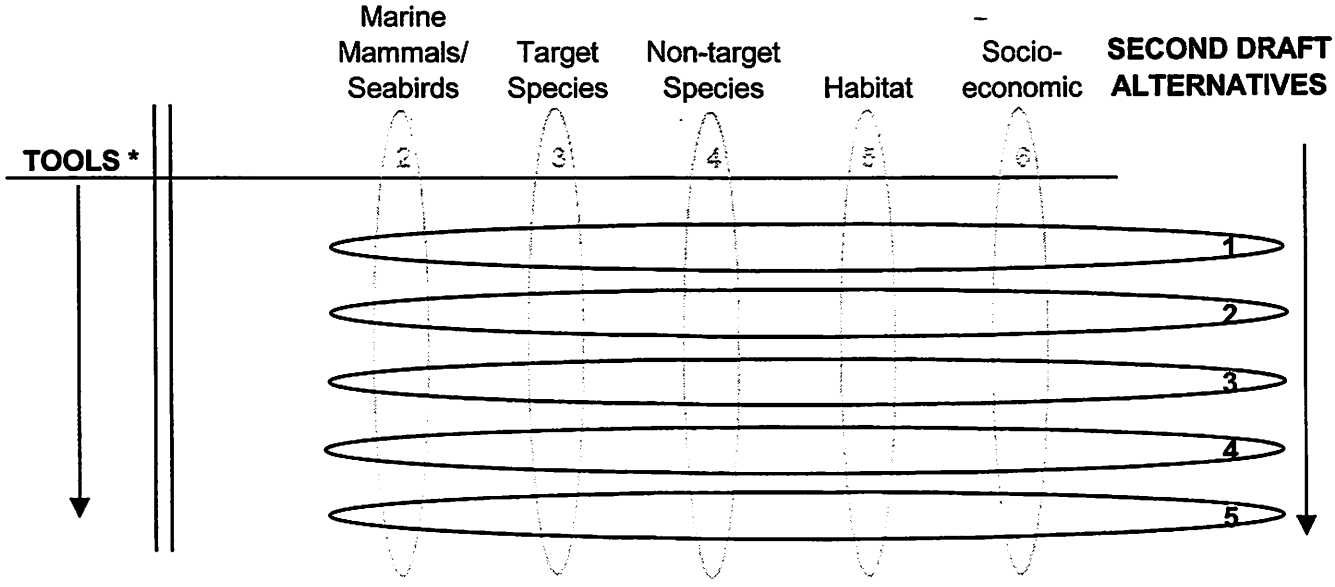
* for illustrative purposes only

FIGURE 2. Comparison of First and Second Draft Alternatives

Problem with the First Draft: Alternatives centred on single issues.



Solution to problem: **Develop and analyze multi-objective alternatives that address many issues simultaneously.**



*** Each alternative utilizes a combination of tools**

FIGURE 3. Range of Alternatives

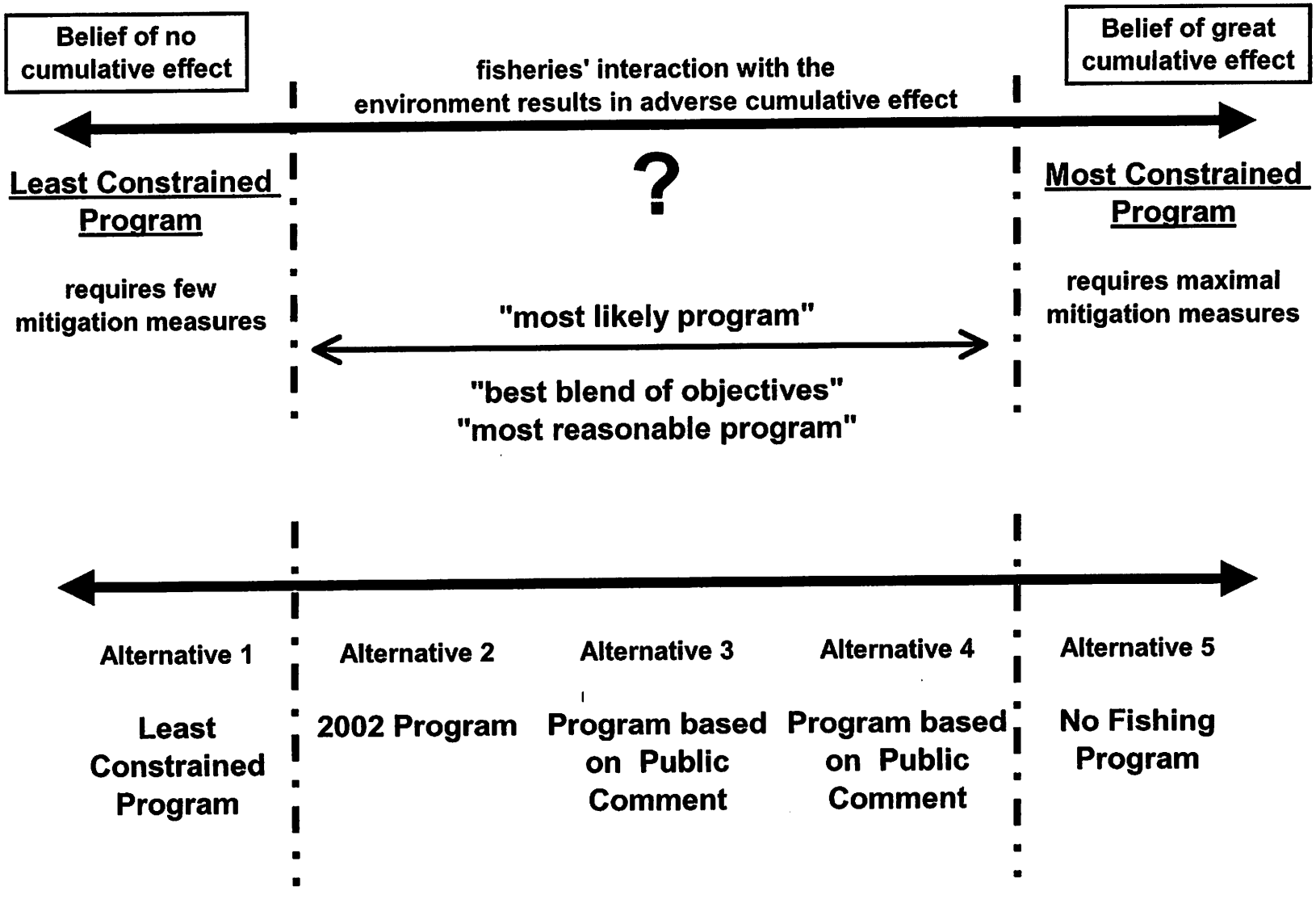
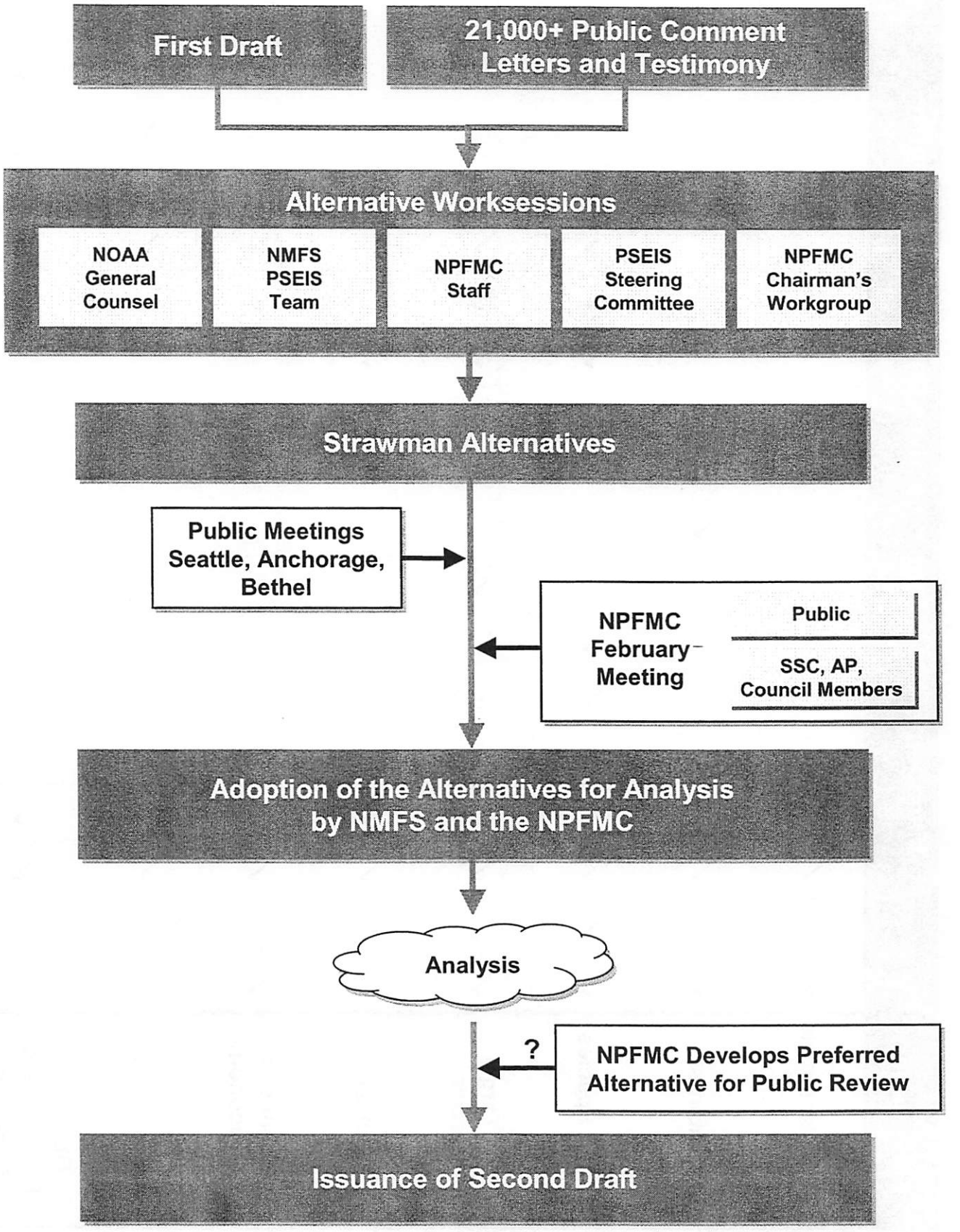


FIGURE 4: Relationship of FMP Issues to Management Approach Objectives

FMP Issue:	Management approach objectives under each alternative: 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
Marine Mammals	✓		✓	✓						✓	✓								
Seabirds	✓		✓	✓					✓		✓								
Target Species	✓	✓	✓	✓	✓	✓	✓				✓	✓	✓	✓			✓		
Non-Target Species	✓	✓	✓	✓	✓	✓	✓	✓			✓	✓	✓	✓			✓		
Habitat	✓		✓	✓							✓	✓							
Economic and Socio-economic	✓		✓	✓									✓	✓				✓	
Alaska Native	✓		✓	✓									✓	✓	✓	✓			
Observer Program and Reporting Requirements			✓	✓													✓	✓	✓

FIGURE 5: Development of the Alternatives for Second Draft



ALTERNATIVE 1: OFL Harvest Strategy (Least Constrained Program)

Management Approach

Establish a fishery conservation and management program that incorporates minimal precaution in management decisions in order to maintain functional ecological relationships and overall ecosystem health and sustainability in the face of scientific uncertainty. The assumption, under this approach, is that fishing does not have an adverse impact on the environment except in specific cases as noted. Management decisions will utilize the best scientific information available; involve and be responsive to the needs and interests of affected states and citizens; incorporate and apply ecosystem principles; consider the impact of fishing on predator-prey, habitat, and other important ecological relationships in the marine ecosystem; draw upon Federal, State, and academic capabilities in carrying out research, administration, management, and enforcement; consider the effects of fishing and encourage the development of practical measures that minimize bycatch; and maintain statutorily mandated programs to reduce excess and the race for fish. NMFS and the Council will achieve these goals by pursuing the following objectives over the next 5-10 years:

1. Adopt less conservative harvest levels for single species fisheries with catch limited only by the Overfishing Level (OFL), and Optimum Yield (OY) caps are eliminated.
2. Continue specifying minimum stock size thresholds (MSSTs) for all managed groundfish stocks in Tiers 1-3 based on the best scientific information available.
3. Incorporate minimal ecosystem considerations into fishery management decisions and repeal existing forage fish ban.
4. Do not include uncertainty correction in ABC.
5. Include bycatch mortality in TAC accounting and research unobserved mortality on pollock.
6. Continue to monitor the bycatch of prohibited species and eliminate PSC limits.
7. Repeal the IR/IU program for discards.
8. Evaluate current population estimates for non-target species.
9. Cooperate with USFWS to protect ESA-listed seabird species but do not enact additional seabird management measures.
10. Continue to avoid jeopardy to Steller sea lions under ESA by maintaining current protection measures.
11. Repeal existing marine protected areas and marine reserve closures.
12. Implement existing research plan for evaluating the impacts of non-trawl and trawl gear on habitat and determine appropriate habitat protection measures.
13. Continue AFA pollock cooperative, CDQ program but repeal the existing sablefish IFQ program.
14. Repeal the sablefish IFQ cost recovery program.
15. Continue to incorporate traditional knowledge from existing literature in fishery management and increase staff expertise in the collection of traditional knowledge.
16. Continue current Alaska Native participation and consultation in fishery management.
17. Continue the existing reporting requirements and Observer Program to provide catch estimates and biological information.
18. Continue on-going effort to improve community and regional economic impact assessments.
19. Increase the quality of monitoring data through improved technological means.

ALTERNATIVE 2: Continue Conservative Harvest Strategy (2002 Fishery)

Management Approach

Continue the current risk averse fishery conservation and management program incorporating the use of the precautionary approach in management decisions in order to maintain functional ecological relationships and overall ecosystem health and sustainability in the face of scientific uncertainty. Under this approach, fishery impacts are mitigated as scientific evidence indicates that the fishery is impacting the ecosystem. Management decisions will utilize the best scientific information available; involve and be responsive to the needs and interests of affected states and citizens; incorporate and apply ecosystem principles; consider the impact of fishing on predator-prey, habitat, and other important ecological relationships in the marine ecosystem; draw upon Federal, State, and academic capabilities in carrying out research, administration, management, and enforcement; consider the effects of fishing and encourage the development of practical measures that minimize bycatch; and maintain current programs to reduce excess capacity and the race for fish. NMFS and the Council will continue to achieve these goals by pursuing the following objectives over the next 5-10 years:

1. Adopt conservative harvest levels for single species fisheries and retain Optimum Yield (OY) caps.
2. Continue specifying minimum stock size thresholds (MSSTs) for all managed groundfish stocks in Tiers 1-3 based on the best scientific information available.
3. Continue NPFMC goals and objectives for ecosystem-based management that include incorporating ecosystem considerations into fishery management decisions.
4. Continue the procedure to reduce ABC in order to account for uncertainty and ecosystem factors such as predator-prey relationships and regime shifts.
5. Include observed bycatch mortality in TAC accounting and research unobserved mortality on pollock.
6. Control the bycatch of prohibited species by maintaining current PSC limits.
7. Continue program to reduce discards by developing management measures that encourage the use of gear and fishing techniques that reduce discards.
8. Evaluate current population estimates for non-target species and their vulnerability by region.
9. Cooperate with USFWS to protect ESA-listed seabird species.
10. Continue to avoid jeopardy to Steller sea lions under ESA by maintaining current protection measures.
11. Protect, conserve, and restore marine habitat by continuing to maintain current marine protected areas (no-trawl zones and time/area closures) and no-take marine reserves (i.e., Sitka Pinnacles).
12. Implement existing research plan for evaluating the impacts of non-trawl and trawl gear on habitat, and determine appropriate habitat protection measures.
13. Continue AFA pollock cooperative, CDQ program and sablefish IFQ program, which decrease excess fishing capacity and other adverse effects of the race for fish.
14. Continue the sablefish IFQ cost recovery program.
15. Continue to incorporate traditional knowledge from existing literature in fishery management and increase staff expertise in the collection of traditional knowledge.
16. Continue current Alaska Native participation and consultation in fishery management.
17. Continue the existing reporting requirements and Observer Program to provide catch estimates and biological information.
18. Continue on-going effort to improve community and regional economic impact assessments.
19. Increase the quality of monitoring data through improved technological means.

ALTERNATIVE 3: A Strategy That Provides More Protection for Living Marine Resources

Management Approach

Establish a more risk averse fishery conservation and management program incorporating the use of the precautionary approach in management decisions in order to maintain functional ecological relationships and overall ecosystem health and sustainability in the face of scientific uncertainty. Under this approach, more conservative mitigation measures are taken as scientific evidence indicates that the fishery is impacting the ecosystem. Management decisions will utilize the best scientific information available; involve and be responsive to the needs and interests of affected states and citizens; incorporate and apply ecosystem principles; consider the impact of fishing on predator-prey, habitat, and other important ecological relationships in the marine ecosystem; draw upon Federal, State, and academic capabilities in carrying out research, administration, management, and enforcement; consider the effects of fishing and encourage the development of practical measures that minimize bycatch; and further reduce excess capacity and the race for fish. NMFS and the Council will achieve these goals by pursuing the following objectives over the next 5-10 years:

1. Adopt conservative harvest levels for single species fisheries and adjust Optimum Yield (OY) caps accordingly.
2. Continue to collect scientific information and improve upon MSSTs including obtaining biological information necessary to move Tier 4 species into Tiers 1-3 in order to obtain MSSTs.
3. Incorporate principles from the Ecosystem Principles Advisory Panel (EPAP) into the FMPs in order to integrate ecosystem considerations into fishery management decisions.
4. Improve the procedure to reduce ABCs in order to account for uncertainty and ecosystem factors such as predator-prey relationships and regime shifts.
5. Include bycatch mortality in TAC accounting and increase research on target, non-target, and PSC unobserved mortality in order to increase accuracy of mortality assessment.
6. Reduce bycatch of prohibited species by adjusting PSC limits and developing incentive programs for bycatch reduction.
7. Continue program to reduce discards by developing management measures that encourage the use of gear and fishing techniques that reduce discards.
8. Evaluate current population estimates for non-target species and their vulnerability by region in order to select species for necessary bycatch limits.
9. Cooperate with USFWS to evaluate current population estimates for seabirds and their vulnerability by region in order to select species for bycatch limits.
10. Continue to avoid jeopardy to Steller sea lions under ESA by maintaining current protection measures.
11. Establish a system of marine protected areas and no-take marine reserves distributed over a range of habitat types and geographic areas to maintain abundance, diversity, and productivity of marine organisms and to protect and conserve essential fish habitat (EFH).
12. Fully implement existing research plan for evaluating the impacts of non-trawl and trawl gear on habitat, and determine appropriate habitat protection measures.
13. Decrease excess fishing capacity and other adverse effects of the race for fish by extending rights-based management to all groundfish fisheries.
14. To support fishery management, extend the cost recovery program to all groundfish fisheries with a percentage fee of the ex-vessel value of retained catch.
15. Increase collection and use of traditional knowledge in fishery management.
16. Increase Alaska Native participation and consultation in fishery management.
17. Increase the utility of groundfish fishery observer data for the conservation and management of living marine resources, and address the equity problems of the current funding mechanism by implementing a fully Federally-funded observer program.
18. Improve community and regional economic impact assessments through increased data reporting requirements.
19. Increase the quality of monitoring data through improved technological means.

ALTERNATIVE 4: A Strategy That Provides Substantially More Protection for Living Marine Resources

Management Approach

Establish a very risk averse fishery conservation and management program incorporating the use of the precautionary approach in management decisions in order to maintain functional ecological relationships and overall ecosystem health and sustainability in the face of scientific uncertainty. This would include a shift in the burden of proof such that fishing is presumed to have an adverse environmental impact unless proven otherwise. Management decisions will utilize the best scientific information available; involve and be responsive to the needs and interests of affected states and citizens; incorporate and apply ecosystem principles; consider the impact of fishing on predator-prey, habitat, and other important ecological relationships in the marine ecosystem; draw upon Federal, State, and academic capabilities in carrying out research, administration, management, and enforcement; consider the effects of fishing and encourage the development of practical measures that minimize bycatch; and further reduce excess capacity and the race for fish through the use of community allocations. NMFS and the Council will achieve these goals by pursuing the following objectives over the next 5-10 years:

1. Adopt highly conservative harvest levels for single species fisheries and adjust Optimum Yield (OY) caps accordingly.
2. Set MSSTs for all stocks in Tiers 1-3 and obtain biological information necessary for Tier 4 and 5 species such that they would qualify for management in at least Tier 3. In cases of insufficient biomass data, develop proxys in order to estimate MSSTs for those stocks.
3. Develop and implement a fishery ecosystem plan (FEP) consistent with the principles established by the Ecosystem Principles Advisory Panel (EPAP) in order to incorporate ecosystem considerations into fishery management decisions.
4. Reduce the ABC in order to account for uncertainty and ecological considerations by setting highly conservative TAC levels for pollock, Atka mackerel, P. cod (i.e., dominant Steller sea lion prey) and long-lived, slow-growing species (e.g., rockfish).
5. Include bycatch mortality in TAC accounting and research target, non-target, and PSC unobserved mortality in order to increase accuracy of mortality assessment.
6. Reduce bycatch including PSC limits by 20% phasing out fisheries with >25% bycatch rates.
7. Reduce discards through stringent bycatch limits.
8. Set bycatch limits for non-target species according to their vulnerability by region.
9. Cooperate with USFWS to evaluate current population estimates for seabirds and their vulnerability by region in order to set bycatch limits for all seabird species.
10. Increase precautionary measures to avoid jeopardy to Steller sea lions under ESA by closing all inshore critical habitat to trawling.
11. Establish 20% of the management area as no-take marine reserves distributed over a range of habitat types and geographic areas to maintain abundance, diversity, and productivity of marine organisms, and to protect and conserve essential fish habitat (EFH); and close an additional 20% of known spawning areas of target species during spawning.
12. Prohibit trawling in fisheries that can be prosecuted with more selective gear types, and restrict bottom trawling to limited areas.
13. Reduce excess fishing capacity and promote Alaskan coastal community stability through the use of community-based fishing cooperatives.
14. Continue the sablefish IFQ cost recovery program.
15. Institute multi-agency collection and use of traditional knowledge in fishery management.
16. Increase Alaska Native participation and consultation in fishery management by establishing an advisory committee to the Council.
17. Increase the precision of observer data through increased observer coverage and enhanced sampling protocols, and address the equity problems of the current funding mechanism by implementing an equitable fee-based funding system for the Observer Program.
18. Improve community and regional economic impact assessments through increased data reporting requirements.
19. Increase monitoring of vessel activity and improve enforcement of closed areas.

ALTERNATIVE 5: Zero Harvest Strategy (No Fishing Program)

Management Approach

Eliminate risk in the fishery conservation and management program by strict implementation of the precautionary approach in management decisions in order to maintain functional ecological relationships and overall ecosystem health and sustainability in the face of scientific uncertainty. This would require a shift in the burden of proof such that in the event that fisheries can be authorized, fishing is only permissible when research has proven to have no adverse impact to the biological environment. Management decisions will utilize the best scientific information available; involve and be responsive to the needs and interests of affected states and citizens; incorporate and apply ecosystem principles; consider the impact of fishing on predator-prey, habitat, and other important ecological relationships in the marine ecosystem; draw upon Federal, State, and academic capabilities in carrying out research, administration, management, and enforcement; consider the effects of fishing and encourage the development of practical measures that minimize bycatch; and maintain current programs to reduce excess capacity and the race for fish. NMFS and the Council will continue to achieve these goals by pursuing the following objectives over the next 5-10 years:

1. Adopt conservative harvest levels for single species fisheries when evidence indicates a fishery will not have an adverse impact to the biological environment. Otherwise, adopt zero harvest levels until scientific evidence indicates that there is no adverse impact.

TOOL	ALTERNATIVE 1 (= Alternative 2 with any changed or added measures)	ALTERNATIVE 2	ALTERNATIVE 3 (= Alternative 2 with any changed or added measures)	ALTERNATIVE 4 (= Alternative 2 with any changed or added measures)	ALTERNATIVE 5 (= Alternative 2 with any changed or added measures)
TAC Setting	Set TAC = ABC. ABC = OFL. Eliminate OY caps. Repeal forage fish ban.	Set TAC <= ABC. ABC < OFL. 2 million mt OY cap in BSAI. F40-based ABC tiers . TAC = 0 for forage fish (forage fish ban). Continue current procedures for incorporating uncertainty in stock assessments.	Develop and implement guidelines for procedures to account for uncertainty in estimating ABC. TAC = 0 for forage fish (forage fish ban).	Conservative TACs for prey base. F_{75} recommended for Pollock, Atka Mackerel and P. cod. MSSTs cannot be lower than B_{msy}. MSSTs set for all possible stocks (for stocks or stock complexes currently in Tiers 4-5). Set conservative rebuilding criteria (B_{40} = limit not target). Alternative harvest policies (F rates) based on individual species and levels of uncertainty. Set ABC at lower bound of confidence limit to account for uncertainty. More conservative harvest policies for long-lived, slow-growing species such as rockfish, recommend F_{60}.	TAC = 0 for all species unless the fishery is proven to have no impact on the ecosystem.
	Develop indicators to modify OFL to account for predator/prey relationships.	Develop indicators to modify ABC to account for predator/prey relationships.	Incorporate ecosystem correction factors into the ABC process.	Ecological characteristics explicitly accounted for in the TAC-setting process.	
Allocation of TAC		CDQ program for pollock fishery. Allocation by gear type for other fisheries.			
PSC Limits	Monitor bycatch but elminate PSC limits.	PSC limits for herring, crab, halibut and salmon. Inseason management measures to close target fisheries once PSC limits reached.	Reduce all PSC limits by 10%. Implement a research plan to obtain more information on unobserved mortality.	Reduce PSC limits by at least 20%. Establish PSC limits in the GOA.	
Bycatch Restrictions (not PSC)	Repeal IR/IU program.	Continue IR/IU program for pollock, P. cod. Implement for flatfish in 2003.	Evaluate current population estimates to select species requiring bycatch limit protection. Implement a research plan to obtain more information on unobserved mortality. Eliminate IR/IU program. Evaluate an Individual Bycatch Quota (IBQ) program.	More stringent bycatch limits set as information becomes available. Phase out fisheries with high bycatch (>25%).	
Direct Take Limits		Short-tailed albatross bycatch limit set at 2.	Establish meetings with USFWS in order to investigate seabird bycatch data.	Establish bycatch limits for all seabird species. Eliminate all take of short-tailed albatross.	
Spatial/ Temporal Management	Repeal non-Steller sea lion time/area closures.	Crab trawl closures. Southeast Alaska trawl closure. Sitka Pinnacles marine reserve.	Institute no-take marine reserve program at 20% of management area that may include Steller sea lion and other existing closure areas and covers a range of habitat types and geographic areas. Examples in 2001 DPSEIS for slope and shelf areas.	Establish no-take marine reserves covering a range of habitats and geographic areas. Close 20% of known spawning areas of target species during known spawning times. Establish additional no-take marine reserves specifically for rockfish and pelagic no fishing reserves in the areas identified in (2001 DPSEIS Alt. 4) for squid bycatch management. Restrict bottom trawling to areas where trawling has previously been concentrated.	
		2002 Steller sea lion closures - fishery and area specific closures.		Close all Steller sea lion critical habitat (inshore) to trawling.	
		Inseason management measures include target species quota closures when TAC harvested. Establish seasons to manage bycatch.		Restrict bottom trawling to areas where trawling has previously been concentrated.	
Gear Restrictions & Modifications	Do not enact 2002 seabird avoidance measures.	Continue research plan for evaluating gear impacts on habitat. 2002 seabird avoidance measures. Bottom trawl ban for pollock.	Implement a research plan for evaluating the impacts of non-trawl gear on habitat.	Prohibit all trawling for rockfish, sablefish, Greenland turbot, P. cod and all others that can be prosecuted with more selective gear types.	

[illegible]L	ALTERNATIVE 1 (= Alternative 2 with any changed or added measures)	ALTERNATIVE 2	[illegible]LTERNATIVE 3 [illegible]rnative 2 with any changed or added measures)	ALTERNATIVE 4 (= Alternative 2 with any changed or added measures)	ALTER[illegible]VE 5 (= Alternative [illegible]y changed or added measures)
Rights-based Management	Repeal sablefish IFQ program.	AFA (including CDQ) for pollock. Sablefish IFQ program. No other use rights assigned.	Extend rights-based management to all groundfish fisheries. Distribute use rights based on catch history.	Apply community fishing cooperatives to all non-rationalized groundfish fisheries. Distribute use rights to Alaskan fishing communities whereby members would: reside in the community 90% of the year, abide by initiatives of the SFA, abide by FAO code for Responsible Fishing; and member vessels must observe effort-based alternatives such as trip, vessel size, horsepower, and gear size limits, and seasonal exclusive area registration.	
Cost Recovery	Repeal cost recovery program for sablefish fishery.	Cost recovery program for the sablefish fishery.	Cost recovery fee at 3% exvessel value.		
Traditional Knowledge		Collect and utilize existing traditional knowledge literature in fishery management.	Consult with subsistence users regarding the impacts of the fisheries and recurrent themes in traditional knowledge.	Design and implement a comprehensive traditionat knowledge collection program in cooperation with other agencies to be used in fishery management.	
CDQ Management		Maintain current levels of Alaska Native consultation, on an action-specific basis.	Develop explicit mechanisms to incorporate Alaska Native participation.	Establish an Alaska Native advisory committee to the NPFMC.	
Observer Program		Fishing industry pays for observers. Independent observer providers hire and deploy observers. NMFS trains and debriefs observers, and manages data. This system has an inherent conflict of interest and costs are not equitable to the industry.	The Federal government pays for observers through direct contracts with observer contractors, supplemented by NMFS staff. Conflict of interest and cost equity issues are resolved.	Institute equitable fee-based funding mechanism whereby fees are based upon: 1) the % of unprocessed vessel value for fish and shellfish (so that vessels pay in proportion to their catch) 2) the % of the processed value (so that processors also pay in proportion to the value of their product).	
		Full observer coverage for CDQ, AFA, and vessels >124' LOA. 30% non-random coverage for vessels 60-124' LOA. No coverage for vessels <60' LOA. Observer coverage for shoreside plants based on tonnage delivered.	30% randomized observer coverage for vessels 60-124' LOA.	Require observer coverage for all sectors of the groundfish fleet (including small boats).	
		Observers collect data on total catch and species composition and species-specific biological data, and monitor for compliance with fishery regulations.	The observer program adapts observer sampling and other duties to best meet the needs of various agency responsibilities. The observer program assesses levels of error in estimates derived from observer sampling.	Increase the precision of observer data to obtain less than 10% error in NMFS catch estimates.	
	Strengthen regulations for Observers and Observer Providers.	Observer program reviews have been completed and recommendations have been made.	Existing recommendations are implemented and ongoing review initiated.		
	Grant NMFS the authority to place NMFS staff and other qualified persons aboard vessels and at plants.		Grant NMFS the authority to place NMFS staff and other qualified persons aboard vessels and at plants.		
Reporting Requirements		Logbooks for processors and vessels.	Mandatory economic data reporting by vessels and processors sufficient to do regional and community impact analysis.	Mandatory economic data reporting by vessels and processors sufficient to do regional and community impact analysis.	
		Current catch weighing requirements for shore-based processors and volumetric estimates for at sea processors.		Motion-compensated scales required to weigh all catches on at-sea processors, motherships or at shore-based processors.	
Monitoring Requirements		Mandatory VMS for Atka mackerel; by June 2002, also for pollock and P. cod.	Require mandatory VMS coverage for all vessels >32' LOA.	100% mandatory VMS coverage on all groundfish vessels.	

MAJOR CONCERNS RAISED DURING PUBLIC MEETINGS

POLICY

- Who is making the decisions in this project, NMFS or the Council? Who decides on the alternatives? What is the relative authority of NMFS and the Council?
  - ***SEA, ANC***

- How and when does the public get to provide input into these alternatives? Is their only opportunity through the Council process?
  - ***SEA, ANC***

- Does this process result in rule-making or policy-making? What is the meaning of "action-forcing alternatives" as it relates to a programmatic EIS?
  - ***SEA***

- How is this programmatic preferred alternative going to be implemented? Is any part of the Record of Decision going to be directly actionable, or will all elements need a second set of environmental analyses before they can be put into effect? For example, closure areas might be something that is immediately actionable while rationalization requires a second step of analysis.
  - ***SEA, ANC***

- If the ROD will not be implementable, is it possible to orient the Council so that they are identifying the implementable package concurrently with the preferred programmatic alternative?
  - ***ANC***

- How will this document be used as a tiering document?
  - ***ANC***

- What will the Council be legally required to implement?
  - ***SEA, ANC***

- What is the timeline for putting into effect the Record of Decision?
  - ***SEA, ANC***

- The time constraints on this PSEIS are unacceptable. It is impossible to serve the stakeholders adequately with this complex issue on the current schedule.
  - ***ANC***

ALTERNATIVES

- How do socioeconomic impacts weigh into these alternatives? Are the Magnuson Stevens Act National Standards being incorporated into the proposed new alternatives and the analysis of the second draft?
  - ***SEA, ANC***

- The presentation of the alternatives does not recognize how conservative the current management regime has become over the last twenty years, and gives a misleading impression of the current regime.
  - ***SEA, ANC***

- There is confusing inconsistency regarding the degree of specificity of the various objectives. Certain objectives are much more prescriptive and action-oriented than they ought to be for a policy objective. People are not sure of the objective/action distinction in the alternatives.
  - ***SEA, ANC***

- What degree of statutory change can we actually consider in this process? Some objectives as crafted would require statutory changes to implement; can we also consider changes that require repealing existing statutory requirements?
  - ***SEA***

- We need to see more than one case study of each alternative, as the particular combination of tools will prejudge the policy, but is not necessarily the only way that policy can be implemented.
  - ***SEA, ANC***

- We need more alternatives. Alternatives 1 and 5 are unrealistic sideboards, which leaves only two alternatives to the status quo in the 'reasonable' middle ground. This is insufficient.
  COUNTER ARGUMENT: We need our alternatives to remain contrastable, which will be more difficult as we add more alternatives.
  - ***ANC***

- We need to clarify whether the Council has the opportunity to mix and match from the presented alternatives to formulate their own. How much mix and matching can you do before new analysis is required?
  - ***SEA, ANC***

- NMFS must clarify how they define the terms on the management policy continuum and accordingly place the current system and the proposed alternatives along this continuum.
  - ***SEA, ANC***

- We need clarification as to whether we are looking at proposed fishery management plans or programs. What we're looking at should be a program at this policy programmatic level.
  - ***SEA***

- We are concerned about the use of "case studies", as opposed to referring to each policy+case study alternative as an FMP alternative.
  - ***ANC***

- We should include the upcoming changes to the TAC-setting process in the case study section of the alternatives analysis.
  - ***ANC***

- The objective that reflects Alaska Native participation and consultation suggests that this is currently occurring. In fact, NMFS should be a great deal more proactive in consulting Alaska Natives, using examples from the National Park Service, and the advisory native consultation model used for the Alaska Board of Fish.
  - ***ANC, BET***

- The proposed alternatives are not realistic. For example, each examines only one allocative process, whereas realistically the various groundfish fisheries will adopt multiple methods for allocating TAC. When you look at the alternatives, there is only one option to adopt in the ROD, making this an intellectual exercise.
  - ***ANC***

ANALYSIS

- We should be analyzing whether the Council system is appropriate for the managing of the fisheries. If this topic is out of scope, we should at least be analyzing whether the NPFMC is an effective council, and whether it is representative (for example, the Advisory Panel) of all constituents including conservation voices.
  - ***ANC***

- We need to define ecosystem-based management in the second draft.
  - ***ANC***

- The second draft ought to define government structure and responsibilities in such a way as to make clear where authority lies between NMFS and the Council.
  - ***ANC***

- The analysis must clearly address the accumulated impact of the twenty years of fishery management. This includes the impacts of the FMPs and their amendments.
  - ***SEA***

- It should be clarified that socioeconomic concerns (not just biological resource concerns) are being analyzed and considered.
  - ***SEA***

- The importance of salmon bycatch in groundfish fisheries to Native communities and particularly the Yukon Kuskokwim delta region, needs to be adequately analyzed in the alternatives
  - ***BET***

Alaska Groundfish Fisheries Programmatic SEIS Work Plan

Revised December 21, 2001

Background

As a result of recent NMFS decisions regarding the need to restructure the PSEIS, develop new, multi-policy objective alternatives, and more fully engage the Council in the NEPA process, I have developed a work plan and time line for this project.

The public comments NMFS received on the January 2001 draft could be placed into three general categories:

1. Need to develop and analyze several multi-policy objective alternatives.
2. Address technical inaccuracies, incomplete data, and complexity of document.
3. Need to more fully integrate the Council into the NEPA process for this PSEIS and make improvements in the agency's outreach program to Native Alaskans.

Based on a review of the January 2001 draft PSEIS and a preliminary review of the public comments, NMFS determined that revisions are necessary in three areas:

- Additional analyses concerning environmental, economic, and cumulative impacts.
- Alternatives should be structured shifting from single-focus to multiple-objective.
- The PSEIS should be edited to evaluate more concisely the proposed action.

These six items overlap in may ways, suggesting a need for a integrated strategy for preparing the revised (second) draft PSEIS.

Schedule

NMFS is committed to completing the Alaska Groundfish Fisheries PSEIS as quickly as possible while still producing a useful and defensible environmental impact study. The following dates represent key milestones for this project. It is understood that the actual dates are subject to change as the project unfolds and serve as general target dates.

December 2001

- Distribution of Comment Analysis Report to the Council.
- Preliminary template of restructured alternatives presented to the Council.

January 2002

- PSEIS Team meeting to develop draft alternatives for Public and Council review (1/7-10).
- Meet with Council Workgroup to receive feedback on draft alternatives and proposed work plan (1/11).
- NMFS and Council post draft alternatives on their websites (1/15).
- NMFS holds PSEIS public meetings in Seattle, Anchorage, and Bethel (1/22,1/24, 1/25).
- PSEIS Team develop methodology for restructured alternatives analysis.

February 2002

- Council meets to review draft alternatives, receive reports from workgroup and public meetings, and finalizes suite of alternatives for analysis (2/4-11).
- PSEIS Team meets to finalize methodology and writing assignments (2/18-19). Team is separated into two groups: Group #1 focuses on alternative development, analysis, and write-up of impacts. This "chapter" of the PSEIS is due May 27. Group #2 focuses on addressing the technical comments received on the January 2001 draft and is responsible for editing, reorganizing, and rewriting the other chapters of the PSEIS. This task is due on June 15. At that time, the alternatives chapter will be inserted into the main document to produce a preliminary second draft PSEIS.

February-May 2002

- Group #1 prepares alternatives chapter (due 5/27).
- Group #2 prepares main document.
- NMFS provides Council with status report at its April meeting (4/8-16).

June 2002

- Council review alternatives chapter and selects its preliminary preferred alternative for purposes of public review (6/5-10).
- Group #2 completes revision to main document (due 6/15).
- Alternatives chapter is inserted into main document.

July 2002

- Preliminary second draft completed July 1.
- Preliminary second draft distributed for internal 30-day review.

August 2002

- Comments on preliminary second draft due August 5.
- PSEIS Team review comments and revise second draft.
- Revised (second) draft PSEIS ready for printer on August 30.

September - December 2002

- NMFS provides Council with status report at its October meeting (10/2-7).
- NMFS releases revised PSEIS for 60-day public review.
- NMFS holds public hearings in Portland, Seattle, Juneau, Anchorage, Kodiak, and Bethel.

January- August 2003

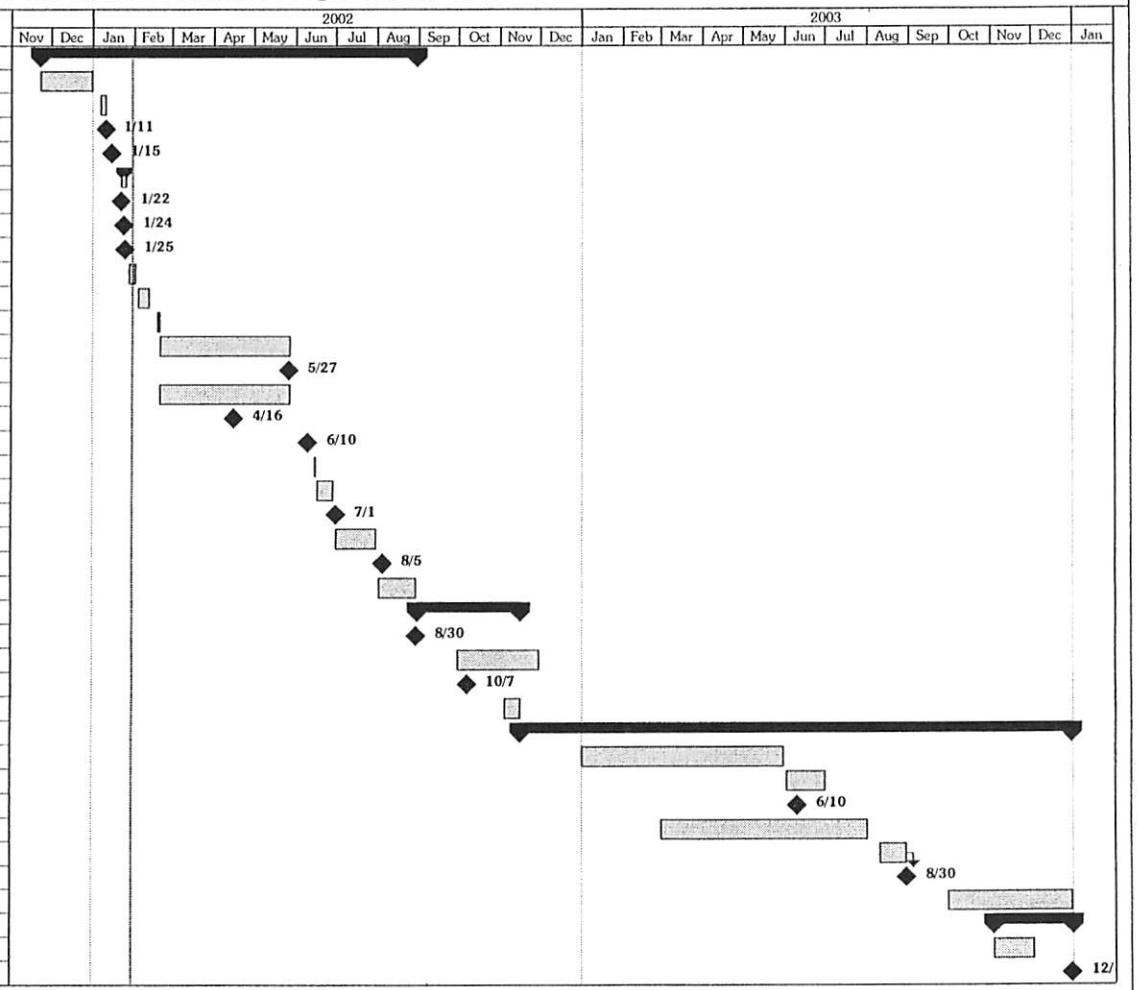
- NMFS and Council review and consider public comments on revised draft PSEIS.
- PSEIS Team prepares follow-up analyses and Council reaffirms/modifies its preferred alternative.
- PSEIS Team prepares preliminary final PSEIS for internal review.
- PSEIS Team addresses review comments and prepares final PSEIS.
- Final PSEIS is printed.

September - December 2003

- NMFS issues Final PSEIS.
- Minimum 30-day public comment period.
- NMFS signs Record of Decision.

Project Schedule - Alaska Groundfish Fisheries Programmatic SEIS

ID	Task Name	Duration	Start	Finish
1	**Review Draft PSEIS**	**270 days**	**Fri 11/23/01**	**Fri 8/30/02**
2	CAR distribution and prelim template of restructured alternatives presented to Council.	28 days	Fri 11/23/01	Mon 12/31/01
3	PSEIS team meeting - develop draft alts. for public and Council review.	4 days	Mon 1/7/02	Thu 1/10/02
4	Meet with Council Workgroup to receive feedback on draft alts. and proposed work plan.	1 day	Fri 1/11/02	Fri 1/11/02
5	NMFS & Council post draft alts. to websites.	1 day	Tue 1/15/02	Tue 1/15/02
6	NMFS holds PSEIS public meetings.	4 days	Tue 1/22/02	Fri 1/25/02
7	- Seattle Public Meeting	1 day	Tue 1/22/02	Tue 1/22/02
8	- Anchorage Public Meeting	1 day	Thu 1/24/02	Thu 1/24/02
9	- Bethel Public Meeting	1 day	Fri 1/25/02	Fri 1/25/02
10	PSEIS team develops methodology for restructured alts. analysis.	5 days	Mon 1/28/02	Fri 2/1/02
11	Council meets-Review draft alts., receive reports, and finalizes suite of alts. for analysis.	8 days	Mon 2/4/02	Mon 2/11/02
12	PSEIS team meets to finalize methodology and writing assignments.	2 days	Mon 2/18/02	Tue 2/19/02
13	PSEIS Group #1 prepares Alternatives Chapter.	97 days	Wed 2/20/02	Mon 5/27/02
14	Alternatives chapter due.	1 day	Mon 5/27/02	Mon 5/27/02
15	PSEIS Group #2 prepares main document.	97 days	Wed 2/20/02	Mon 5/27/02
16	NMFS provides Council with Status Report.	1 day	Tue 4/16/02	Tue 4/16/02
17	Council reviews Alts. Chapter-Selects prelim preferred alt. for purposes of public review.	1 day	Mon 6/10/02	Mon 6/10/02
18	PSEIS Group #2 completes review to main document.	1 day	Sat 6/15/02	Sat 6/15/02
19	Alternatives Chapter is inserted in main document.	12 days	Mon 6/17/02	Fri 6/28/02
20	Preliminary second draft complete.	1 day	Mon 7/1/02	Mon 7/1/02
21	Preliminary second draft distributed for internal 30-day review.	30 days	Mon 7/1/02	Tue 7/30/02
22	Comments on prelim second draft due.	1 day	Mon 8/5/02	Mon 8/5/02
23	PSEIS team review comments and revise second draft.	28 days	Fri 8/2/02	Thu 8/29/02
24	**Public Review of Draft PSEIS**	**77 days**	**Sat 8/31/02**	**Fri 11/15/02**
25	Revised (second) draft PSEIS printer ready.	1 day	Fri 8/30/02	Fri 8/30/02
26	NMFS releases revised PSEIS for 60-day public review.	61 days	Mon 9/30/02	Fri 11/29/02
27	NMFS provides Council with Status Report	1 day	Mon 10/7/02	Mon 10/7/02
28	NMFS holds public hearings in Portland, Seattle, Juneau, Anchorage, Kodiak, and Bethel.	12 days	Mon 11/4/02	Fri 11/15/02
29	**Final PSEIS**	**410 days**	**Sat 11/16/02**	**Tue 12/30/03**
30	NMFS & Council review and consider public comments on revised draft PSEIS.	150 days	Wed 1/1/03	Fri 5/30/03
31	PSEIS team prepares follow-up analyses.	29 days	Mon 6/2/03	Mon 6/30/03
32	Council reaffirms/modifies its preferred alt.	1 day	Tue 6/10/03	Tue 6/10/03
33	PSEIS Team prepares prelim final PSEIS for internal review.	153 days	Sat 3/1/03	Thu 7/31/03
34	PSEIS Team addresses review comments and prepares final PSEIS.	20 days	Sun 8/10/03	Fri 8/29/03
35	Final PSEIS is produced and printed.	32 days	Sat 8/30/03	Tue 9/30/03
36	NMFS issues Final PSEIS.	92 days	Tue 9/30/03	Tue 12/30/03
37	**Review Period and ROD**	**59 days**	**Mon 11/3/03**	**Wed 12/31/03**
38	Minimum 30-day public comment period.	30 days	Mon 11/3/03	Tue 12/2/03
39	NMFS signs Record-of-Decision.	1 day	Wed 12/31/03	Wed 12/31/03



Task Milestone Summary Meeting

MARINE CONSERVATION ALLIANCE

645 G S..., #...
ANCHORAGE, AK 99501

(907) 345-0622
FAX (907) 276-8262

January 29, 2002

RECEIVED
JAN 30 2002
N.P.F.M.C

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

RE: PSEIS Alternatives and Process

Dear Mr. Benton,

On behalf of the Marine Conservation Alliance (MCA), I am submitting comments on the proposed strawman alternatives for the second draft Programmatic Supplemental Environmental Impact Statement (PSEIS). As you know the MCA is a broad-based coalition of Alaska coastal communities, fixed and mobile gear fishermen, processors, support industries, western Alaska native villages and related CDQ organizations and others who are directly and indirectly involved in the Alaska groundfish fisheries. The coalition members have joined together to support science-based policy that protects the marine environments and the North Pacific fishing community.

When the National Marine Fisheries Service released for public review the first draft of the 3,300 page PSEIS, members of the Marine Conservation Alliance devoted considerable time and resources to provide detailed input to the agency for consideration in this important process given that the PSEIS will, as you know, create the blueprint for future management of the North Pacific ecosystem. Even though we were deeply disappointed when the agency chose to take a new approach and to extend the completion timeframe by two years, we are still hopeful that our participation in this public process will provide the Council and the agency with useful information and feedback which will assist the Council as it crafts the alternatives and chooses a final alternative for implementation.

The PSEIS Lacks and Needs a Clear Purpose and Need Statement

A team of MCA members has reviewed the proposed matrix and strawman alternatives developed by the agency in conjunction with the Council Executive Committee and staff. The complex structure of the matrix and the freewheeling selection of objectives designed for individual alternatives make it difficult to discern a clear purpose in this task. We strongly recommend that the Council take the time to craft a clear and concise Purpose and Needs Statement so that both it and the public clearly understand the task. Such a statement should succinctly capture the intent of Judge Zilly's order and the requirements of NEPA and the Magnuson-Stevens Act (MSA) which, by law, guides national fishery policy decision-making. We are hopeful that in clearly defining the task, the Council can more easily craft and evaluate alternatives that best meet those goals.

The Range of Alternatives is Unreasonable

The preliminary range of alternatives is inadequate and unreasonable in that its extreme, or bookend, alternatives are not balanced. The range includes five alternatives based on a continuum that begins with an alternative that is described as "minimal precaution" and ends with a "no fishing" alternative. These bookend alternatives are mismatched.

Alternative 1, called "OFL Harvest Strategy," seems to be loosely based on the original FMP implemented 20 years ago with Endangered Species Act (ESA) required restrictions superimposed. This proposed bookend alternative is an FMP developed after implementation of the MSA and so is compliant with that law and NEPA. In fact the MSA is, in itself, a mitigation of fishing impacts on the environment when an unrestrained foreign fleet harvested the marine resource within 200 miles of the US terrestrial boundaries.

By contrast, the other proposed bookend, "No Fishing" is outside the bounds of the statutory requirements of the Magnuson-Stevens Act which expressly proposes to promote and develop US-based Alaska groundfish fishery. In our view, the proper bookend to a "No Fishing" alternative is "Pre-Magnuson," or an unrestrained fishery environment. Both the "No Fishing" and "Pre-Magnuson" alternatives are outside the bounds of current statutory requirements and so are equally unreasonable. Judge Zilly emphasized that alternatives under consideration were to be "reasonable," which the "No Fishing" alternative is not. *Greenpeace v. National Marine Fisheries Serv.*, 55 F. Supp. 2d 1248, 1274 (W.D. Wash. 1999). Thus, it is our belief that consideration of these alternatives does not properly meet the task of development of a PSEIS. Or as a NEPA appellate court order said in *Citizens Against Burlington v. Busey*, "For an alternative to be considered reasonable for the purposes of NEPA, it must bear a relationship to the objective of the proposed action, as well as the views of Congress, expressed to the extent the agency can determine them, in the agency's authorization to act." 938 F.2d 190 (D.C. Cir. 1991) (quoted in *Greenpeace*, 55 F. Supp. 2d at 1272)

In short, the MCA recommends that the Council either eliminate the "No Fishing" alternative or balance it with a "Pre-Magnuson" alternative.

A Look at Specific Alternatives

If the "No Fishing" Alternative is dropped, MCA supports the conceptual range and themes of the remaining alternatives with some modification.

Alt. 1: As mentioned earlier, Alternative 1 seems to be loosely based on the original FMP but is made statutorily compliant with ESA with inclusion of SSL and seabird protective measures. We propose that this alternative be an accurate representation of the original FMP stripped of all succeeding amendments except those that are statutorily required such as ESA measures. In this way the Council is provided with a tool to re-evaluate those individual measures, assess their impact on the environment and consider whether some might be rescinded should they negatively impact the environment.

Alt. 2: This alternative attempts to capture the elusive and adaptive status quo fishery management regime by using a snapshot of regulations in place during the 2002 fishery. We

support this as an alternative but may provide comment at the Council meeting on the specific components included in the objectives and tools sections of the matrix.

Alt. 3: This alternative attempts to accelerate precautionary management measures through rights-based management, increased habitat protection and bycatch constraints. It is loosely based on Alternative 6.1 from the first draft of the PSEIS, an alternative that received considerable comment from MCA. We will provide the Council with specific recommendations in the crafting of this alternative at the February Council meeting.

Alt. 4: This alternative seems to be an amalgam of strongly protectionist measures advocated by some in comments on the first draft of the PSEIS and seems to capture that end of the spectrum of management options, or, using NMFS's terminology, it represents "maximum precaution" as a balance to Alternative 1 which depicts representation of "minimal precaution."

Management Actions are Inappropriately Considered as Management Objectives

Each of the strawman alternatives identifies 19 objectives. Some of the objectives seem more like specific management actions. It is not the role of a PSEIS to recommend specific management measures but, rather, to serve as a basis for future "project specific" NEPA analysis tiered from the policy objectives. That is all that is required by NEPA and all that Judge Zilly has requested. Greenpeace, 55 F. Supp. 2d at 1273 n.37, 1276 (stating "a programmatic analysis would not require consideration of detailed alternatives with respect to each aspect of the plan - otherwise a programmatic analysis would be impossible to prepare and would merely be a vast series of site specific analyses"). As you know, the Council will develop specific management measures in the future in accordance with the programmatic guidance that will be provided by the final PSEIS and the MSA.

The Baseline and Evaluation Criteria Should Be Based Upon the Original FMPs

The draft PSEIS proposes to evaluate each alternative by comparing and contrasting it against the current management system. In using the current system as the yardstick for the evaluation of all alternatives, the PSEIS erroneously makes the current system the baseline from which to measure the alternatives' impacts on the environment. Instead, the baseline should be the fishery FMP that was the subject of the original EIS twenty years ago. Indeed, Judge Zilly stated that, "NEPA require[s] a broad programmatic SEIS in order to fairly evaluate the dramatic and significant changes which have occurred in the GOA and BSAI fisheries." *Greenpeace* 55 F. Supp. 2d at 1273. Thus, the only way to fulfill NEPA's requirements as set forth by Judge Zilly is to measure the changes that have occurred in the GOA and BSAI fisheries since the issuance of the original FMPs.

Use of the original FMPs as the baseline is further reinforced by Judge Zilly's ruling that the PSEIS contain a thorough analysis of the cumulative effects of the FMPs. *Greenpeace*, 55 F. Supp. 2d at 1273. In order to analyze cumulative effects, the Court ruled that NMFS must analyze the impacts of past actions. *Id.* As Judge Zilly stated, "'Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably future actions . . . Cumulative impacts can result from individually

minor but collectively significant actions **taking place over a period of time.**"[1] Put differently, the cumulative effects of FMP-based groundfish management can only be determined by comparing these effects to the environment as it existed prior to the amended FMPs.

Evaluation of Alternatives

The ultimate objective of a PSEIS is to "help further informed decision-making." Thus, the heart of that analysis is not to compare one alternative against another, but to determine how each alternative succeeds in achieving the balanced purposes of the MSA while mitigating negative impacts on the marine and human element of the environment. To accomplish this, the objectives and tools of each alternative should be evaluated using the National Standards. In this way, the Council can properly evaluate the trade-offs of each proposed objective and hypothetical action using the lawful constraints it is required to abide by. Other applicable law should be used to provide an overall compliance assessment of each alternative.

Additionally, in an effort to provide forward –looking guidance in the development of future policy guidelines, the MCA recommends that the Council consider inclusion of the National Research Council's policy guidelines for sustainable fisheries as part of its evaluation criteria.

In conclusion, the PSEIS, once finalized, should comfortably stand as a policy document providing a context from which future NEPA-required analysis tailored for specific "projects" can be tiered. MCA looks forward to working with the Council and the agency in development of a PSEIS that accomplishes this task.

Sincerely,

Donna Parker

Donna Parker
Chair, MCA PSEIS Committee

cc: Jim Balsiger, Regional Director, NMFS

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[1] Moreover, the Council on Environmental Quality's "handbook" on conducting cumulative effects analysis emphasizes the importance of establishing environmental "baselines" from which cumulative effects can be measured based upon the impacts of past actions. *See* "Considering Cumulative Effects under the National Environmental Policy Act," Council on Environmental Quality vi (January 1997). It stated, "Determining the cumulative environmental consequences of an action requires delineating the cause-and-effect relationships between the multiple actions and the resources, ecosystems, and human communities of concern. . . . Most often, the historical context surrounding the resources is critical to developing these baselines and thresholds and to supporting both imminent and future decision-making." *Id.*

ARCTIC STORM MANAGEMENT GROUP, LLC
400 North 34th Street, Suite 306
Seattle, Washington 98103 U.S.A.

January 30, 2002

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

RE: Second Draft PSEIS

Dear ~~Mr. Benton~~ Dave,

On behalf of Arctic Storm I am writing to comment on the second draft PSEIS. We recommend that in the design and evaluation of proposed alternatives, the Council work to keep this task simple and straight forward so that the public can understand and meaningfully participate in the process.

To accomplish this task we recommend that the Council:

1) Draft a clear and concise Purpose and Need Statement;
2) Design a range of alternatives that is reasonable, well balanced, and within the confines of existing law;
3) Develop policy objectives that are not management actions;
4) Develop hypothetical management actions that might flow from identified policy objectives;
5) Use as a baseline the original, unamended BSAI and GOA FMPs so as to facilitate an understanding of the cumulative impacts since the original EIS twenty years ago;
6) Evaluate the alternatives, including the objectives and hypothetical actions using the National Standards of the Magnuson-Stevens Act;
7) Choose an alternative that best meets the goals of the Purpose and Needs Statement using these National Standards to provide balanced guidance in understanding the trade-offs embodied in each of the proposed alternatives.

We urge you and the Council not to make this process more complicated than it need be. Good luck!

Sincerely,

Walter Pereyra
Chairman

(206) 547-6557 / FAX: (206) 547-3165

January 26, 2002

North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage AK 99501-2252

Attn: David Benton, Chairman

Re: Letter of Comment on NMFS Draft Programmatic SEIS by the Kodiak Island Borough

Dear Council and Panel Members:

We are submitting the following comments to draw attention to our concerns about process and the latest draft of the Programmatic SEIS (PSEIS) being submitted by NMFS. As to process, we are very frustrated by the proposals in the draft and its 11th hour submission to the Council. Despite its reference to public comment on the original PSEIS, this new draft seems to have taken a very restrictive and pessimistic approach to policy making, which should be flexible and realistic. In our opinion, based on our review of the comment report, the draft does not adequately reflect the consensus of opinion from the stakeholders.

Although we appreciate the reduction in the number of alternatives, we do not think the recalibration of the scope and direction of them is appropriate. For instance, use of Alternative #5 would result in economic devastation of the fishing industry and fishing dependent communities. As stated in our previous submission and substantiated by the McDowell Group's report, the fishing industry represents 57% of the Kodiak area employment, which coupled with the service sector, would mean that Alternative #5 could result in over half of the jobs in Kodiak being eliminated overnight. Alternative #5 should be deleted as unrealistic based on its premise of a TAC of zero and its requirement for proof of no ecosystem impact prior to fishing, which is an unrealistic and impossible burden. For this and other reasons, Alternative #5 is no more an Alternative than returning to the relatively wide-open days of the post-Americanization period of the eighties.

Another key point is the use of Alternative #2 as the "status quo" which implies no action and a placid attitude, when in fact the current situation is much more restrictive than Alternative #1 or the historic situation. We do not mean to imply more cannot be done and some of the tools documented in the draft are appropriate for the Council to review and utilize, but only while balancing the impacts of the use of those tools on the industry and communities.

Another point we would make is that the draft has become more of an action document than a policy document to guide the direction of North Pacific fishery management policies. There is no clear statement of purpose or direction from which to gauge future actions, and the draft seems to force future actions in a downward direction of continued dramatic reductions in commercial fishing activities without any braking mechanisms. We believe that prior to implementation, any decision should be balanced with documentation of the socio-economic pain that is empirically and independently generated and is systematically recalibrated. Based on this, we would request a clear and concise requirement for the creation and use of solid socio-economic analysis to determine the depth and severity of proposed actions, and that analysis would be a fundamental component of the decision making process and given great weight in determining policy.

At the Anchorage PSEIS meeting to review the new draft on January 25, 2002, a participant made the comment that the fisheries should just be shut down because the Council created fishery plans that are too complex, and the public process was too messy. This attitude seems to have been embraced to some degree under the new plan, which we believe boxes in the Council and restricts their ability to craft good policy. The desire by some to manipulate the process through the court system and ignore the Council process must be strongly resisted and protection of the policies set forth in the Magnusen-Stevens Act should be safeguarded.

We would end our comments by restating that Alternative #2 is our preferred choice with flexible and thoughtful incorporation of portions of Alternative #3 to achieve more conservative measures when and if scientific evidence warrants further action. We also resist implementation and closures of additional areas until there is strong supporting scientific evidence that those actions would address abundance and productivity. Just as a pruned tree bears more fruit, it may well be that appropriate harvest levels of ground fish may do a better job of achieving abundance and productivity. Alternative #4 should be retained as the outside border for the setting of policy only after moderating its severe restrictions.

Finally, we restate our strong support for the public process the Council provides and believe the Council effectively serves as a jury by ensuring a full public record and deliberative decisions in the best interests of all. We look forward to assisting the Council's efforts to ensure a healthy marine environment that is productive and balanced with the social and economic interests of the industry and communities in the years to come.

Respectfully submitted

Gabrielle Ledoux, Mayor

Thomas Walters, Deputy Mayor

for Carolyn Floyd, Mayor

Cc: Jim Balsiger, Regional Director, NMFS

High Seas Catchers' Co-op

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January 30, 2002

Jim Balsiger
Regional Director
National Marine Fisheries Service - Alaska Region
709 West 9th Street, Room 401
P.O. Box 21668
Juneau, Alaska 99801

Re: Scoping of the DPSEIS

Dear Jim,

In attempting to apply the "Matrices" approach to restructuring the DPSEIS it is difficult to understand how certain elements of the Dec. 11, 2001 memo from Craig O'Connor to Bill Hogarth on "Guidance on PEIS" relate to the information provided on the NMFS website on "Strawman Alternatives."

Conceptual Framework for the Alternatives

The document provided on the Strawman Alternatives contained the following statement:

VERY IMPORTANT!!
• Figure 1. Elements of Second Draft Alternatives
This diagram should answer questions concerning the structure of the alternatives (i.e. elements), and the framework for the eventual policy decisions concerning future management of the Alaskan groundfish fishery (e.g. the Record of Decision).

The diagram raises more questions than it answers. By presenting the: "Pros/Cons of crossing 'the line' in PSEIS," it seems to imply that the decision between having the 2nd DPSEIS cross the line between policy-making and rule-making is one that is still pending.

We believe that the DPSEIS should be a policy document, and that the Council should have latitude to implement the policy over time through the normal rulemaking process, which will take into consideration new information and balance competing policy objectives.

We also believe that the Council should be the lead body in selecting the preferred alternative, subject to the approval of the Secretary that the Council policy decisions are consistent with applicable law.

Matrix or Rubix cube?

The document provided on the Strawman Alternatives also stated:

• Figure 2. Comparison of First and Second Draft Alternatives
Shows the major problem with the alternatives developed in the first draft of the PSEIS.

While the NOAA-GC memo concluded that the structure of the most recent DPSEIS was not acceptable, it is not clear that Fig. 2 presents a "Solution to problem."

Matrices are useful to a reader if they are two dimensional with a limited number of fields. Three dimensional matrices are more challenging, but a four dimensional matrix is beyond the comprehension of just about anyone. It appears that the proposed structure of the next PSEIS version is 4 dimensional matrix based on string theory.

While Fig. 2 presents a 2 dimensional matrix with themes rather than alternatives on the X axis, and tools on the Y axis, it is not that simple. The 2 dimensional diagram presents a second Y axis on the right hand side of the matrix, which in reality would be a Z axis in the 3rd dimension.

However, even this 3 dimensional depiction of the matrix is not consistent with the textual description of the "strawman" alternatives, which list 19 "objectives" under each alternative. A closure reading suggests that these "objectives" are what are represented on the left hand Y axis under the label of "tools." This results in an unfortunate blurring of the distinction between "objectives" and "tools."

For example, consider "objective" #17 dealing with observer program. An "objective" related to an observer program is the acquisition of adequate data to satisfy the management needs. A tool for obtaining that data is an observer program based on a sampling design with a certain level of coverage. A "sub-objective" relating to a data collection program is that the distributional impacts of the cost be "fair." A set of "tools" to achieve the desired cost distribution include federal funding, fee based funding, or user-pay funding.

It becomes clear that the left hand Y axis represents two separate axis, one for objectives and one for tools – and now we have a 4 dimensional matrix or two 3 dimensional matrices in parallel universes.

Ultimately, the "objectives" underlying the choice of tools, are mitigation measures (discussed further under "Mitigation," below). If the goal of the PSEIS is a preferred "policy planning" document, rather than a "drop-in" substitute FMP with all the regulatory tools hardwired, then one must recognize that the ultimate preferred alternative is likely to be a synthesis of the alternatives selected for analysis. This means that component "objectives" must be able to move from one alternative to another, and that "tools" used to achieve the "objective" may need to be scaled differently. Additionally, a tool used to deal with one objective may have a different or conflicting effect relative to another objective. If "objectives" and "tools" can move between alternatives, a 4 dimensional matrix requires the addition of "string theory" to produce an analytical document to satisfy the NOAA_GC memo.

Each of the mitigation measures inherent in status quo and the other alternatives is a management tool. Each tool/element can be varied in scale or intensity within any of the "theme/alternatives." Assuming 5 alternative/themes, and multiple competing objectives, once you inject the suite of tools (including the 15 tools/mitigation measures listed in the following section), each set a one of

a varieties of "levels," depending on which competing objective is being addressed, the matrix generates an almost infinite number of outcomes.

How will anyone ever know how the tweaking of any particular element resulted in an environmentally good or bad effect?

Mitigation

Page 7 of the O'Connor memo sets out the range of alternatives (status quo as baseline, other reasonable alternatives, and the mitigation alternative.) The mitigation alternative is "the final alternative to be considered, the mitigation alternative, is a spin on the proposed action alternative." This theme of mitigation is important, however it is not clear how the matrices will reflect the mitigation all ready contained within the status quo without appropriately defining the baseline.

The real basic action to be taken under the MS_FCMA is the authorization of harvest of fish in the EEZ to achieve an "Optimum Yield," (implying an Allowable Biological Catch and TACs.) This was captured in the 1st FMP developed by the council two decades ago. Everything other action the Council has taken (in the cumulative measures now embodied in status quo) is in some degree a mitigation measure.

These mitigation elements include:

- Monitoring (observer program and other reporting requirements)
- The multi-tier TAC setting process (incorporating increased precaution in proportion to uncertainty).
- Area closures (protecting habitat for various species, such as PSC species, various marine mammals, sea birds, etc.)
- Prohibition on Forage fish fisheries
- 2 Million ton OY cap
- PSC limits
- MRBs
- Apportionments of TAC
    - Seasonal TAC apportionment
    - Area sub-apportionments of TACs
    - Subdivisions species group TACs
    - Gear apportionments of TACs
    - Sector apportionments of TACs
- IRIU
- Gear restrictions (pelagic trawl for pollock, tori lines for longline, etc)
- Effort limitation (LLPs, ITQs for sablefish, AFA for pollock)

Each of these elements have mitigated the effects or impacts of allowing a unconstrained harvest of the ABCs, on the physical or human environment (and both in many cases).

Unfortunately, the fact that the Council has acted to include each of these mitigation elements (and ratcheted them up over time) within status quo seems to get lost if status quo is the preferred alternative, since the "mitigation alternative" is a spin on the proposed action alternative.

As a result, to get credit for the mitigation, one is forced to advocate that the "preferred alternative" or "proposed action" be to revert to the original FMP, and then mitigate it until it

looks like "status quo." Some mitigations are no longer discretionary, some of the mitigation elements adopted by the Council were (or have subsequently been) mandated by Congress.

Range of Alternatives

This leads to questions on what can be included in the range of reasonable alternatives, particularly whether you can have an alternative that is outside the statutory bounds. In the NEPA training class sponsored by NMFS, it was mentioned that some case law indicates that such alternatives should be included. If alternatives can contain elements not authorized in statute, then there should be symmetry between a "wild and free" alternative and a "no fishing" alternative. Or, if only those tools and objectives authorized in statute are to be included in the range of alternatives, then alternative 5 should be dropped from consideration.

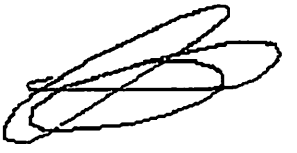
Because status quo is indeed a 'highly mitigated' program relative to the fishery that was the subject of the EIS on the original FMP, then the analysis needs to encompass a range of alternatives that brackets status quo.

Measuring Against the Appropriate Baseline

The heart of the analysis is not to compare one alternative against another, but to determine how each alternative succeeds in achieving the purposes of the MS-FCMA, while mitigating potential negative impacts and meeting the constraints imposed by other applicable law.
As noted above, the status quo is a complex set of mitigation measures.

The appropriate baseline is the fishery FMP that was the subject of the original EIS. The cumulative actions embodied in status quo or other alternatives are elements have mitigated the impacts on the physical or human environment of allowing an unconstrained harvest of the ABCs.

Sincerely,



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cc:
Dave Benton, Chairman NPFMC
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Lauren Smoker, NOAA-GC

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January 24, 2002

Dr. William Hogarth
Assistant Administrator for Fisheries
National Marine Fisheries Service
1315 East West Highway
Silver Spring, MD 20910

Dear Bill:

We are again writing with regard to the draft programmatic groundfish SEIS. As you recall, we wrote to Secretary Evans on October 10, 2001, relaying our desire to be a full partner with NMFS in developing the preferred alternative and finalizing the DPSEIS. While we did not receive a written response, we did receive a progress report from Dr. Jim Balsiger on the status of the DPSEIS, and we reviewed the notice of intent published on November 27 announcing your decision to revise the DSEIS and restructure the alternatives over the coming year. In public testimony on this topic in December, the fishing industry and other interest groups voiced their concerns on further development of the DPSEIS, and raised several questions with regard to timing, impacts to other Council initiatives, and specific nature of the revised alternatives.

Our staff have been working with NMFS staff over the past few weeks on developing revised alternatives for analysis, and a subgroup of Council members, including myself, were briefed on January 11th on the nature and scope of those alternatives. We were also briefed on the timing of events over the next two years, which includes Council action in February to approve the revised alternatives for analysis. So, many of the questions which were raised in December are being resolved and the picture is now coming into better focus. However, in preparation for our February meeting, there are still a few fundamental questions which we would like to reiterate, including:

1. Will the Council's decision at the upcoming February meeting constitute the final list of alternatives to be analyzed, or might the agency include alternatives not identified by the Council?
2. It is our understanding that the Council will be identifying the preferred alternative. Would that occur prior to release of the draft for public comment, or prior to a final decision (ROD) by the Secretary?
3. After the alternatives have been developed, will the Council be able to combine elements from different alternatives into a composite preferred alternative?
4. Under the Magnuson-Stevens Act Councils develop FMPs. If the Council chooses an alternative that the Secretary does not agree with, it is our understanding that the Secretary may either disapprove, or partially disapprove, that alternative, in which case it would return to the Council for further consideration and action. Is this understanding correct in the context of the DPSEIS process?

Dr. Balsiger raised our comfort level somewhat by indicating that NMFS wants to work closely with the Council in structuring the alternatives and throughout the decision process. He stressed cooperation with the Council, and while many of us question the need to revise the DPSEIS, we intend to fully participate in this collaborative process, of which the next step is identifying alternatives for analysis at our upcoming February meeting. If you have answers to these lingering questions, we would appreciate hearing them, or we can discuss them further at our February Council meeting.

Sincerely,

David Benton
Chairman

cc: Dr. Jim Balsiger
Steve Davis

TO: David Benton, Chairman
North Pacific Fishery Management Council
605 West 4th Avenue, Suite 306
Anchorage, AK 99501-2252

CC: James W. Balsiger, Administrator, Alaska Region
National Marine Fisheries Service
P.O. Box 21668
Juneau, Alaska 99802-1668

January 31, 2002

RE: North Pacific Groundfish Programmatic SEIS Alternatives

Mr. Chairman:

The fisheries managed via the FMPs constitute the largest human impact on the environment of the North Pacific, with far-reaching consequences for living marine resources. As such, the undersigned organizations welcome the opportunity to provide this input to the Council as it advises NMFS on the development of the Revised Draft Programmatic SEIS, and will continue to provide input to NMFS in the coming weeks.

In 1998, NMFS prepared a North Pacific Groundfish Supplemental EIS that focused narrowly on the method of setting the total allowable catch (TAC) for the groundfish fisheries while not analyzing other crucial issues, impacts, and alternatives. On July 13, 1999 the U.S. District Court, in *Greenpeace et al. v. NMFS et al.* ruled that this EIS was deficient in scope because the alternatives focused only on groundfish TAC levels. The court indicated that given the large changes that have occurred in both the FMPs and the environment since the original EISs were prepared, a *Programmatic* SEIS that addresses the full scope of FMP programs is required.

NMFS thus began the scoping process that ultimately culminated in the 2001 Draft PSEIS, which contained several thousand pages of analysis. The 2001 Draft PSEIS reflected the enormous complexity, uncertainty, and scope of the impacts of the FMPs on the environment, but did not satisfy the analytical and action-forcing requirements of NEPA. First, NMFS did not provide a full analysis of the direct, indirect, and cumulative environmental impacts of the FMPs in their entirety. Second, NMFS did not prepare adequate alternatives to the status quo FMPs, choosing instead to analyze single issue areas designated as alternatives.

The 2001 Draft PSEIS was further deficient in that the alternatives were not full FMP alternatives and thus did not offer the decisionmaker a real choice amongst alternatives. Properly designed, each alternative in the Revised Draft PSEIS must represent an alternative way to manage the fisheries. Thus, in addition to two alternatives that serve as bookends for analytical purpose (an overfishing alternative and a no fishing alternative), each alternative must include a full set of management measures required of an FMP and must analyze the effects of those management measures on the ecosystem and on the issue area identified in the scoping process. It is therefore incumbent upon the

Council to advise NMFS to develop several additional fully realized alternatives that take the following into consideration.

(1) The PSEIS should be an action-forcing document that infuses the policies and goals of NEPA into the ongoing programs of the North Pacific groundfish Fishery Management Plans (FMPs).

The primary purpose of an EIS is to *"serve as an action-forcing device to insure that the policies and goals defined in the Act are infused into the ongoing programs and actions of the Federal Government".*[1] These policies and goals include protection and restoration of the environment.[2] Thus the EIS is not a paperwork exercise,[3] not a tool "*to rationalize or justify decisions already made,*" but a document prepared early enough in the agency's decisionmaking process "*so that it can serve practically as an important contribution to the decisionmaking process*".[4] In this case, the decision involves the future direction of federal fisheries and ocean resource management in the North Pacific, as reflected in the goals, policy objectives and specific implementing programs of the FMPs.

NMFS has indicated both on and off the record that it considers this EIS a *pro forma* exercise required by law, and has stated that its purpose is only to "provide the NPFMC and NMFS with information that will result in a concrete set of policy goals and objectives for the next 5-10 years".[5] These statements are in direct contravention to regulations that clearly state that an EIS is an "action-forcing" document. While a Programmatic EIS does serve the function of evaluating ongoing activities that the program covers, it is also intended that concrete actions which can immediately be implemented be both offered and analyzed.

(2) The policy framework and scope of the status quo FMPs is not sufficient to implement ecosystem-based management.

The 2001 Draft PSEIS indicated that the North Pacific Management Council has developed an ecosystem-based approach to managing fisheries.[6] However, the report to Congress from the Ecosystem Principles Advisory Council (EPAP) indicated that existing FMPs are *not* sufficient to implement an ecosystem-based approach to management.[7] Although some of the EPAP's principles, goals and policies are applied in current management in the North Pacific, EPAP concluded that they are not applied

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[1] 40 C.F.R. 1502.1.
[2] 40 C.F.R. 1500.1(c).
[3] See Ronald E. Bass, Albert I. Herson, and Kenneth M. Bogdan, The NEPA Book, A Step-By-Step Guide On How To Comply With The National Environmental Policy Act (Solano Press Books, Second Edition , 2001), p. 163: *"NEPA's purpose is not to generate paperwork (even excellent paper), but to foster excellent action. Its policies are intended to promote better decision making through an interdisciplinary approach to environmental planning."*
[4] 40 C.F.R. 1502.5.
[5] NMFS, "Alaska Groundfish Fisheries Programmatic SEIS Update" Handout.
[6] Draft PSEIS 4.9, Table 4.9-1.
[7] EPAP, Ecosystem-Based Fishery Management, A Report to Congress, April 1999, p. 27.

comprehensively and systematically in any fishery management region. Thus, the major recommendation of the EPAP report to Congress is to mandate the development of an explicit "Fisheries Ecosystem Plan" (FEP) for ecosystems under the jurisdiction of the regional Fishery Management Councils.

In the current management framework, goals and objectives for ecosystem-based management are expressions of intent and lack force. Unless these goals and objectives are integrated into the FMP policy framework and treated as obligatory requirements of "conservation and management," they will remain discretionary goals that are not integrated into the annual TAC Specification process. Thus, each alternative beyond the Status Quo and the bookend 'overfishing' alternative should fully integrate an FEP into the FMPs as a governing framework of goals, objectives, and implementing programs.

(3) The PSEIS must be comprehensive in its assessment of FMP alternatives.

The alternatives section is the heart of an EIS and the success or failure of the pending PSEIS will depend upon whether NMFS analyzes a reasonable range of FMP alternatives. The 1998 SEIS failed to provide a broad, programmatic analysis of the FMPs as a whole because the narrow range of alternative TAC levels did not help decisionmakers assess *"whether the fisheries should continue to be conducted under the current structure of the FMPs, or whether other alternatives would be more beneficial".*[8]

The Council should advise NMFS to consider a wider range of alternatives than those presented as the "strawman" alternatives. While it is useful to have the bookends of 'overfishing' and 'no fishing', the agency must also consider a range of alternatives between the bookends that are truly viable. As such, the Council should advise NMFS to analyze several FMP alternatives that might be implemented following the analysis. This not only keeps the PSEIS from being an intellectual exercise, but also provides the practical analysis of options for the Council to implement in the preferred alternative.[9] NMFS' "strawman" alternatives offer a varying degree of ecosystem protection based upon the use of nineteen different management tools and general policy objectives. While this is useful in assessing what components of FMP alternatives can be bundled together to form the different alternatives, it confuses the analysis by omitting several key considerations. The Council should advise NMFS that its analysis of the FMP alternatives must include considerations of both the temporal and spatial aspects of the fisheries. Thus the different FMP alternatives, and how they impact the environment when they are actually applied, can be analyzed fully.

Attached is the undersigned's revision of NMFS' "strawman" Alternative 4, which NMFS staff indicated was intended to reflect the comments on the 2001 Draft PSEIS. Instead of bundling management tools and objectives together, the revised Alternative 4

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[8] District Court Order, pg. 38

[9] An illustration of how the process has worked in other programmatic management contexts is available from the Forest Service's Forest Ecosystem Management Assessment Team, which considered 54 alternatives before ultimately narrowing the number down to ten alternatives to be considered in the Draft and Final SEIS.

makes the changes outlined below. The arrangement is intended to reflect a careful delineation between the management framework, management objectives, and management tools to accomplish objectives.

(4) Alternative 4 requires substantial revision to reflect the intent of PSEIS comments on ecosystem-based management.

An overarching goal of the EPAP's FEP concept is to put ecosystem principles into *practice*, as expressed in the MSFCMA Sec. 406. As an organizing framework of goals, objectives and implementing programs, the FEP/FMP framework should make ecosystem-based management explicit. As noted in Draft PSEIS public comments by Greenpeace, American Oceans Campaign, Sierra Club, and National Environmental Trust, however, the EPAP's FEP "action items" are all informational in nature, implying that an FEP is solely a source of information rather than a set of programs that embody its goals and objectives. We maintain that these "action items" are *not* the FEP itself; rather, they represent the baseline of available scientific and socioeconomic information about the action area in question, which is required to formulate specific FEP/FMP *programs* that achieve conservation and management goals. The PSEIS should serve as the document that provides the informational baseline identified by EPAP for *implementing* ecosystem-based management in the FMP programs of the preferred alternative and final Record of Decision.

Thus the incorporation of ecosystem principles and policy objectives into the FMPs is essential to define priorities clearly, provide explicit direction, and guide implementation in the rule-making process at the Fishery Management Councils. The policy framework for an ecosystem-based FMP should include clear definitions of key terms such as "conservation and management," "sustainability," "healthy ecosystem," "ecosystem-based management," and "precautionary approach." It must refine definitions of overfishing and sustainability in an ecosystem context. For instance:

- "**Healthy ecosystem**" means an ecosystem in which productive capacity and habitat is maintained, diversity of the flora and fauna is preserved, and the system retains the ability to regulate itself. Such an ecosystem should be similar to undisturbed ecosystems with regard to productivity, nutrient dynamics, trophic structure, species richness, stability, resilience, contamination levels, and the frequency of diseased organisms (NMFS 1997, 62 FR 66551).
- "**Sustainability**" means to maintain a healthy ecosystem and preserve the ecological relationships between harvested, dependent and related species across generations, so as not to deny future generations the goods and services provided by marine ecosystems that we enjoy today (CCAMLR; Christensen et al. 1996).
- "**Ecosystem-based management**" means management of fisheries with the objective of maintaining healthy ecosystems and preserving the natural diversity of populations, species, and biological communities so as not to jeopardize a wide range of goods and services provided by marine ecosystems, including food, revenue, and recreation for humans (NRC 1999).

- "**Precautionary approach**" means that the absence of definite scientific information should not be an excuse for inaction to address suspected harmful activities; the burden of proof should be on the user of a resource to show that the intended use will not have a detrimental effect (WWF-IUCN 2001).[10]

As an ecosystem-based alternative, the Strawman Alternative 4 risks being construed too mechanically and statically. For instance, the title suggests that the socioeconomic goal of reducing capacity and addressing the race for fish is to be achieved only through the establishment of community-based cooperatives. That begs the question of what to do about large sectors of the groundfish industry that are *not* in the Alaskan coastal communities, yet a credible ecosystem-based management plan the goal must address all components of the fishery. The goal is *capacity reduction and an end to the destructive and wasteful race for fish*, but an equitable capacity reduction plan should also provide opportunities for communities within the overall framework of protecting ecosystem functions and processes that sustain fisheries.

To take another example, Objective #4 proposes to reduce the ABC to account for uncertainty and ecological considerations (good so far) by setting highly conservative TAC levels for pollock, Atka mackerel, Pacific cod and long-lived rockfish. As stated, #4 implies that only those species merit such consideration. More properly applied, and more accurately stated,

> "*Uncertainty and ecological considerations should be incorporated in the setting of acceptable biological catch (ABC) and the total allowable catch (TAC) for all exploited stocks, including genetic, life history, food web, and habitat considerations.*"

To avoid the impression that ecosystem-based management is a static concept, and to ensure that the concept institutionalizes learning and is fully adaptable to new information, establish a new objective emphasizing the need for adaptive management of the fisheries and ongoing collection of information to enhance learning, improve understanding and implementation:

> "*Manage fisheries in an explicitly adaptive manner to facilitate learning, including large no-take marine reserves that can provide experimental control areas. Establish a coordinated, long-term ecosystem monitoring program to collect baseline information and compile existing information from a variety of ongoing research initiatives.*"

To address goals for conservation of biodiversity, a further objective should be added:

> "*Conserve native species and biological diversity at the genetic, species and community levels.*"

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[10] World Wide Fund for Nature (WWF) and the World Conservation Union (IUCN). The status of natural resources on the high-seas, prepared by the Southhampton Oceanography Centre & Dr. A. Charlotte de Fontaubert. May 2001, p. 74.

Under Objective #11, both additions and revisions are required to capture the intent of our FEP example:

> *"Zone and delimit fishing gear use in the action area, establish no-take marine reserves distributed over the full range of habitat types encompassing at a minimum 20-50% of management areas, and close at least an additional 20-50% of spawning areas of target species during spawning."*

The attached version of Alternative 4 is offered as a substitute for the "strawman" version in its entirety and more accurately reflects the intent of several Draft PSEIS comments.

(5) Conclusion

The undersigned respectfully request that the Council:

(1) Advise NMFS to consider several viable FMP alternatives in addition to the NMFS "strawman" alternatives;
(2) Advise NMFS to modify Alternative 4 (as attached) for consideration as an alternative FMP in the revised Draft PSEIS; and
(3) Advise NMFS that an analysis that articulates the difference between management objectives and management tools is necessary so that the differences between FMP alternatives can be clearly understood.

Signed,

Whit Sheard
Fish Conservation Program Manager
The Ocean Conservancy

Whit Sheard for
Phil Kline
Fisheries Policy Director
America Oceans Campaign

Whit Sheard for
Andrea Durbin
Campaign Director
Greenpeace

Whit Sheard for
Jack Hession
Alaska Representative
Sierra Club

Whit Sheard for
Gerald B. Leape
Marine Conservation Program Director
National Environmental Trust

Dave Cline
Dave Cline
Alaska Field Office Director
World Wildlife Fund

Attachment

REVISED ALTERNATIVE 4: An Ecosystem-Based FMP

Management Framework:

Establish a fishery conservation and management program incorporating ecological principles and policy objectives to maintain ecological relationships between exploited, dependent and related species as well as ecosystem processes that sustain them. Adopt a highly precautionary approach to scientific uncertainty in which the burden of proof is shifted to the user of the resource to demonstrate that the intended use will not have a detrimental effect. Management decisions will utilize the best scientific information available while recognizing that science cannot eliminate uncertainty and that action must be taken in the face of large uncertainties, *guided by policy priorities and the precautionary principle.* Management decisions will involve and be responsive to the public; incorporate and apply ecosystem principles; address the impact of fishing on predator-prey, habitat and other important ecological relationships in the marine environment; draw upon Federal, State, academic and other capabilities in carrying out research, administration, management and enforcement; implement practical measures that avoid or minimize bycatch; and include the use of appropriate and equitable allocative or cooperative programs to reduce excess capacity and end the destructive, wasteful race for fish, including fishing cooperatives, community quota programs, and other measures such as the halibut/sablefish IFQ program. NMFS and the Council will achieve these objectives by implementing the FEP in the final Record of Decision.

Management Objectives:

1. Develop and implement a Fishery Ecosystem Plan FMP based upon goals, objectives and programs as articulated by NRC (1999), EPAP (1999), the Convention on the Conservation of Antarctic Marine Living Resources (CCAMLR), and other relevant sources.
2. Manage fisheries in an explicitly adaptive manner to facilitate learning (including large no-take marine reserves that provide experimental controls) and establish a coordinated, long-term monitoring program to collect baseline information and better utilize existing research information to improve implementation of the Fishery Ecosystem Plan.
3. Conserve native species and biological diversity at all relevant scales of genetic, species, and community interactions.
4. Protect marine habitats, including EFH, HAPC, ESA-designated critical habitats and other identified habitat types.
5. Set fishing levels in a highly precautionary manner to preserve ecological relationships between exploited, dependent, and related species.
6. Reduce the ABC to account for uncertainty and ecological considerations for *all* exploited stocks, including genetic, life history, food web and habitat considerations.
7. Include bycatch mortality in TAC accounting and improve the accuracy of mortality assessments for target, non-target, and PSC bycatch, including unobserved mortality.

8. Reduce bycatch, discards and PSC limits (e.g., by 10%/year for five years) and phase out fisheries with >25% bycatch rates.
9. Set stringent bycatch limits for vulnerable non-target species based on best available information from research, groundfish surveys, and Observer Program fishery data.
10. Set bycatch limits for all seabird species and cooperate with USFWS to develop fishing methods that reduce incidental takes to levels approaching zero for all vulnerable, threatened or endangered species.
11. Protect Steller sea lion foraging areas and the prey base by prohibiting trawling in all sea lion critical habitat, limiting catches by other gear types in critical habitat, and reducing catches of sea lion forage species (including pollock, Atka mackerel, and Pacific cod) to address the competitive effects of single-species exploitation strategies.
12. Zone and delimit fishing gear use in the action area and establish no-take marine reserves (both pelagic and nearshore) encompassing 20-50% of management areas that conserve EFH, provide refuges from fishing, serve as experimental controls to test the effects of fisheries, protect genetic and biological diversity, and foster regeneration of depleted stocks in fished areas.
13. Close an additional 20-50% of known spawning areas of target species across the range of the stock to protect the productivity and genetic diversity.
14. Prohibit trawling in fisheries that can be prosecuted with more selective gear types and establish trawl closure areas to reduce bycatch and protect habitat.
15. Reduce excess fishing capacity and employ equitable allocative or cooperative programs to end the race for fish, reduce waste, increase safety, and promote long-term stability and benefits to fishing communities.
16. Increase participation of and consultation with Alaska Native subsistence users and explicitly address the direct, indirect and cumulative fishery impacts on traditional subsistence uses and cultural values of living marine resources.
17. Utilize traditional knowledge, including monitoring and data-gathering capabilities, through co-management and cooperative research programs.
18. Increase the precision of observer data through increased observer coverage and enhanced sampling protocols, and address the shortcomings of the current funding mechanism by implementing either a federally funded or equitable fee-based system for a revamped Observer Program Research Plan.
19. Improve community and regional economic impact assessments through increased data reporting requirements.
20. Require a Vessel Monitoring System (VMS) for all vessels to improve enforcement and in-season management.

Management Tools To Accomplish Objectives:

TAC-setting

Guidelines should include procedures in the TAC-setting process to evaluate and address all major sources of uncertainty in the single-species stock assessments, including: quantity and quality of data, survey sampling methods, stock

assessment error, trophic interactions, habitat requirements, and oceanographic variability, reflecting a policy objective to *maintain a margin of safety in recommending acceptable biological catches when the information concerning the resource is questionable* (PSEIS 2.4, p. 15, and 4.1, p. 48):

- Employ more conservative harvest policies (e.g., $F_{60\%}$, $F_{80\%}$) for species whose life history characteristics make them especially vulnerable to fishing mortality (e.g., long-lived, slow-growing rockfish).
- Employ more conservative harvest policies (e.g., $F_{75\%}$) for important forage fishes (e.g., pollock, Atka mackerel, Pacific cod) in order to maintain the forage base for predators at high levels of abundance relative to the unfished condition as is done under the Convention for the Conservation of Antarctic Living Marine Resources (CCAMLR), which sets the harvest policy for important forage species such as krill (*Euphausia superba*) at $F_{75\%}$ in an effort to take the needs of predators into account.[1]
- Employ a method for incorporating survey variance and uncertainty in the setting of the acceptable biological catch (ABC) as proposed in Alternative 3, reducing TACs by the amount of survey coefficient of variation (CV) for each stock or mixed-stock complex to address uncertainty in survey information.
- For groundfish stocks that can be assessed with AD model builder (e.g., **PSEIS 2.7, Table 9**), employ the AD model builder statistical tools to evaluate and illustrate levels of uncertainty in the mathematical models and the risks associated with ABC recommendations. Evaluate a range of ABC values using the lower bound of a confidence limit, including the lower 50% and 90% confidence limits, to address uncertainties in the stock assessment advice.
- Adopt a Minimum Stock Size Threshold (MSST) appropriate to the harvest policy for each stock. At a minimum, MSSTs should be set no lower than a level of spawning biomass equivalent to 40% of the reference unfished stock size in order to maintain a larger margin of safety in the face of large uncertainties (i.e., designate $B_{40\%}$ as a limit rather than a "target").

Habitat protection

A comprehensive habitat protection plan should include all types of benthic and pelagic habitat. It should include the use of marine protected areas (understood as

[1] R.B. Thomson, D.S. Butterworth, I.L. Boyd, and J.P. Croxall. Modeling the Consequences of Antarctic Krill Harvesting on Antarctic Fur Seals. Ecological Applications, 10(6), 2000, pp. 1806-1819: "*The Commission for the conservation of Antarctic Marine Living Resources (CCAMLR) takes the needs of krill into account in an indirect manner when recommending the annual krill catch limit. This is done using a single species model to estimate the size of the krill population (relative to its pre-exploitation size) after a 20-yr period of harvesting at a given intensity. The level of harvesting intensity is adjusted until the median krill spawning biomass is predicted to be 75% of its median pristine size.*"

refuges from all fishing) to achieve goals for conservation of Essential Fish Habitat and HAPC biota (e.g., living substrates such as corals), as well as designated habitats of protected mammal and bird species. The habitat plan should:

- Provide detailed habitat maps.
- Zone and delimit fishing gear use in the action area.
- Establish marine protected areas (understood as refuges from fishing) covering the full range of marine habitats and including nearshore crab habitat, pelagic shelf-break habitat, submarine canyons, gullies, boundaries of water masses, and other unique habitat features or highly productive zones where crabs, fishes, birds and mammals congregate in large numbers.
- Establish spawning area reserves (**PSEIS 4.1, p. 50**) for exploited species such as pollock, Pacific cod, Atka mackerel, rock sole, etc., which are fished intensively at spawning time.
- Delimit areas for bottom trawling of flatfish and restrict bottom trawling to those areas.
- Prohibit trawling for rockfishes, sablefish, Greenland turbot, Pacific cod and any other fishery that can be prosecuted with more selective gear types that have less impact on habitat.
- Establish comprehensive trawl exclusion zones to protect all designated critical habitat of the endangered Steller sea lion in western Alaska.
- Provide for traditional Native subsistence uses of fish and wildlife within protected areas.

Bycatch reduction/avoidance

A bycatch reduction plan should seek to reduce or eliminate bycatch, not simply to reduce regulatory discards as under the Improved Retention/Improved Utilization (IR/IU) program for pollock and cod. Bycatch limits are a principle tool for constraining bycatch in the North Pacific, but as conservation measures the bycatch caps are costly and information-intensive, requiring extensive independent survey and fishery observer data. They do not account for the uncounted crustaceans, mollusks, and other benthic life which are crushed or maimed by trawl gear and left on the seabed, and therefore they understate the full impacts of fisheries; and they provide no protection to seabed habitat from trawl gear disturbance and damage. Fishing gear closures can serve as a conservation tool to reduce bycatch and protect foraging birds and mammals that also congregate in these zones. Gear allocations to cleaner gear types should also be employed in conjunction with an integrated system of gear closure areas and marine reserves in order to reduce and avoid bycatch:

- Set stringent bycatch and prohibited species catch limits.
- Establish PSC bycatch limits for crab, salmon, and herring in the Gulf of Alaska.

- Establish bycatch limits for non-target stocks (e.g., squid, octopus, skates, sharks, grenadiers, sculpins) as sufficient information becomes available
- Employ time/area gear closures and marine protected areas to avoid bycatch in sensitive areas.
- Prohibit trawling for rockfishes, sablefish, Greenland turbot, Pacific cod and any other fishery that can be prosecuted with more selective gear types that have less impact on habitat.
- Phase out fisheries with high bycatch.

Catch monitoring and data collection

Observer coverage and VMS should be required for all sectors of the groundfish fleet. An equitable funding mechanism should be developed to support a robust Observer Research Plan that accomplishes the goals and objectives of the MSFCMA for total catch measurement and other data needs *necessary for the conservation, management, and scientific understanding of any fisheries under the Council's jurisdiction* (16 U.S.C. 1853 et seq.). Improvements in identification and enumeration in all FMP species categories should be prioritized and resources should be made available to accomplish those goals. Observer Research Plan program design, objectives, sampling protocols and methods for improving data should be coordinated by NMFS. Program measures should include:

- Vessel monitoring systems (VMS) for all groundfish vessels, as well as other monitoring tools (e.g., winch sensors, video equipment) where appropriate or feasible to enhance catch monitoring and measurement.
- Observer coverage for all sectors of the groundfish fleet, including vessels <60'.
- "Hotspot authority" to place observers and Observer Program staff aboard vessels in fisheries with high bycatch or other priority monitoring needs as determined by the program, based on statistically sound protocols.
- Adequate resources and methods for improving identification and enumeration in all FMP species categories.
- Whole-haul observer sampling on selected vessels to test assumptions of random sampling methodology, or as needed to improve total catch measurement and ensure that confidence in the data is high.
- Requirement of motion-compensated scales to weigh all catches at sea or at shore-based processing plants.
- Fee-based funding mechanism based on (1) a percentage of the unprocessed ex-vessel value of the fish and shellfish (such that smaller vessels with a smaller share of the catch are not unfairly charged and larger vessels with a larger share of the catch pay into the system proportional to the benefits of the public resource that they enjoy); and (2) a percentage of the estimated processed value (such that fishing vessels do no bear the sole cost of the program and processors who reap the largest economic benefits pay their fair share).

Capacity reduction

The economic sustainability of the fisheries is undermined by excess capacity and the resulting race for fish between competing sectors of the groundfish industry leaves fishermen with little flexibility to respond to other priorities for conservation. A guiding principle should be: "*For fisheries to be sustainable and economically stable, capacity must be balanced with resource availability.*" **PSEIS 4.9, p. 8.** Criteria for the design of limited access quota programs have been recommended by AMCC and Marine Fish Conservation Network, which we endorse. Effort-based measures should also be explored as an alternative means of reducing capacity and protecting smaller participants from bigger competitors in instances in which quota share programs are not feasible:

- Effort-based regulations, including trip limits, vessel size and horsepower limits, gear size limits, limits on tender vessels, and seasonal exclusive area registration.
- License limitation on entry.
- Halibut/sablefish IFQ.
- Community quota shares.
- Fishing co-operatives.

Research Plan

Establish a coordinated, long-term ***ecosystem monitoring program*** to collect baseline information and compile existing research information from a variety of ongoing research initiatives. The FMPs should already contain research recommendations that the Councils and NMFS view as necessary to carrying out their EFH management mandate, including a schedule for obtaining information on the effects of fishing. An ecosystem monitoring program should be one of the recommendations contained in the FMPs that the Councils and NMFS view as vital to improved implementation of ecosystem-based management, including a schedule for obtaining information on the effects of fishing on marine ecosystems of the North Pacific. The Ecosystems Considerations chapter of the annual SAFE reports should be used as a vehicle in the TAC-setting process for collecting and compiling ecosystem monitoring data, identifying and reviewing research priorities, providing regular updates and evaluations of ongoing research as new information becomes available, and assessing methods for integrating that knowledge into management programs:

- The FEP/FMP research plan should include a specified research schedule for improving the description and identification of EFH and HAPC in the North Pacific, as well as a schedule for obtaining information on the impacts of fishing gear on marine habitat.

- The FEP/FMP ecosystem monitoring plan should include a specified research schedule for improving the description and understanding of ecosystems and ecosystem processes in the North Pacific, combining existing research information from programs such as FOCI, SEBSCC, and others, and that information should be compiled and updated on an ongoing basis in the Ecosystem Considerations chapter of the annual SAFE reports to inform decisions by the Councils and NMFS.
- Experimental fishing permits should be used where appropriate to evaluate methods for reducing bycatch, improving data collection of bycatch or testing hypotheses about the impacts of fishing on the environment.
- Research efforts to improve knowledge of trophic interactions and predator-prey dynamics between exploited, dependent and related species should be reviewed and updated on a regular basis and utilized in stock assessment advice.
- Fisheries Oceanography Coordinated Investigations (FOCI) and other long-term research should be funded to gather baseline data.
- Utilize traditional knowledge, including monitoring and data-gathering capabilities, through co-management and cooperative research programs.
- Traditional knowledge and observations of fishermen should be incorporated as additional sources of information and monitoring.
- Ecosystem mapping capabilities should be enhanced.

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
Washington, D.C. 20230

OFFICE OF THE GENERAL COUNSEL

MEMORANDUM FOR: William T. Hogarth
Assistant Administrator For Fisheries

FROM: Craig R. O'Connor
Acting General Counsel

SUBJECT: Guidance on Programmatic Environmental Impacts Statements

I. Introduction: NEPA Overview

The intent of the National Environmental Policy Act, 42 U.S.C. § 4321 (NEPA) is to incorporate environmental considerations in to Federal agency decision making. As the "basic national charter for protection of the environment," NEPA establishes policy, sets goals, and provides the procedural requirements for federal agencies to comply with the law. (See 40 C.F. R. § 1500.1(a)). The implementing regulations for NEPA were developed by the Council on Environmental Quality (CEQ) and are codified at 40 C.F.R. § 1500 et seq.

Specifically, NEPA demands that federal agencies understand and acknowledge environmental interconnections related to their decisions and activities by assessing how the impacts of one action add to, change, or exacerbate the impacts of other actions. To accomplish this, the Act prescribes the necessary process by which agencies must take a "hard look at the environmental consequences of proposed actions utilizing public comment and the best available scientific information." Colorado Envt'l. Coalition v. Dombeck, 185 F.3d 1162, 1171-72 (10th Cir, 1999). Being procedural, it does not dictate specific decisional outcomes or results. Vermont Yankee Nuclear Power Corp. V. NRDC, 435 U.S. 519 (1978).

Two major objectives of NEPA's procedural requirements are (1) to disclose the foreseeable environmental consequences of the proposed action and alternatives to that action, and (2) to permit the public to participate in the evaluation and selection among the alternative courses of action. (See 40 C.F.R. §§ 1502.1 and 1506.6). The primary vehicle for meeting the procedural requirements of NEPA is the environmental impact statement (EIS). An EIS must be included with every recommendation or report on proposals for legislation and for every major federal action significantly affecting the quality of the human environment.

The purpose of an EIS is to serve as an "action-forcing device to insure that the policies and

goals defined in [NEPA] are infused into the ongoing programs and actions of the Federal government." Andrus v. Sierra Club, 442 U.S. 347 (1979), (See also 40 C.F.R. § 1502.1). Intended as more than a descriptive document, the EIS is a detailed, probing and analytical document to be used by federal officials in planning actions and making decisions. (See 40 C.F.R. 1502.1). It requires an up-front analysis at the proposal stage of a project and is not to be used as a justification for decisions already made. Baltimore Gas & Electric Co. v. NRDC, 462 U.S. 87 (1983). To be sufficiently complete, the EIS must address any adverse unavoidable environmental effects resulting from the implementation of the proposed action, alternatives to the proposed action, the relationship between short-term uses and the long-term maintenance of the environment, and any irretrievable commitment of resources involved in the proposed action. (See 42 U.S.C.§ 4332(2)(C)).

The EIS provides the scientific and analytic basis for comparing and assessing alternatives to the proposed action. It must disclose both the direct and indirect environmental effects, as well as any cumulative impacts that alternatives to the proposed action will have on the environment (See 40 C.F.R. §§ 1508.7and 1508.8). In this way, the EIS insures the integrity of the agency process by forcing it to face difficult issues and objections raised in the preliminary public scoping process. As such, it serves as an environmental full disclosure law allowing the public to weigh a project's benefits against its environmental costs. As an analytical document, the EIS also serves to identify gaps in the knowledge base of the action.

A programmatic EIS (hereinafter also referred to as a PEIS) is the comprehensive document in which the Agency considers a number of related actions or projects being decided within one program. As such, a PEIS looks to the environmental consequences of a program as a whole. One of its purposes is to assess the impact of connected and cumulative actions under one programmatic umbrella in order to determine significant impacts to the environment. In it, the analysis of environmental impacts is tied to a specific program and the individual and cumulative effects of each project individually, and all projects together, are analyzed in a way which allows senior level decision makers to examine the implications of their programs. As stated in Northcoast Environmental Center v. Glickman, 136 F.3d 660 (1998), "...a programmatic EIS is superior to a limited, contract-specific EIS because it examines an entire policy initiative rather than performing a piecemeal analysis within the structure of a single agency action."

(NOTE: Several types of EISs are designed to view activities with a much broader framework, including environmental assessments of programs, policies or governmental management plans. These EISs are often called overview, comprehensive, policy or programmatic assessments. For purposes of this guidance on programmatic EISs, the term programmatic should be read to include all of these categories of broad assessment.)

Although the CEQ regulations provide a framework for the overall NEPA EIS process, much discretion for actually formulating the structure and scope of the PEIS is left to the agency. Being so broadly defined and structurally limitless, scoping the PEIS can prove cumbersome and confusing. This guidance is intended to provide general information on the scope and structure of the PEIS. The first section addresses the basic structure of the PEIS document and presents

the nuts and bolts scoping requirements of the NEPA process as provided in the regulations and relevant case law. The second portion looks at how the agency can use NEPA and the PEIS process to structure a document which will meet the goals of NEPA and also provide for long-term program management and planning. The final section provides specific recommendations for structuring PEIS documents to address NMFS activities as embodied in Fishery Management Plans (FMPs).

I. The PEIS Scope

There are two ways in which the CEQ regulations refer to the scope of an EIS document. 40 C.F.R. § 1501.7 establishes parameters for scoping the document which includes soliciting public participation in the identification of issues to be addressed by the proposed agency action. This scoping process helps the agency define the purpose and need for the EIS. A separate section on "scope" at 40 C.F.R §§ 1508.25 addresses the specific structural components required to be addressed in the EIS. This section specifies the three types of actions, three types of alternatives, and three types of impacts that the agency must consider in the EIS. It establishes the threshold criteria for making a preliminary decision whether the EIS will be programmatic or site-specific. The emphasis of this guidance is on the section 1508.25 structural and procedural requirements.

In terms of basic structure, an EIS generally includes: 1) a detailed statement of purpose and need for the action, 2) a description of a range of alternatives for the proposed action, 3) a description of the affected environment, and 4) an analysis of potential impacts on the environment from the alternatives and the proposed action. The following discussion addresses the statement of purpose and need and the three categories of factors to be considered when scoping the PEIS as reflected in 40 C.F.R §§ 1508.25. It concludes with some general remarks regarding cumulative impacts assessment, past effects and the scope of the affected environment.

A. The Basic Structure of the PEIS under 40 C.F.R. § 1508.25

Regardless of the regulations outlining this basic framework, scoping a tight, concise and sufficiently detailed PEIS can be daunting. In their effort to afford a wide range of Federal agency activity with sufficient leeway for tailored assessments, the regulations remain fairly broad and often raise more questions than they address. A look at the case law alone lends further confusion. Beginning in 1976, a handful of landmark cases attempted to describe the scope and necessity for a comprehensive or programmatic EIS. (See Kleppe v. Sierra Club, 427 U.S. 390 (1976)("When several proposals are pending before an agency at the same time, and when those proposals have cumulative or synergistic environmental impacts, their environmental consequences must be considered together.") and Fritiofson v. Alexander, 772 F.2d 1225 (5th Cir. 1985)(the agency must review the cumulative impact of incremental actions)). Unfortunately, these early cases led to significant confusion regarding timing, scope and the early enunciation of the principles of cumulative actions versus cumulative effects.

In an attempt to dispel uncertainty and provide specific guidance, the CEQ regulations promulgated in 1979 generally codified, expanded and summarize the court's earlier findings. Since then, the courts have attempted to reconcile previous decisions with CEQ's directives. Today, making the threshold determination for a PEIS and scoping an appropriate PEIS document requires untangling and understanding the interplay of early case law, the ensuing CEQ regulations that tried to make sense of early case law, and the interpretive decisions which have ensued. The following discussion is intended to highlight the guiding principles and applicable requirements regarding the appropriate scope of the PEIS which have emerged through the course of NEPA's evolution.

1. The Statement of Purpose and Need

The Purpose and Need section of the EIS defines the need for and the goals of Agency decision-making as reflected in the public scoping process. 40 C.F.R. § 1502.13 specifies that "The statement [of Purpose and Need] shall briefly specify the underlying purpose and need to which the Agency is responding in proposing the alternatives.." As such, the statement effectively scopes and structures the alternatives under consideration and helps determine the breadth and scope of the ensuing analysis. In a PEIS, the Purpose and Need section of a PEIS should be structured to clearly articulate the purpose as it relates to the establishment of a program management framework. In addition, and as appropriate, the PEIS statement of Purpose and Need should describe the role of a cumulative effects analysis in establishing a baseline environmental picture which will allow the Agency to assess whether the current management regime is working and how it might be changed, if necessary.

2. The types of actions mandating a Programmatic EIS

Three types of actions require agency consideration in determining the need to prepare a PEIS. They are:

(1) Connected actions, which means that they are closely related and therefore *should be discussed in the same impact statement.* (See Custer County Action Association v. Garvey, 256 F.3d 1024 (2001) (Actions are connected if one automatically triggers another, or they are sufficiently interdependent to not proceed on their own),

(2) Cumulative actions, which when viewed with other proposed actions have cumulatively significant impacts and *should therefore be discussed in the same impact statement,* (See Kleppe), and

(3) Similar actions, which when viewed with other reasonably foreseeable or proposed agency actions, have similarities that provide a basis for evaluating their environmental consequences together, such as common timing or geography. An agency

> *may wish* to analyze these actions in the same impact statement. It should do so when the best way to assess adequately the combined impacts of similar actions or reasonable alternatives to such actions is to treat them in a single impact statement. (Emphasis added).

Under 40 C.F.R. § 1508.25(a), two types of actions require a PEIS (cumulative and connected actions), and one is discretionary (similar actions). The two categories of mandatory PEIS, however, have been sufficiently broadened by case law to the extent that there are actually two additional instances where an agency must consider producing a comprehensive, single programmatic EIS. The other two instances are: 1) when an agency undertakes a broad program or regional planning, and 2) where there are cumulative or synergistic environmental impacts upon the environment from past, present or reasonably foreseeable future actions.

While the CEQ regulations make separate reference to regional and geographic planning in 40 C.F.R. § 1502.4(b) and 40 C.F.R. § 1508.18(b)(4), these sections do not make the PEIS process mandatory. It is in post-regulation case law that the courts have held that when regional plans and multiple federal programs will have a cumulative or synergistic environmental effect upon a region, the relevant agency must prepare a programmatic environmental impact statement. Churchill County v. Babbitt, 150 F.3d 1072 (1998); City of Tenakee Springs v. Block, 778 F.2d 1402 (9th Cir. 1985).

The cumulative impacts requirement (2 above) ostensibly relates more to synergy and the interplay of cumulative *effects* as opposed to specific actions. The CEQ regulations define cumulative impacts in 40 C.F.R. § 1508.7. That section provides that:

> "Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

This section has its roots in earlier case law (Fritiofson) which attempted to capture past, present and future actions in the analysis of cumulative impacts (as opposed to cumulative actions). Like the regional planning requirement, this standard was swept in to the regulations in a section unrelated to the section 1508.25 scoping provision and therefore without a mandatory statement for a programmatic EIS. Nevertheless, it is now widely recognized and generally held that any project that will have cumulative effects as a result of its interplay with other projects, whether government action or not, must assess those other impacts as well. In other words, it is not sufficient to discuss a single action that has significant synergistic effects based another projects without addressing the impacts from those other projects in a broader, more comprehensive EIS.

Thus, in determining whether or not a PEIS is required, the agency should consider:

a) Whether there are cumulative actions pending which require a look at cumulative effects within one document;
b) Whether there are connected actions (e.g., actions proceeding because of their inter-relatedness to one another) which require a single PEIS;
c) Whether a regional plan is about to be undertaken, and
d) Whether the project will cause cumulative or incremental synergistic effects on the environment which give rise to a singular PEIS.

3. The Alternatives to be Considered

The CEQ regulations specify that the development and consideration of alternatives is "..the heart of the environmental impact statement." See 40 C.F.R. § 1502.14. The D.C. Circuit court has held that the detailed statement of alternatives is the "lynchpin of the entire impact statement." Alaska v. Andrus, 580 F.2d 465 (D.C. Cir. 1978). Significant emphasis is placed on this analysis as it is through assessing and reviewing the alternatives that the agency discloses its thinking on implementation of the project and demonstrates to the public that sufficient consideration has been given to the protection of the environment.

In the discussion of alternatives section, the environmental impacts of the proposal and the alternatives must be presented in comparative form. The comparison must be made in a way that "sharply defines the issues and provides a clear basis for choice for the decision maker and the public." (See 40 C.F.R. § 1502.14). The comparison of alternatives is to be made by scientifically assessing the environmental consequences of each of the alternatives on the affected environment and presenting that information in a point-by-point, side-by-side analysis of the alternatives in the "Environmental Consequences" section (See 40 C.F.R. § 1502.16). Where possible, the agency should identify the preferred alternative.

The CEQ regulations at 40 C.F.R. sections 1502.16 and 1508.25 require that agencies develop and assess three kinds of alternatives. The kinds of alternatives the agency must, at a minimum, consider are the no action alternative, alternatives describing other reasonable courses of action, and an alternative that advances mitigation efforts to the proposed action, but which are not specified in the proposed action.

The No Action alternative simply means maintaining the status quo as opposed to reverting to a pristine environmental state. Kleppe. This alternative assesses the expected consequences to the affected environment should the agency undertake no action. Presentation of this alternative provides the baseline by which comparison is made to the other alternatives developed.

The alternatives describing other reasonable courses of action presents the range of alternatives developed by the agency and assessed for possible use in meeting the agency's needs. These are the alternatives typically identified with the EIS document. The individual alternatives to the proposed action are described in the "Alternatives" section of the EIS.

In developing alternatives, the agency is bound by a "rule of reason." That rule of reason governs both which alternatives the agency must discuss, and the extent to which it must discuss them. Andrus; Citizen's Against Burlington, Inc. v. Busey, 938 F.2d 190 (D.C.Cir. 1991). Under the rule of reason, there is no specified number for how many alternatives the agency must consider. This is a matter left to agency discretion as guided by the nature of the action. As stated in Vermont Yankee Nuclear Power Corp. V. NRDC, 435 U.S. 519 (1978), the concept of alternatives is an evolving one, requiring the agency to explore more or fewer alternatives as they become better known and understood. In fact, an EIS with only two alternatives considered, the no action and preferred, has been upheld by the courts. In Communities, Inc. V. Busey, 956 F.2d 619 (6th Cir. 1992), the court held that it was acceptable that an EIS considered only these two alternatives where the agency "fully explained" its reasons for rejecting other alternatives for airport improvement, and where the agency provided a "thorough discussion" of the infeasibility of the other alternatives not considered.

In a programmatic EIS, the proposed action for which alternatives must be developed is the agency's formulation of a comprehensive management framework to address a wide array of subsequent and perhaps disparate and as yet unknown field activities. This can be a difficult undertaking. At the PEIS stage, many actions which have been identified may lack specificity and detail in terms of their application, and yet their ultimate implementation will lead to the very effects which ideally should be analyzed up-front. In addition, management framework options may be severely limited by the directives and objectives established in the authorizing law and the realities of the political process. These factors can hamper decision makers and may limit the availability of specific management alternatives in a PEIS. To counter this effect, the PEIS should clearly articulate and acknowledge these limitations and proceed within the bounds of reason to provide as complete an array of alternatives as possible.

The final alternative to be considered, the mitigation alternative, is a spin on the proposed action alternative. It requires the agency to assess its ability to avoid impacts altogether. The specific parameters for mitigation are set forth at 40 C.F.R. § 1508.20. In assessing mitigation, the agency should look at the possibility of not taking certain actions or parts of an action, minimizing the magnitude of the action or its implementation, restoring or rehabilitating the environment through maintenance or preservation measures or by replacing the loss in one area with substitute resources in another.

The requirement that an EIS contain a detailed discussion of possible mitigation measures flows both from the language of the Act and, more expressly, from CEQ's implementing regulations. It is only by discussing and understanding the extent to which adverse effects can be avoided that NEPA's requirement that an agency prepare a detailed statement on "any adverse environmental effects which

cannot be avoided should the proposal be implemented," can be met (See 42 U. S. C. §§ 4332(C)(ii)). The omission of a reasonably complete discussion of possible mitigation measures would undermine the "action forcing" function of NEPA. Without such a discussion, neither the agency nor other interested groups and individuals can properly evaluate the severity of the

adverse effects. Robertson v. Methow Valley Citizen's Council, 490 U.S. 332 (1989).

4. The Types of effects to be Considered in the "Environmental Consequences" section

The "Environmental Consequences" portion of the EIS is that portion of the document where the agency takes a "hard look" at the environmental effects of the proposed alternatives. (See 40 C.F.R. § 1502.16). The analysis of effects consists of the assessment and consideration of the impact of the alternatives on the affected environment. The effects to be considered must include the reasonably foreseeable direct, indirect, and cumulative impacts of a proposed action on the components, structures and functioning of affected ecosystems, including the biological communities within that ecosystem. (See 40 C.F.R. §§ 1508.7 and 1508.8). The analysis should demonstrate that the agency is thinking through and considering the project in an environmentally conscientious way.

The effects to be considered are defined at 40 C.F.R. §§ 1508.7 and 1508.8. Section 1508.8 provides that:.

> (a) Direct effects, ... are caused by the action and occur at the same time and place.
>
> (b) Indirect effects... are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems.

That section further provides that:

> Effects and impacts as used in these regulations are synonymous. Effects includes ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Effects may also include those resulting from actions which may have both beneficial and detrimental effects, even if on balance the agency believes that the effect will be beneficial.

Section 1508.7 provides that:

> "Cumulative impact" is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

A five part process for conducting the threshold cumulative effects analysis was set forth in Fritiofson. There, the court held that a meaningful cumulative- effects analysis must identify:

1) the area in which effects of the proposed project will be felt;
2) the impacts that are expected in that area from the proposed project;
3) other actions- past, proposed and reasonably foreseeable- that have had or are expected to have impacts in the same area;
4) the impacts or expected impacts from these other actions, and
5) the overall impact that can be expected if the individual impacts are allowed to accumulate.

Only significant effects need to be assessed in the PEIS. The CEQ regulations define "significant effects" in terms of context and intensity. The context requirement generally means that the significance of the effect "must be analyzed in several contexts such as society as a whole (human, national), the affected region, the affected interests, and the locality ...." The regulations also specify that "[B]oth short-term and long-term effects are relevant." (See 40 C.F.R. 1508.27(a)).

Intensity refers to the severity of impact and requires that the agency consider both beneficial and adverse effects, the unique characteristics of the affected environment, public health and safety, highly controversial effects, uncertain and unknown effects, the extent precedence will be established, the impact on unique cultural and historical resources, the impact on endangered or threatened species, the effect of cumulative impacts on the project, and potential violations of existing law designed for protection of the environment. 40 C.F.R. § 1508.27(b).

Case law also provides that the PEIS should consider whether the program causes an unacceptable degradation of a resource for which there is often no regulation or mechanism for regulating incremental impacts. Challenges to the adequacy of a PEIS can be successfully challenged by a plaintiff focusing on the potential effects of several actions on unregulated target resources. In Natural Resources Defense Council v. Hodel, 865 F.2d 288 (1988), the Federal Energy Regulatory Commission's EIS supporting several offshore oil drilling proposals was found legally insufficient because it failed to consider the cumulative impacts of oil exploration and oil drilling ranging from Alaska to southern California on two target resources (salmon and whales) that migrated past all the widely separated locations of activity. While acknowledging that such an assessment was potentially an extreme undertaking, the court nevertheless left no doubt that the NEPA analysis was incomplete without it.

Finally, the allocation of resources by a Federal agency necessarily calls in to play discussions of public policy. Because decisions on allocating resources involves political choices and trade-offs, the political goals of resource management plans are often at odds with scientific or technical expertise. As a result, management plans cannot always be limited to technical questions and technical solutions. The PEIS should therefore acknowledge the political realm in which it exists, describe the effects and interplay between science and policy, and seek mechanisms to deal with the potential friction.

B. A Final Word on Cumulative Impacts, Environmental Consequences and the Affected Environment

There are two potential pitfalls associated with the delineation of impacts on the affected environment which are worth noting. First, the cumulative impacts assessment must always be considered as separate and distinct from the cumulative action assessment. The cumulative action assessment consists of determining whether there are multiple projects represented by actual proposals which must collectively be reviewed in one EIS. To do this, the agency must determine whether multiple projects are presented by actual proposals and whether they may have cumulative impacts. Thus, the cumulative actions are considered for the purpose of cumulative environmental impact assessment *and* for the purpose of decision making on each proposed action.

The cumulative impacts assessment provides that for every action, whether a single-action EIS or a cumulative action EIS, an analysis must be made of the synergistic effects of all of the actions, both individually and collectively. In other words, both the cumulative action programmatic EIS and the single-project EIS call for the assessment of the cumulative effects of each action. In a programmatic EIS, this analysis can become quite wieldy. Nevertheless, failure to note this distinction and address its tenets can lead to significant legal shortcomings in the PEIS and leaves the agency vulnerable to time-consuming and costly litigation.

The cumulative impact analysis is of tremendous significance in the PEIS. Because the PEIS is a broad, overview document, it is critical that it look at the cumulative impacts the program is expected to have (and has had) over time. Without a full-blown look at cumulative and synergistic effects, the PEIS will be held legally insufficient. In Greenpeace v. NMFS, 55 F. Supp. 2d 1248 (W.D. Wash. 1999), Judge Zilly held the National Marine Fisheries Service could not continue "to make individually minor but collectively significant changes to the Fishery Management Plans (FMPs) without preparing an SEIS analyzing these changes" and that "NEPA's cumulative effects provisions requires a programmatic analysis of the FMPs in their current form." (See also, Sierra Club v. Penfold, 857 F.2d 1307 (1988) (an EIS must include a cumulative impacts assessment).

Second, the agency must remain mindful that both the CEQ regulations and the courts require the agency to consider past and present actions as well as future actions when assessing the affected environment and environmental consequences. In essence, the word "consequences" connotes future effects. When assessing environmental impacts, it is easy to be blind to the requirement to consider past and present impacts caused by other activities that have affected the environment.

40 C.F.R. § 1502.15 defines the "Affected Environment" as "...the areas to be affected or created by the alternatives under consideration..." For purposes of the environmental consequences comparison, the area is defined as it exists prior to the effect of any proposed or alternative action. Thus, it establishes a baseline environmental picture by which to gauge the effects of each of the alternatives. In order to adequately present the baseline, it has been held that "... impact statements...will take into account the effect of their approval upon the existing

environment; and the condition of that environment presumably will reflect earlier proposed actions and their effects." Kleppe (emphasis added). Allowing the cumulative impacts of contemplated actions to be evaluated later simply acknowledges that the effects of past and present actions have created the existing environment.

This "backward look" requirement appears to make the PEIS process appear piecemeal. Many have tried to argue that it is contrary to NEPA's overall prohibition against using the EIS process to justify past actions. But the purpose of the look back is not to document or discuss the merits of the past action, but to insure that the environmental baseline is presented as it actually exists. Congress passed NEPA out of concern that our limited natural resources are being lost in "small but steady increments." By requiring that the affected environment be described in terms that reflect the degree of existing environmental degradation caused by previous activity and by requiring that the cumulative impacts assessment account for previous effects on the environment, the goal of NEPA to help agencies avoid undue environmental harm through creeping and incremental loss is, in fact, advanced and assured.

In a programmatic EIS, the failure to adequately describe the affected environment and to account for the effects of past actions is fatal. In Greenpeace v. NMFS, Judge Zilly held that "...the programmatic EIS was necessary because of the significant cumulative effects of the amendments to the FMPs over the years, rather than because there were particular new amendments pending" and that, "[T]he programmatic EIS should therefore present a more general picture of the environmental effects of the plans..." Because the court was asking NMFS to look back, the document was also referred to as a supplemental EIS (SEIS). (The concept and parameters of an SEIS are considered later in this document).

If these aspects have been overlooked and the sufficiency of the PEIS analysis is legally challenged, the decision making process will be delayed as the court remands the document to the agency for their inclusion. Accurately capturing the baseline environmental scope of the affected area, including the consequences of past actions, is time consuming and complex. During the pendency of the redrafting, the court can, and generally does, forestall proceeding with the proposed action. Sierra Club v. Penfold, 857 F.2d 1307 (9th Cir. 1988). It is therefore imperative that the agency provide a complete environmental baseline of the affected environment up front and include the consideration of past actions in their cumulative effects analysis.

II. What is the appropriate structure of a PEIS?

NEPA demands analytical thought and the presentation of environmental and scientific evidence and findings in an organized, well written, and concise document. As such, NEPA serves as a comprehensive scientific planning device designed to promote and further our understanding of

ecosystem dynamics and bio-diversity. An agency, and particularly an environmental agency, has much to benefit from applying NEPA's concepts and requirements to its overall management structure. By meeting all of NEPA's procedural requirements in the PEIS, the agency will have produced a document flexible enough to help the agency meet any number of other goals and objectives. A look at NEPA's requirements for scientific accuracy and organization makes these possibilities clear.

A. NEPA as a scientific research promoter

From its inception, NEPA recognized that scientific and agency knowledge about the environment is incomplete. In fact, NEPA was designed to promote and assist the search for greater environmental knowledge. As stated by Senator Allott, the Republican floor manager of NEPA, it "authorizes all federal agencies to conduct investigations and research relating to ecological systems and environmental quality." 115 Cong. Rec. at 40, 422. This concept is clearly articulated in NEPA's statement of purpose at 42 U.S.C. § 4321 which provides that the goal of the Act is:

> To declare a national policy which will encourage productive and enjoyable harmony between man and his environment; to promote efforts which will prevent or eliminate damage to the environment and biosphere and stimulate the health and welfare of man; *to enrich the understanding of the ecological systems and natural resources important to the Nation*; and to establish a Council on Environmental Quality. (Emphasis added)

In order to accurately reflect the agency's thinking, NEPA EISs must be analytically sound. They must organize and rely on existing scientific data, and, where reasonable and not cost-prohibitive, the agency must gather new supporting information. Andrus at 473. (See also 40 C.F.R. § 1502.22). The CEQ regulations are replete with directives to this effect. 40 C.F.R. § 1502.2 directs that "[e]nvironmental impact statements shall be analytic rather than encyclopedic." 40 C.F.R. § 1502.1 directs that environmental impact statements "...shall be supported by evidence that the agency has made the necessary environmental analyses." 40 C.F.R. § 1500.1(b) states that the information in the EIS must be of "high quality"and that "accurate scientific analysis, expert agency comments, and public scrutiny are essential to implementing NEPA." And 40 C.F.R. § 1502.8 states that statements shall "... be based upon the analysis and supporting data from the natural and social sciences and the environmental design arts." As such, NEPA serves as an information gathering and educational vehicle designed to promote our scientific understanding of ecology and the environment.

1. Incomplete or Unavailable Information

Because it plays an information gathering role, and recognizing that the complexities of ecosystem inter-relatedness are far-reaching and predominantly unknown, the NEPA process accepts and accommodates the fact that there will be gaps in an agency's knowledge surrounding a decision. Thus, while reasonable efforts to acquire knowledge must be made, all

decisions need not be delayed pending perfect knowledge. Andrus; Jicarilla Apache Tribe of Indians v. Morton, 471 F.2d 1275 (9th Cir. 1973). The specific requirements for dealing with incomplete and unavailable information are set out at 40 C.F.R.§ 1502.22. That section requires that the agency clearly identify the information that is incomplete or unavailable, together with a statement of the relative importance of the missing information. It also requires the agency to provide a summary of the existing scientific evidence relative to the missing information and to prepare an evaluation of the expected environmental impacts in light of that evidence.

2. Monitoring and Supplemental EISs

In its promotion of environmental research and understanding, NEPA requires continuing environmental monitoring and analysis for changes to ongoing federal actions. CEQ regulation 40 C.F.R §.1505.3 specifies that implementation of the action should be accompanied by monitoring in important cases. Regulation 40 C.F.R. § 1502.9 provides the procedural framework for keeping environmental analyses current as significant new information is identified through the process of supplementing draft and final EISs.

Provided the changes are not substantial, the environmental assessment (EA) process is sufficient for monitoring purposes. If, however, significant new information of relevance to the proposed action or its impacts is discovered, an agency must prepare a supplement to the EIS. Thus, "a supplemental EIS is required where new information is generated as a result of maintaining inventories and adjusting management direction and those changes cumulatively have an impact on the environment. See Greenpeace v. NMFS, 55 F.Supp 2d 1248 (W.D. Wash. 1999); Seattle Audubon Society V. Mosely, 798 F.Supp 1473 (W.D. Wash. 1992). The decision whether to prepare an SEIS is as critical as the initial determination to do an EIS. As one court noted, when new information comes to light the agency must consider it, evaluate it, and make a reasoned determination whether it is of such significance as to require [an SEIS]." Warm Springs Dam Task Force v. Gribble, 621 F.2d 1017, 1024 (9th Cir. 1980). How routinely an agency programmatically supplements a PEIS is a matter to be determined by the specific project. Typically, routine assessments should be considered every five years. The key is that there be no gaps in planning. Seattle Audubon.

B. NEPA as an Organizational and Planning Tool

In addition to serving as a means for furthering our understanding of ecosystem dynamics and bio-diversity, NEPA is well-designed to serve as a comprehensive scientific planning and organizational tool.. Toward this end, section 102(2)(H) of NEPA specifically requires all federal agencies to "initiate and utilize ecological information in the planning and development of resource-oriented projects." The CEQ regulations at 40 C.F.R. § 1501.2 states that each agency shall comply with the mandate of section 102(2)(A) to "utilize a systematic, interdisciplinary approach which will insure the integrated use of the natural and social sciences and the environmental design arts in planning and in decision making which may have an impact on man's environment."

NEPA is replete with directives that EIS documents be well-organized and well-written. It directs that "Agencies shall avoid useless bulk in statements and shall concentrate effort and attention on important issues" and that "[V]erbose descriptions of the affected environment are themselves no measure of the adequacy of an environmental impact statement" (See 40 C.F.R. § 1502.15). The regulations also direct that "agencies should employ writers of clear prose or editors to write, review, or edit statements" (See 40 C.F.R.§ 1502.8).

Of critical value and importance, and in further emphasizing the need for organization, NEPA encourages the use of tiering impact statements to eliminate repetitive discussions of the same issues. In fact, the concept of programmatic EISs is closely linked to tiering. Pursuant to 40 C.F.R. § 1508.28, "tiering" refers to:

> the coverage of general matters in broader environmental impact statements (such as national program or policy statements) with subsequent narrower statements or environmental analyses (such as regional or basin wide program statements or ultimately site-specific statements) incorporating by reference the general discussions and concentrating solely on the issues specific to the statement subsequently prepared.

The CEQ guidelines provide that when an area-wide or overview EIS is prepared for projects that share common timing or geography, the area-wide EIS should be followed by a site-specific or project-specific EIS. The specific regulation is found at 40 C.F.R. §1502.20. That section provides that:

> Agencies are encouraged to tier their environmental impact statements to eliminate repetitive discussions of the same issues and to focus on the actual issues ripe for decision at each level of environmental review. Whenever a broad environmental impact statement has been prepared (such as a program or policy statement) and a subsequent statement or environmental assessment is then prepared on an action included within the entire program or policy (such as a site specific action) the subsequent statement or environmental assessment need only summarize the issues discussed in the broader statement and incorporate discussions from the broader statement by reference and shall concentrate on the issues specific to the subsequent action. The subsequent document shall state where the earlier document is available. Tiering may also be appropriate for different stages of actions.

It is through the subsequent tiering of a project that the onerous initial undertaking of the PEIS analysis pays off. Two words of caution, however. While the agency has discretion on whether to prepare a PEIS, it cannot tier site-specific EISs to the broader program where the program itself has not been subject to NEPA procedures. Northcoast Environmental Center v. Glickman, 136 F.3d 60 (1998). This is particularly problematic in those instances where an agency has never prepared a programmatic EIS but has proceeded with a number of project actions under unrelated EAs and EISs and those individual projects are later determined to have had cumulatively significant impacts on the environment. AOC v.Daley, Greenpeace. In addition, where a programmatic EIS has been prepared, a second level of NEPA analysis is required to describe the detailed, site-specific actions which follow. City of Tenakee Springs v. Block, 778 F.2d 1402 (9th Cir. 1985).

The NEPA PEIS, monitoring, SEIS and tiering systems all support a well-organized management and scientific referral system. The PEIS is the backbone of this system. Once a programmatic EIS has been completed and the agency is preparing to take an action under the program, an environmental assessment (EA) is conducted to evaluate the expected impacts of a particular project on the environment. If the impacts are not expected to be great, the agency will issue a finding of no significant impact (FONSI) and no further analysis will be done. If the impacts are expected to be significant, the agency will proceed with developing an SEIS that identifies not only the impacts on the action, but also all new reasonable alternatives to the proposed action. In this way, the agency can rely on its preceding organizational and analytical efforts to stay on top of decision making and to forecast expected changes required in managing a resource. As a result of initially complete work, a well crafted PEIS should therefore serve as an important component for planning national programs and for providing guidance and context when initiating a specific project in the field.

III. PEIS Principles applied to NMFS' Fishery Management Plans (FMPs)

The interplay of law, CEQ regulations and guidance and the complexity of the PEIS cumulative effects analysis with regard to fishery management and the affected environment requires an intense and focused organizational approach. Given the many parameters to be considered on a multitude of fronts, the process begs for the formulation of a series of inter-related matrices on which to base textual discussion. This matrix approach can be used to organize data as well as to highlight and overview key aspects of the PEIS. It should never, however, be construed as replacing the necessary and required in-depth analysis demanded of the NEPA process outlined in this guidance.

The following section describes an approach for organizing a set of three matrices which can form the basis of managing the volume of data and information in a PEIS and which should assist decision makers in developing and assessing an appropriate range of management alternatives. The three matrices contemplated are a baseline matrix, a past effects matrix and an alternatives matrix. Each is described briefly below, and then synthesized in a discussion of the effective interplay of the matrix approach.

A. The Baseline Matrix

The baseline matrix is intended to promote a concise and organized description of the "Affected Environment" in the PEIS. It's goal is to provide the foundation of information describing what is known about the impacted environment. The baseline matrix should identify the specific resources in the affected environment (such as marine mammals, see birds, habitat) (in rows) as well as a series of parameters which quantify the resource (for example, population density, habitat/range, known predators, known prey, life span, etc) (in columns). In each cell,

information is tabulated based on what is known. Where information is unavailable, the cell is left empty. Where information is incomplete, existing data is provided, but the deficiency is acknowledged and/or explained.

B. The Alternatives Matrix

The alternatives matrix is intended to delineate the parameters of the different management objectives addressed within a range of identified management components. It is based on the premise that the overall management of a resource is subject to variation as a result of shifting policy decisions within statutory constraints, as well as by variations in the resource itself as a result of both predictable and unpredictable environmental affects. In developing alternatives for an FMP PEIS, the root of the question is whether the way in which the Council and the agency have decided to meet statutory policies continues to be the best way to meet those policies or whether there is a better, alternative way to meet those same policy objectives. True "policy" decisions are made by the Council and NMFS in trying to determine how best to craft a management regime in order to meet a particular statutory policy objective and balance management measures among sometimes competing statutory policy objectives. The goal of the alternatives matrix, therefore, is to present alternatives as a series of management regimes in which different management approaches for each component are chosen as a result of the desire or need to meet a particular statutory policy objective.

The management components should identify the broad category of policy objectives being considered by the agency in the proposed management plan (for example marine mammal protection, sea bird protection, target species protection, habitat protection, etc.). Where possible and applicable, these components should include reference to the authorizing statute or regulation they arise under, and the specific resource managed or otherwise served by the law.

Within each management component, the matrix should identify a sub-layer of management tools directly associated with each management component. The management tools would include actions previously used to implement policy objectives within each component, such as TAC setting, spatial and temporal closures and harvest limits and gear restrictions/modifications for marine mammal protection. It may also include new initiatives under consideration.

The remainder of the matrix would present in columns different management regimes combining different levels of a variety of the management tools in each component. The different regimes would be designed to reflect shifting policy objectives. All components would be considered in each alternative and the array of management tools in each alternative would be chosen to reflect a different set of management objectives for each management component. The no action alternative would include statements of "no change/status quo" in each cell.

In order to craft "FMP-like" alternatives that are legally sufficient, each alternative must have an approach specified for each major component of the FMP identified. Approaches to a particular component do not have to be unique among all of the alternatives, but there should be at least one reasonable alternative management approach to the component presented in the status quo alternative. Less emphasis should be placed on the number of alternatives and more on the quality. It is quite possible under this scenario that many of the management tools employed are

the same with only minor modifications in any one component. This is perfectly acceptable provided each alternative has a management approach for each management tool identified in each management component.

C. The Past Effects Matrix

The past effects matrix is intended to delineate what is known about the effects of past actions on the affected environment for purposes of accurately assessing cumulative impacts and to allow the assessment of our capabilities for managing a resource under a specific management approach in the future. It's goal is to present the range of actions the agency has implemented in managing all aspects of the resources, together with their consequent effects. It should include information gathered through research, testing and any other activities which arise as a result of the direct management of a resource, but which nevertheless have bearing on the state of the affected environment. It should provide information in a manner useful to the "environmental consequences" discussion as well as for aiding in the development of alternative courses of action. As such, it serves to provide information allowing NMFS to assess its capability for managing a resource based on past experience.

The resources enumerated in the baseline matrix should all be accounted for in the past effects matrix, regardless of whether there is any known effect from activity on that resource. Again, in each cell, information is tabulated based on what is known. Where information is unavailable, the cell is left empty. Where information is incomplete, existing data is provided, but the deficiency is acknowledged and/or explained. The past effects matrix should include the tabulation of all previous EAs and EISs prepared for a fishery management area, together with their known effects.

The past effects matrix combines parameters from the baseline matrix and the alternatives matrix. It should identify the affected resource parameter (by row) and the management tool employed (columns). Each cell, then, would contain a description of the level of measure employed and it's effect on the corresponding resource parameter. The cell should also contain information referencing specific information regarding when and where the tool/method was employed and citing all relevant pre-existing NEPA documentation discussing the predicted impacts.

D. The Interplay of the Matrices

The three matrices described above can serve the agency in a number of ways. First, they can provide the basis for the discussion of affected environment and environmental consequences in the PEIS and in all subsequent NEPA documents related to the management unit under consideration. This will minimize repetitive and redundant work in ensuing documents and will provide uniformity and consistency across the program. Second, by adhering to the requirements for monitoring and supplementing EIS information, they serve as a central repository for a significant amount of incoming and accumulating data. Third, they provide a useful vehicle for arraying and manipulating data in a way which can aid environmental modeling and study on

related projects. Fourth, they provide the agency with valuable information regarding the agency's capability for managing an individual or collective group of resources. Fifth, they will highlight gaps in our knowledge base requiring further study and they can be used to present requests for additional funding for research to fill those gaps. Sixth, they can provide accurate information regarding the effects of past actions on our ability to manage and/or protect specific resources. Finally, they can aid the agency in assessing and planning for the need to take different management approaches to specific resource issues in the future.

UNITED STATES DISTRICT COURT
WESTERN DISTRICT OF WASHINGTON
AT SEATTLE

GREENPEACE, AMERICAN OCEANS CAMPAIGN, and SIERRA CLUB,

Plaintiffs,

v.

NATIONAL MARINE FISHERIES SERVICE, and WILLIAM M. DALEY, in his official capacity as Secretary of the Department of Commerce,

Defendants.

NO. C98-492Z

REMAND ORDER

This matter came before the Court on the parties' cross-motions for summary judgment. On July 13, 1999, the Court entered an Amended Order, docket no. 254, which granted in part and denied in part each of the parties' motions. That Order also directed plaintiffs to submit a proposed order of remand, and directed defendants and intervenors to provide their responses to that proposed order. The Court received proposed orders from each of the parties, and held a telephone status conference on August 6, 1999. Having considered all materials submitted regarding the proposed order, the arguments of counsel, and the record in this case, the Court now enters the following Order.

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A. Remand of the 1998 Biological Opinion

The December 3, 1998 Biological Opinion, as revised on December 16, 1998, is REMANDED to the National Marine Fisheries Service (NMFS). NMFS shall prepare and issue Revised Final Reasonable and Prudent Alternatives (RFRPAs) for that document consistent with this Court's July 13, 1999 Amended Order. Specifically:

1. In accordance with the Section 7 of the Endangered Species Act and 50 C.F.R. §. 402.02, NMFS shall analyze and explain how the December 3, 1998 RPAs and the December 16, 1998 Revised RPAs will avoid the likelihood of jeopardizing the continued existence of the western population of Steller sea lions or adversely modifying their critical habitat.
    a. If NMFS concludes, based on the above analysis, that the December 3rd and December 16th RPAs do not comply with Section 7 of the Endangered Species Act and 50 C.F.R. § 402.02, then NMFS shall issue Revised Final RPAs which NMFS believes are in compliance with the applicable law.
    b. Alternatively, if NMFS concludes that the December 3rd and December 16th RPAs fulfill the mandates of the ESA, NMFS shall explain this conclusion, and these RPAs shall constitute Revised Final RPAs.
2. NMFS shall analyze jeopardy and adverse modification separately, or provide an explanation of why the two may be treated together.
3. NMFS shall analyze and explain how the individual management measures avoid jeopardy or adverse modification, or how the various management measures work together to avoid jeopardy or adverse modification.
4. NMFS shall analyze and explain how the management measures will accomplish the principles of temporal dispersion, spatial dispersion, and protection of rookeries and haulouts.

5. NMFS shall analyze and explain how the management measures fulfill the four-part definition of RPAs found at 50 C.F.R. § 402.02.

6. If, when preparing the RFRPAs, NMFS is faced with a range of possible measures that are consistent with the requirements of 50 C.F.R. § 402.02, NMFS can recommend the adoption of certain measures based on other factors, including effects on the fishing industry.

7. NMFS will issue the RFRPAs on or before October 15, 1999.

8. On the date of their issuance, the RFRPAs will supersede in their entirety the RPAs contained in the December 3, 1998 Biological Opinion as revised on December 16, 1998.

9. Within three days of the issuance of the RFRPAs, a copy of the RFRPAs will be filed with the Court and served on all parties. The Court schedules a status conference for October 29, 1999, at 9 a.m., to determine the parties' intent to pursue further motions and relief in this action, including challenges to the remanded 1998 Biological Opinion. At that status conference, the Court will determine appropriate times for filing of further administrative records and schedule any briefing and hearing(s) on remaining issues.

B. Remand of the Supplemental Environmental Impact Statement

The Final Supplemental Environmental Impact Statement (SEIS) issued by NMFS in December 1998 is REMANDED to NMFS for preparation of a programmatic SEIS consistent with this Court's July 13, 1999 Amended Order. Specifically:

1. NMFS shall prepare a comprehensive programmatic SEIS that defines the federal action under review as, among other things, all activities authorized and managed under the Fishery Management Plans (FMPs) and all amendments thereto, and that addresses the conduct of the Gulf of Alaska (GOA) and Bering Sea/Aleutian Islands (BSAI) groundfish fisheries and the FMPs as a whole.

2. The SEIS will evaluate the significant changes that have occurred in the GOA and the BSAI groundfish fisheries, including the significant cumulative effects of environmental and management changes in the groundfish fisheries since the issuance of the 1979 and 1981 EISs.

3. The SEIS will present a "general picture of the environmental effects of the [FMPs], rather than focusing narrowly on one aspect of them." Amended Order at p. 41. The SEIS does not have to consider detailed alternatives regarding each and every aspect of the FMPs.

4. The SEIS will provide reasonable management alternatives, as well as an analysis of their impacts, so as to "sharply defin[e] the issues and provid[e] a clear basis for choice among options by the decisionmaker and the public." 40 C.F.R. § 1502.14. See Amended Order at p. 38.

5. In preparing the programmatic SEIS, NMFS will comply with the public participation requirements of NEPA and its implementing regulations.

6. NMFS will publish a notice of intent to prepare the programmatic SEIS in the Federal Register by October 1, 1999. The public scoping period will run, at a minimum, from October 1 to November 15, 1999. NMFS may extend the public scoping period beyond November 15, 1999 if it deems such an extension to be appropriate. The Court will, at a later time, issue an order scheduling a deadline for issuance of the final programmatic SEIS.

7. NMFS will file written reports regarding the progress of its NEPA process every 60 days, starting from the date of this Order.

IT IS SO ORDERED.

DATED this 6th day of August, 1999.

THOMAS S. ZILLY
UNITED STATES DISTRICT JUDGE

4 of 6 DOCUMENTS

GREENPEACE, et al., Plaintiffs, v. NATIONAL MARINE FISHERIES SERVICE, et al., Defendants.

NO. C98-492Z

UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF WASHINGTON

55 F. Supp. 2d 1248; 1999 U.S. Dist. LEXIS 16418; 48 ERC (BNA) 2035

July 13, 1999, Decided

July 13, 1999, Entered

DISPOSITION:
[**1] Motions for summary judgment of plaintiffs, defendants and intervenors GRANTED in part and DENIED in part.

CORE TERMS: fishery, pollock, sea, lion, species, jeopardy, modification, mackerel, habitat, environmental, season, intervenors, fishing, sea lion, catch, ecosystem, arbitrary and capricious, regulation, programmatic, preparation, scientific, prepare, proposed action, prey, fish, federal action, consultation, jeopardize, continued existence, prudent

COUNSEL:
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For GREENPEACE, AMERICAN OCEANS CAMPAIGN, SIERRA CLUB, plaintiffs: Eric Paul Jorgensen, Douglas A Ruley, EARTHJUSTICE LEGAL DEFENSE FUND, JUNEAU, AK.

For GREENPEACE, AMERICAN OCEANS CAMPAIGN, SIERRA CLUB, plaintiffs: Peter Van Tuyn, Jack K Sterne, TRUSTEES FOR ALASKA, ANCHORAGE, AK.

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For ALEUTIANS EAST BOROUGH, intervenor: Michael A D Stanley, JUNEAU, AK.

For NATIONAL MARINE FISHERIES SERVICE, WILLIAM M DALEY, defendants: Brian C Kipnis, U S ATTORNEY'S OFFICE, SEATTLE, WA.

For NATIONAL MARINE FISHERIES SERVICE, WILLIAM M DALEY, defendants: Michael J Robinson, Anthony P Hoang, US DEPT OF JUSTICE, WASHINGTON, DC.

For NATIONAL MARINE FISHERIES SERVICE, WILLIAM M DALEY, defendants: Lyn Jacobs, US DEPARTMENT OF JUSTICE, ENVIRONMENTAL & NATURAL RESOURCES, WASHINGTON, DC.

For WESTWARD SEAFOODS [**2] INC, WARDS COVE PACKING COMPANY, NORTH PACIFIC PROCESSORS INC, NELBRO PACKING COMPANY, UNISEA INC, PETER PAN SEAFOODS INC, KODIAK SALMON PACKERS, INC., ALYESKA SEAFOODS INC, WESTERN ALASKA FISHERIES INC, KANAWAY SEAFOODS INC, ROYAL VIKING INC, MORNING STAR LP, GREAT PACIFIC LIMITED PARTNERSHIP, ALASKAN COMMAND COMPANY, PACIFIC KNIGHT LLC, UNALASKA CITY OF, intervenor-defendants: James Alexander Smith, Jr, SMITH & LEARY, SEATTLE, WA.

For WESTWARD SEAFOODS INC, WARDS COVE PACKING COMPANY, NORTH PACIFIC PROCESSORS INC, NELBRO PACKING COMPANY, UNISEA INC, PETER PAN SEAFOODS INC,

KODIAK SALMON PACKERS, INC., ALYESKA SEAFOODS INC, WESTERN ALASKA FISHERIES INC, KANAWAY SEAFOODS INC, ROYAL VIKING INC, MORNING STAR LP, GREAT PACIFIC LIMITED PARTNERSHIP, ALASKAN COMMAND COMPANY, PACIFIC KNIGHT LLC, UNALASKA CITY OF, intervenor-defendants: George J Mannina, Jr, Gary C Adler, O'CONNOR & HANNAN, WASHINGTON, DC.

For UNITED CATCHER BOATS, intervenor-defendant: Linda Rae Larson, HELLER, EHRMAN, WHITE & MCAULIFFE, SEATTLE, WA.

For THE ALEUTIANS EAST BOROUGH, intervenor-defendant: Marc Slonim, ZIONTZ, CHESTNUT, VARNELL, BERLEY & SLONIM, SEATTLE, WA.

For THE ALEUTIANS EAST BOROUGH, [**3] intervenor-defendant: Michael A D Stanley, JUNEAU, AK.

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For AT-SEA PROCESSORS ASSOCIATION, intervenor-defendant: Eldon V.C. Greenberg, GARVEY, SCHUBERT & BARER, WASHINGTON, DC.

For SERGEI VAKHRIN, SAVE THE SALMON FUND, NORTH PACIFIC, NORTH PACIFIC JOURNAL, RUSSIAN FAR EAST FISHERIES FILM STUDIO, OLGA CHERNIAGINA, KAMCHATKA LEAGUE OF INDEPENDENT SCIENTISTS, PACIFIC ENVIRONMENT AND RESOURCES CENTER, amici: Claire M Gilchrist, SEATTLE, WA.

For SERGEI VAKHRIN, SAVE THE SALMON FUND, NORTH PACIFIC, NORTH PACIFIC JOURNAL, RUSSIAN FAR EAST FISHERIES FILM STUDIO, OLGA CHERNIAGINA, KAMCHATKA LEAGUE OF INDEPENDENT SCIENTISTS, PACIFIC ENVIRONMENT AND RESOURCES CENTER, amici: Kenneth C Powers, STOCK & MOELLER, ANCHORAGE, AK.

For NATIONAL WILDLIFE FEDERATION, INTERNATIONAL MARINE MAMMAL PROJECT OF EARTH ISLAND INSTITUTE, HUMANE SOCIETY OF THE UNITED STATES, DEFENDERS OF WILDLIFE, amici: Richard A Smith, SMITH & LOWNEY, PLLC, SEATTLE, WA.

For AT-SEA PROCESSORS ASSOCIATION, intervenor: Jay H Zulauf, Christopher S McNulty, MUNDT MACGREGOR, SEATTLE, WA.

For [**4] AT-SEA PROCESSORS ASSOCIATION, intervenor: Eldon V.C. Greenberg, GARVEY, SCHUBERT & BARER, WASHINGTON, DC.

JUDGES:
THOMAS S. ZILLY, UNITED STATES DISTRICT JUDGE.

OPINIONBY:
THOMAS S. ZILLY

OPINION:

[*1252] AMENDED ORDER

I. INTRODUCTION

The Gulf of Alaska (GOA) and the Bering Sea/Aleutian Islands region (BSAI), collectively referred to as the North Pacific ecosystem, is home to the largest commercial fishery in the United States. This region is also home to the western population of Steller sea lions, which were listed under the Endangered Species Act (ESA) as a threatened species in 1990 and reclassified as endangered in 1997. This case arises out of the complex and difficult-to-assess interaction between the fisheries and the Steller sea lion population.

The federal defendants in this case are subject to the complicated legal dictates of the ESA, the National Environmental Policy Act (NEPA), and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson Act). Pursuant to the Magnuson Act, the North Pacific Fisheries Management Council (Council) authorizes Fishery Management Plans (FMPs) which regulate all aspects of the fisheries in the GOA and BSAI. Under the ESA, the National [**5] Marine Fisheries Service [*1253] (NMFS) must consult, either formally or informally, to ensure that these FMPs are not likely to jeopardize the continued existence of the Steller sea lions, nor to modify their critical habitat. NEPA requires that environmental information is made available to decision-makers, including the Council and the Secretary of Commerce, as well as to the public, for use in such decision-making as the creation and amendment of the FMPs.

Plaintiffs n1 filed suit against NMFS and William M. Daley, Secretary of Commerce (collectively NMFS), in April 1998, challenging the 1998 North Pacific Fishery Management Plans under both the ESA and NEPA. Representatives of the fishing industry intervened (collectively intervenors or industry) n2. The Court

granted additional environmental organizations leave to file amicus briefs in support of plaintiffs. n3 The focus of the litigation has now shifted to the parameters of the 1999 fisheries in the GOA and BSAI. In particular, plaintiffs and intervenors challenge determinations made in NMFS's Biological Opinion issued December 3, 1998 regarding the 1999-2001 atka mackerel fishery and the 1999-2001 pollock fisheries. n4 S1-55. Plaintiffs [**6] and intervenors also challenge the "Final Reasonable and Prudent Alternatives" passed by the Council and approved by NMFS. Finally, plaintiffs challenge the legal adequacy of the Supplemental Environmental Impact Statement (SEIS), issued on December 18, 1998, regarding the North Pacific fisheries. n5

n1 The plaintiffs in this action are Greenpeace, the American Oceans Campaign, and the Sierra Club.

n2 The intervenors are Aleutians East Borough, Westward Seafoods Inc., Wards Cove Packaging Company, North Pacific Processors Inc., Nelbro Packaging Company, Unisea Inc., Peter Pan Seafoods Inc., Kodiak Salmon Packers Inc., Alyeska Seafoods Inc., Western Alaska Fisheries Inc., Kanaway Seafoods Inc., Royal Viking Inc., Morning Star LP, Great Pacific Limited Partnership, Alaskan Command Company, Pacific Knight LLC, the city of Unalaska, United Catcher Boats, and At-Sea Processors Association.

n3 The "American Amici" are the National Wildlife Federation, International Marine Mammal Project of Earth Island Institute, the Humane Society, and Defenders of Wildlife. The "Russian Amici" are Sergei Vakhrin, Save the Salmon Fund, North Pacific, the North Pacific Journal, Russian Far East Fisheries Film School, Olga Cherniagina, Kamchatka League of Independent Scientists, and the Pacific Environment and Resources Center. [**7]

n4 References in this Order to the "BiOp" relate to the Opinion issued December 3, 1998. Prior Biological Opinions will be identified by the year in which they were issued.

n5 See Notice of Availability of Final Supplemental Environmental Impact Statement, 63 Fed. Reg. 71,285 (1998).

This matter currently is before the Court on cross-motions for summary judgment: plaintiffs' motion, docket no. 181, defendants' motion, docket no. 184, and intervenors' motion, docket no. 187. On May 13, 1999, the Court heard argument on these motions and took the matter under advisement in order to carefully study the issues presented. Having considered the arguments of counsel, the motions, all materials filed in support and in opposition, the amicus briefs, and the record in this case, the Court hereby GRANTS in part and DENIES in part the motions of plaintiffs, defendants, and intervenors.

II. BACKGROUND

A. Steller Sea Lions

Steller sea lions are closely related to other types of sea lions and to fur seals. The genus to which Steller sea lions belong is thought to be [**8] at least 3 million years old. Female Steller sea lions average 2.3 meters in length and 263 kilograms weight, while males are somewhat larger, at 2.8 meters and 566 kilograms. Males live to about 20 years old, and females can reach 30 years old. In 1965, the population of the western stock of Steller sea lions was estimated at 230,000 animals. [*1254] They inhabit coastal areas around the North Pacific Rim, from Southern California to Japan. Before the recent population decline, approximately 75% of the world's population of Steller sea lions were found in Alaska. The majority of Steller sea lions are still found in Alaska, primarily in the Gulf of Alaska and Bering Sea/Aleutian Islands area.

Over the last three decades, however, the population of Steller sea lions in the North Pacific has declined approximately 85%. In 1990, NMFS listed the Steller sea lion as a threatened species under the ESA, and established emergency protective regulations in an attempt to stop the population decline and to begin the process of recovery. n6 In 1993, NMFS designated "critical habitat" for the Steller sea lion, based in significant part on protecting food resources for the sea lions. n7 This critical habitat [**9] consists of the area around 40 rookeries and 82 haulouts, which provide areas for reproduction, feeding, rest, and protection from predators and weather. n8 In 1997, based on genetic distinctions, the Steller sea lion species was separated into the western and eastern populations; the western population's status was then changed to endangered. During the 1990s, the rate of decline has slowed to single-digits, but nevertheless continues. AR-125 at 4; S1-236. NMFS has determined that the next twenty years will likely be crucial for Steller sea lion survival and recovery. S1-55 at 60.

n6 A threatened species is "likely to become an endangered species within the foreseeable future throughout all or a significant portion of its

range." 16 U.S.C. § 1532(20). The listing of a species as threatened triggers an obligation of the Secretary to "issue such regulations as he deems necessary and advisable to provide for the conservation of the species." 16 U.S.C. § 1533(d). An endangered species is "in danger of extinction throughout all or a significant portion of its range." 16 U.S.C. § 1532(6). [**10]

n7 Critical habitat are those areas "essential to the conservation of the species" and that "may require special management consideration or protection" in order for the species to survive and recover. 16 U.S.C. § 1532(5)(A)(i).

n8 The primary difference between haulouts and rookeries is that only rookeries are used in connection with the reproductive process, including mating, giving birth, and nursing.

B. Fishing Industry

1. Pollock and Mackerel

The North Pacific is home to the largest commercial fishing industry in the United States. The most abundant fish in the region, and the major component of the North Pacific fishing industry, is the walleye pollock (pollock). Pollock is a bottom-dwelling fish and a member of the cod family. S1-55 at 21. Mature female pollock are approximately 40 cm in length, and males are longer. Id. Pollock have a fairly short life-span and a high mortality rate, in part because they are sometimes highly cannibalistic.

The estimated biomass of pollock in the North Pacific ecosystem has fluctuated significantly since [**11] the 1960s. In the east Bering Sea, for example, the estimated biomass was less than 2 million metric tons (mmt) in the mid-1960s, rose to nearly 8 mmt in 1971, declined to 4 mmt in 1978, peaked at 14 mmt in 1984, declined to 8 mmt in 1990, increased again to over 12 mmt in 1993, and dropped to 7 mmt in 1997. S1-55 at 25. The fishing effort directed toward pollock has also fluctuated. From 1964 to 1970, the pollock catch in the BSAI rose from approximately 200,000 to 1 million mt. Id. at Fig. 13. In the late 1980s, the total catch peaked at approximately 2.7 mmt. Id. A significant portion of this catch came from what later was designated as Steller sea lion critical habitat. Id. By the mid-1990s, the total pollock catch in the BSAI had declined to approximately 1.25 mmt, but much of the catch came from within Steller sea lion critical habitat. Id. Scientists believe that the pollock population changes stem in large part from climate changes which have effected the rest of the North Pacific ecosystem as well. In part because of [*1255] these changes, Steller sea lions have become increasingly dependent on pollock as their major source of prey.

In the Aleutian Islands, atka mackerel [**12] (mackerel) also form a very significant part of the sea lions' diet. Mackerel are a pelagic, dense schooling fish. They reach a maximum size of 50-55 cm, at age 4 to 6 years. S1-55 at 7. Biomass trends for the atka mackerel are similar to those for pollock: in 1977, the biomass in the BSAI was approximately 300,000 mt. It rose in the early 1980s, fell again, then peaked at approximately 1.3 mmt in 1991. Id. at Fig. 2. In the 1990s, the biomass has declined steadily, to approximately 600,000 mt in 1998. Id. The amount of mackerel caught has been generally rising since the late 1970s, with a brief peak in the mid-1980s at 30,000 mt, a decline in the late 1980s to approximately 18,000 mt, then sharp and steady growth throughout the early 1990s. Id. at Fig. 5. By 1996, the total atka mackerel catch reached nearly 80,000 mt. Id. Since 1980, the percentage of the catch occurring in Steller sea lion critical habitat has been almost always above 75%, and in many years was well over 90%. Id.

2. Legal Parameters

The Magnuson Act provides the legal framework for federal management of the fisheries in the North Pacific. This Act establishes eight Regional Fishery Management [**13] Councils, including the North Pacific Fishery Management Council, that have primary responsibility for designing fishery management measures, including the Fishery Management Plans (FMPs) and implementing regulations. The Secretary of Commerce reviews these proposals, and can either approve or disapprove, in whole or in part, those recommendations; the Secretary cannot make changes to the proposals or take action based on a policy disagreement with the Councils' recommendations. The FMPs must specify each fishery's optimum yield, the catch level which would provide the greatest benefit to the nation. The plans must also state how much of that optimum yield can be expected to be harvested by vessels from the United States. Additionally, the FMPs must specify the level of fishing that would constitute overfishing.

The FMPs typically contain a high level of detail concerning all the variables involved in fishing, including Total Allowable Catch (TAC) limits for targeted species, "time and area closures, gear restrictions, bycatch limits of prohibited species, and allocation of TACs among vessels delivering to different types of processor groups, gear types, and qualifying communities. [**14] " S2-350 at 9. With respect to some fisheries, including the atka mackerel fishery, there has been no temporal allocation of the TAC; in other words, the fleet fishes until the TAC is met, and then fishing stops for the year. In other fisheries, the TAC has

been allocated among fishing seasons: for example, the 1998 BSAI pollock fishery involves 45% of the TAC being taken in the "A" season, which ran from approximately January 20th to March 20th, and the remaining 55% of the TAC was taken in the "B" season, during September and October. n9 TACs may also be allocated by location, by type of vessel, and by numerous other factors.

n9 The BiOp analyzes the effects of the 1998 fishery on the Steller sea lions, and makes recommendations as to how the 1999-2001 fisheries should be conducted to minimize their impact. The ESA claims in this case involve challenges to NMFS's conclusions based on this data, and on the recommendations they make to avoid the problems that occurred with the 1998 fisheries. Thus, the 1998 fisheries data provides the appropriate baseline for this Court's analysis.

[**15]

C. Biological Opinions Under the ESA

The ESA imposes on all federal agencies a duty to "insure" that action taken by the agencies does not jeopardize endangered species or adversely modify their critical habitat. n10 Section 7 of the ESA provides [*1256] for the "action" agency to consult with an expert agency to determine whether jeopardy or adverse modification is likely to occur. The final product of a formal consultation is the issuance of a Biological Opinion (BiOp), which sets forth the expert agency's conclusions regarding jeopardy and adverse modification, as well as the reasoning supporting the opinion.

n10 An action that "jeopardizes" a listed species is one that "reasonably would be expected to reduce appreciably the likelihood of both the survival and recover" of the species. 50 C.F.R. § 402.2. An action that adversely modifies a species' critical habitat is one that "appreciably diminishes the value of [the] critical habitat for both the survival and recovery" of the species. Id. The terms are discussed in more detail, infra, Section III(B).

[**16]

Since the Steller sea lions were first listed as threatened, NMFS's Office of Sustainable Fisheries (the action agency for ESA purposes) has participated in formal and informal consultation with NMFS's Office of Protected Resources (the expert agency), regarding the effect of the fisheries on Steller sea lions. n11 See S1-55 at 141 (summarizing previous consultations). These prior consultations considered the role of the fisheries in sea lion population decline, and concluded that the effect of the fisheries on the sea lions was as yet undetermined. See, e.g., AR-34 at 6, 13; AR-36 at 6. All Biological Opinions issued prior to 1998 concluded that the fishery management processes were taking into account the needs of the Steller sea lions, and that the FMPs under review did not depart significantly from prior practices, so they concluded that no jeopardy or adverse modification was occurring. See, e.g., AR-34 at 17-18; AR-36 at 8.

n11 Although the North Pacific Fishery Management Council makes recommendations regarding amendments to the FMPs, the Secretary of Commerce must approve them before they become final. This structure leads to NMFS's Office of Sustainable Resources being the action agency for ESA purposes. Because most of the decisions are actually made by the Council, however, NMFS's role as expert/consulting agency is more significant to the issues presently before the Court. Thus, references to "NMFS" in this Order, unless otherwise specified, refer to NMFS in its role as expert/consulting agency.

[**17]

On December 3, 1998, NMFS issued its BiOp on the effect of the 1999-2001 pollock and mackerel fisheries on the Steller sea lions. S1-55. The BiOp set forth at great length the current scientific information about the sea lions, mackerel, and pollock. It acknowledged the continued scientific uncertainty about competition between the fisheries and sea lions. Importantly, however, it discussed new evidence that the mackerel fishery caused localized depletions of available prey in Steller sea lion critical habitat. The Biological Opinion also noted that the Council had taken precautionary action based on this data, by proposing a series of new regulations designed to spread out the mackerel fishery, both spatially and temporally. The BiOp concluded that the proposed changes to the fishery structure as contained in the FMP minimized the risk of localized depletion, and therefore that the mackerel fishery would not cause jeopardy or adverse modification.

For the first time in the lengthy consultation process, however, NMFS concluded that the BSAI and GOA pollock fisheries were likely to result in jeopardy to the Steller sea lions and adverse modification of their critical habitat. While [**18] lacking the direct evidence of

localized depletion found regarding the mackerel fishery, the BiOp nevertheless found that competition probably does occur between the pollock fisheries and sea lions "because the pollock fisheries: (1) operate in the same areas where sea lions feed; (2) operate during seasons when sea lions may be especially vulnerable to competition and reduction in availability of prey; (3) catch pollock at the same or overlapping depths at which sea lions feed; and (4) catch the same size pollock on which sea lions feed." Def. Mem. in Supp., docket no. 185, p. 16; see also S1-55 at 98-111. The BiOp concluded that this competition results in localized depletions of pollock. The BiOp, without clearly and specifically analyzing the proposed pollock fisheries, concluded that the pollock fisheries were likely to jeopardize [*1257] the continued existence of Steller sea lions and to adversely modify their critical habitat.

Federal law requires that once a jeopardy or adverse modification determination has been made, the consulting agency must propose "Reasonable and Prudent Alternatives," which are alternative actions that can be taken consistent with the purpose of the original [**19] project but the consulting agency believes would avoid jeopardy or adverse modification. See 50 C.F.R. § 402.02. The BiOp therefore proposed three "principles" (temporal dispersion, spatial dispersion, and pollock trawl exclusion zones) for reasonable and prudent alternatives, then gave examples of measures which would fulfill these objectives. On December 13, 1998, the Council approved new measures, which became the "Final RPAs" when the Director of the consulting agency concurred in the proposal on December 16, 1998. See S1-56. The Final RPAs included a number of measures proposed in the December 3rd BiOp, but also involved numerous changes.

Both plaintiffs and intervenors now challenge the December 1998 BiOp and the Final RPAs. The plaintiffs and amici support NMFS's jeopardy assessment regarding the pollock fisheries. They contend, however, that the draft and Final RPAs are arbitrary and capricious because they do not apply the governing legal standards and because they do not remedy the problems on which NMFS based its jeopardy assessment. Plaintiffs also challenge the no-jeopardy or adverse modification finding regarding the mackerel fishery, claiming that management [**20] measures on which the agency relies for its findings of no jeopardy or adverse modification are even less adequate than the Final RPAs proposed for the pollock industries. The intervenors support NMFS's determination of no jeopardy from the mackerel fishery, and argue that the existing scientific evidence renders a jeopardy finding for the pollock fisheries arbitrary and capricious. Intervenors further argue that the NMFS has not met its burden of showing that each component of the RPAs is essential and effective for avoiding jeopardy and adverse modification. Finally, the defendants argue that NMFS's determinations in the BiOp are well-reasoned, rationally-based, and "resulted from an intense deliberative process that considered all relevant factors." Def. Mem. in Supp., docket no. 185, p. 1. They also contend "that the RPAs are NMFS's best evaluation of measures that would avoid competition between the fisheries and the sea lions and mitigate the [BiOp's] jeopardy conclusion." Id.

D. Supplemental Environmental Impact Statement

This case also involves claims by plaintiffs based on the National Environmental Policy Act (NEPA). NEPA requires that an environmental impact [**21] statement (EIS) n12 be prepared on proposals for legislation and other major federal actions significantly affecting the quality of the human environment. n13 See 40 C.F.R. § 1502.3. The Fishery Management Plans (FMPs), such as those for the fisheries in this case, undisputedly constitute major federal actions requiring an EIS. Accordingly, NMFS published an EIS for the GOA fishery in 1978, in connection with the FMP for that year. AR-19. The Bering Sea EIS was published in 1981. AR-20. These FMPs and their accompanying [*1258] EISs address numerous issues, including when, where, and how the fish are caught, TAC levels, bycatch, habitat destruction, socioeconomic issues, and other marine mammals affected.

n12 An EIS is "an action-forcing device to insure that insure that [NEPA's] policies and goals ... are infused into the ongoing programs and actions of the Federal Government. It shall provide full and fair discussion of significant environmental impacts and shall inform decisionmakers and the public of the reasonable alternatives which would avoid or minimize adverse impacts or enhance the quality of the human environment." 40 C.F.R. § 1502.1. [**22]

n13 Major federal actions are those which may have significant effects on the environment and which are "potentially subject to Federal control and responsibility." 40 C.F.R. § 1508.18.

NEPA requires continuing environmental analysis for changes to ongoing federal actions, such as the dozens of amendments to the FMPs for the North Pacific fisheries. If an agency finds that a change is not substantial, however, it can prepare an Environmental Assessment (EA) and Finding of No Significant Impact (FONSI) rather than a supplemental environmental

impact statement (SEIS). n14 The key difference, for present purposes, between an EA/FONSI and an SEIS is that the latter must consider a broad range of alternatives to the proposed federal action, while an EA can simply approve the action as proposed. n15 NMFS had prepared EAs/FONSIs for all prior amendments to the FMPs, and had never prepared an SEIS until December 1998.

n14 An Environmental Assessment is a concise public document that helps an agency determine whether an EIS is necessary, facilitates preparation of an EIS when one is necessary, and aids in the agency's NEPA compliance. 40 C.F.R. § 1508.9. A Finding of No Significant Impact briefly presents "the reasons why an action ... will not have a significant effect on the human environment and for which an [EIS] therefore will not be prepared." 40 C.F.R. § 1508.13. [**23]

n15 The section on alternatives to the proposed agency action is "the heart of the environmental impact statement." 40 C.F.R. § 1502.14. This section "should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." Id.

During the approximately twenty years since the original EISs were prepared, however, there have been dramatic changes to the North Pacific ecosystem. Steller sea lions were listed as a threatened species nine years after preparation of the original EISs, and the western population was classified as endangered sixteen years after their preparation. In fact, the original EISs considered the Steller sea lion population as being at an optimal sustainable level. This period also saw significant population declines of fur seals, harbor seals, and several species of whales, birds and fish in the North Pacific ecosystem. This area went through a major climate change during this period, which significantly affected the prevalence [**24] of various fish species, which in turn affected the focus of the fishing industry. When the original EISs were prepared, the fishing fleet was dominated by foreign vessels; it is now almost entirely composed of American vessels. This change has significantly altered the fishing industry's economic effects on Alaskan communities. The size and capacity of the trawlers used has also increased considerably, which allows more fish to be caught in a shorter amount of time. This highlights only a small fraction of the changes which occurred in the North Pacific in the 1980s and 1990s.

These extensive changes in the North Pacific led to sharp criticism within NMFS over the adequacy of the existing documents for NEPA compliance. Some NMFS employees have urged the preparation of a supplemental EIS since the early 1990s. NMFS did not take its first formal step towards doing so, however, until March 1997, when NMFS issued a notice of intent to prepare an SEIS regarding the BSAI and GOA groundfisheries. AR-7 (62 Fed. Reg. 15,151 (1997)). NMFS announced that the SEIS would "incorporate[] the following: The amendments to the groundfish FMPS; the annual process for determining the [**25] TAC specifications; and the public process in place for implementing new regulations, revising existing ones, and incorporating new information." AR-7 at 2. After 18 months of preparation, the agency issued a draft EIS for public review and comment in September 1998. The final SEIS (FSEIS) was issued on December 18, 1998. S2-350. It discussed in great detail the new developments regarding [*1259] the North Pacific fisheries, from the changes in the way the fisheries occur to the listings of the Steller sea lion and several other species under the ESA, to the new scientific information obtained since the prior EISs had been prepared. The critical "alternatives" section of the FSEIS, however, analyzed this information only under a range of alternative TAC levels. Plaintiffs contend that this narrow scope violates NEPA; the defendants argue that this approach fulfills their NEPA obligations. n16

n16 The intervenors do not raise NEPA claims.

III. Endangered Species Act Claims

A. Standard of Review

Challenges [**26] to Biological Opinions issued pursuant to ESA Section 7, 16 U.S.C. § 1536, are reviewed under the Administrative Procedures Act ("APA") to determine whether the Biological Opinion was "arbitrary, capricious, an abuse of discretion, or otherwise not in accordance with law." 5 U.S.C. § 706(2)(A); See Bennett v. Spear, 520 U.S. 154, 174, 137 L. Ed. 2d 281, 117 S. Ct. 1154 (1997); Southwest Ctr. for Biological Diversity v. U.S. Bureau of Reclamation, 143 F.3d 515, 522 (9th Cir. 1998). In determining "whether an agency decision was 'arbitrary or capricious,' the reviewing court 'must consider whether the decision was based on a consideration of the relevant factors and whether there has been a clear error of judgment.'" Marsh v. Oregon Natural Resources Council, 490 U.S. 360,

378, 104 L. Ed. 2d 377, 109 S. Ct. 1851 (1990). "Normally, an agency rule would be arbitrary and capricious if the agency has relied on factors which Congress has not intended it to consider, entirely failed to consider an important aspect of the problem, offered an explanation for its decision that runs counter to the evidence before the agency, or is so implausible that it could not be ascribed [**27] to a difference in view or the product of agency expertise." Motor Vehicle Mfrs. Ass'n v. State Farm Mut. Auto. Ins. Co., 463 U.S. 29, 43, 77 L. Ed. 2d 443, 103 S. Ct. 2856 (1983). An agency action is also arbitrary when it fails "to articulate a satisfactory explanation for its action." Northern Spotted Owl v. Hodel, 716 F. Supp. 479, 482 (W.D. Wash. 1989). "In applying [the arbitrary and capricious] standard, the focal point for judicial review should be the administrative record already in existence, not some new record made initially in the reviewing court." Camp v. Pitts, 411 U.S. 138, 142, 36 L. Ed. 2d 106, 93 S. Ct. 1241 (1973); Inland Empire Pub. Lands Council v. Glickman, 88 F.3d 697, 703 (9th Cir. 1996).

"Deference to an agency's technical expertise and experience is particularly warranted with respect to questions involving engineering and scientific matters." United States v. Alpine Land and Reservoir Co., 887 F.2d 207, 213 (9th Cir. 1990). When scientific evidence is equivocal, a court is to defer to an agency's reasonable interpretation of that evidence. Central Ariz. Water Conservation Dist. v. United States EPA, 990 F.2d 1531, 1540 (9th Cir. 1993). [**28] "When specialists express conflicting views, an agency must have discretion to rely on the reasonable opinions of its own qualified experts even if, as an original matter, a court might find contrary views more persuasive." Marsh, 490 U.S. at 378. "The deference a court must accord an agency's scientific ... expertise is not unlimited, however. Thus the presumption of agency expertise may be rebutted if its decisions, even though based on scientific expertise, are not reasoned." Defenders of Wildlife v. Babbitt, 958 F. Supp. 670, 679 (D.D.C. 1997). See also Northern Spotted Owl, 716 F. Supp. at 482 ("Judicial deference to agency expertise is proper, but the Court will not do so blindly.").

B. ESA Obligations

The ESA imposes on all federal agencies a duty to insure that their actions will not "jeopardize" endangered species or "adversely [*1260] modify" their critical habitat. The statute does not define "jeopardize," but the implementing regulations provide:

> Jeopardize the continued existence of means to engage in an action that reasonably would be expected, directly or indirectly, to reduce appreciably the likelihood of [**29] both the survival and recovery of a listed species in the wild by reducing the reproduction, numbers, or distribution of that species.

50 C.F.R. § 402.02. The regulations also define "adverse modification:"

> Destruction or adverse modification means a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species. Such alterations include, but are not limited to, alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical.

50 C.F.R. § 402.02. The Biological Opinion correctly cites these definitions, and the parties agree that they provide the relevant legal standards by which to evaluate the BiOp. n17

> n17 Plaintiffs' contention that NMFS failed to apply this definition by analyzing adverse modification and jeopardy separately will be discussed infra, Section III(E)(2).

To effectuate the ESA's duty to avoid jeopardy and adverse [**30] modification, the Act provides for consultation by an expert agency, to evaluate the consequences of a proposed action on a listed species. 16 U.S.C. § 1536(a)(2). n18 The expert agency then prepares a Biological Opinion, which sets forth the expert agency's:

> opinion, and a summary of the information on which the opinion is based, detailing how the agency action affects the species or its critical habitat. If jeopardy or adverse modification is found, the [expert agency] shall suggest those reasonable and prudent alternatives which [it] believes would not violate subsection (a)(2) of this section and can be taken by the Federal agency ... in implementing the agency action.

16 U.S.C. § 1536(b)(3)(A). In this case NMFS's Office of Protected Resources prepared a Biological Opinion on the 1999-2001 BSAI and GOA fishery management plans. n19 This December 1998 BiOp constitutes the final agency action for purposes of judicial review pursuant to the APA. Bennett, 520 U.S. at 178.

> n18 Section 1536(a)(2) provides: "Each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by

such agency (hereinafter in this section referred to as an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is determined ... to be critical .... In fulfilling the requirements of this paragraph each agency shall use the best scientific and commercial data available." [**31]

n19 See supra footnote 11 for a precise explanation of the expert-consulting agency structure in this case.

C. Pollock Fisheries Jeopardy Assessment

To logically evaluate the ESA issues presented, the Court must begin by considering the pollock fishery jeopardy determination. Plaintiffs and defendants argue that the Court should uphold this determination. The intervenors, however, contend that NMFS failed to make the pollock jeopardy determination "based on the best scientific and commercial data available," as required by 16 U.S.C. § 1536(a)(2). Specifically, the intervenors contend that: (1) NMFS failed to consider relevant information contrary to its conclusion, (2) the existing scientific data does not support NMFS's conclusion, and (3) the method used in the Biological Opinion is merely speculation based on an absence of data. Each contention is discussed in order.

[*1261] **1. Evidence Regarding Lack of Appropriate Prey and Climate Change**

Industry contends that the Steller sea lion decline is caused by environmental changes and the resulting lack of appropriate [**32] prey. See Int. Mem. in Supp., docket no. 188, p. 3-5. They further contend that there is "growing agreement in the scientific community that this general collapse is not associated with fishing activities but is due to a reduced 'carrying capacity' of the North Pacific ecosystem as a whole." Id. at 4. They argue that NMFS's treatment of these issues in the Biological Opinion violated the ESA both by failing to use the best scientific data available and by reaching arbitrary and capricious conclusions based on the available data.

These challenges must fail under the prevailing legal standards. The Biological Opinion stated that environmental changes may have contributed to the decline, which may have multiple causes. S1-55 at 72-73. The BiOp concluded, however, that: "the existence of a strong environmental influence on sea lion trends does not rule out the possibility of significant fisheries-related effect." Id. at 73. Similarly, the BiOp noted that:

The amount of [dict] diversity has varied considerably and may be an important factor ... but clearly sea lions are not limited to the extreme of only one prey type. ... In spite of any debate about the nutritional [**33] value of pollock, the fact remains that pollock is a major prey of sea lions. Simply put, sea lions eat, and therefore depend, on pollock. In the present context, the question to be addressed is whether fishery removal of pollock from critical habitat is to the sea lions' advantage, disadvantage, or of no particular consequence.

Id. at 73-74. Although the intervenors point to scientific testimony disagreeing with NMFS's conclusion, "an agency must have discretion to rely on the reasonable opinions of its own qualified experts." Marsh, 490 U.S. at 378. NMFS considered and rejected the theory favored by the intervenors. This rejection was not arbitrary and capricious.

2. Evidence Supporting Competition Theory

Similarly, the Court rejects intervenors' contention that NMFS's conclusion was not based on sufficient scientific evidence. NMFS based its jeopardy determination on the theory that sea lions and the fisheries "compete" with each other for available prey. See S1-55 at 75-82, 98-111. In support of this theory, NMFS relied on scientific evidence establishing a significant overlap between the size of pollock taken by the fisheries and that consumed [**34] by the Steller sea lions. Id. at 76-78. Specifically, NMFS found that sea lions consume a wide range of pollock, including the larger pollock targeted by the fishery. Further, NMFS concluded that biomass consumed at each length, rather than number consumed of a given size, was the relevant measure for dietary significance. Id. NMFS also found that the fisheries catch pollock at the same or overlapping depths at which sea lions feed, relying on studies of sea lion foraging patterns and of fishing industry practice. Id. at 78-79. The agency found that the fisheries operated extensively in sea lion critical habitat. Id. at e.g. 27-28. Additionally, much of the fishing activity in sea lion critical habitat occurs in the winter months; NMFS relied on scientific evidence that sea lions are particularly vulnerable to competition during this period. See id. at 79-80. Finally, a key new study showed that the mackerel fishery was causing localized depletions of prey, for similar reasons. Id. at 17-20. Thus, the Biological Opinion relied on significant evidence that the pollock fisheries were competing with the Steller sea lions for prey, at times which were particularly [**35] likely to harm the endangered species.

3. Methodology

NMFS acknowledged that this scientific evidence is not "conclusive." Id. [*1262] at 99. The ESA, however, only requires that decisions be made on the basis of "the best scientific and commercial data available." 16 U.S.C. § 1536(a)(2). This standard requires "far less" than conclusive proof. See Defenders of Wildlife, 958 F. Supp. at 680. In fact, Congress intended that agencies give "the benefit of the doubt to the species." Conner v. Burford, 848 F.2d 1441, 1454 (9th Cir. 1988) (citing H.R. Conf. Rep. No. 96-697, at 12, reprinted in 1979 U.S.C.C.A.N. 2572, 2576). One of the express purposes of the ESA is "to provide a means whereby the ecosystems upon which endangered species and threatened species depend may be conserved." 16 U.S.C. § 1531(b). NMFS did so by evaluating the best evidence currently available and concluding that jeopardy and adverse modification were likely to occur.

Besides the specific evidence discussed above, the Biological Opinion supported its jeopardy assessment by a two-step approach. First, it considered a number of potential [**36] non-fishery causes for the Steller sea lions' decline: predation, disease, toxic substances, oil and gas or mineral development, disturbance by non-fishing activities, research, commercial and/or subsistence harvest of sea lions, natural environmental changes, and prey quality. S1-55 at 66-74. Based on consideration of the scientific evidence related to these factors, the BiOp concluded that these factors were not likely to be major causes of the decline, and/or that they were not likely to still pose significant impediments to recovery. Id. Having thus eliminated non-fishery related causes for the decline, and acknowledging that no data conclusively established a positive or negative impact from the fisheries on Steller sea lions, NMFS then turned to three "assumptions:" (1) "the abundance of any species in a particular space at a particular time is finite;" therefore removing hundreds of thousands of tons of fish per day must, "at least on a very local scale and for short periods of time, reduce the biomass of the [remaining] targeted fish;" (2) the likelihood of localized depletions rises when fish are patchily distributed, as pollock are; and (3) "if the reductions in schools [**37] of pollock or mackerel occur within the foraging areas of the endangered western population of Steller sea lions, the reduced availability of prey is likely to reduce the foraging effectiveness of sea lions." Id. at 100. The BiOp then detailed the evidence supporting these assumptions, and concluded that based on the available data and the reasonable assumptions, jeopardy and adverse modification were likely to occur.

Such an approach can hardly be considered arbitrary and capricious. NMFS examined a number of other potential causes for the Steller sea lions' decline. They evaluated a great deal of evidence indicating that the fishery was competing with the sea lions for prey during critical times of the year, especially in light of the three reasonable assumptions discussed above. NMFS found that although the fishery may not be the sole cause of the decline, nor the sole factor preventing recovery, the fishery was nevertheless likely to jeopardize the continued existence of the Steller sea lion population. In so finding, NMFS provided a reasonable interpretation of equivocal evidence, to which this court must defer. See Central Ariz., 990 F.2d at 1540. Accordingly, [**38] plaintiffs and NMFS are entitled to summary judgment upholding the determination that the pollock fisheries in the GOA and BSAI were likely to result in jeopardy and adverse modification.

D. Mackerel Fishery Finding of No Jeopardy

The plaintiffs argue that the same evidence on which NMFS relied to find jeopardy for the pollock fisheries compels a similar finding for the mackerel fisheries. In fact, plaintiffs contend, the evidence is even stronger in the latter context: the only study to find occurrences of localized depletion concerned the mackerel fishery. See S1-55 at 17-19. The plaintiffs thus [*1263] argue that the BiOp's conclusion that the mackerel fishery is not likely to cause jeopardy or adverse modification is arbitrary and capricious. Instead of analyzing the relevant differences, or even providing any comparative discussion of the two fisheries at all, the BiOp simply set forth a great deal of data, then stated its conclusions, without making its reasoning explicit. After reviewing the Opinion closely, however, the Court concludes that the Biological Opinion provided a rational basis for the different treatment of the effect of the pollock and mackerel fisheries on [**39] the Steller sea lions.

First, the pollock fishery accounted for a much larger percentage of the overall groundfish catch in the BSAI than did the mackerel fishery. Compare S1-55 Figs. 11 and 7. n20 Secondly, the two fisheries have historically been conducted very differently. The mackerel fishery has involved a single season, with 100% of the total mackerel TAC taken between January and late March or early April. Id. at 103. The BSAI pollock fishery, in contrast, has been split between two seasons, with more than half of the catch occurring in September and October. Id. at 115. The spatial allocation involved is different as well. The mackerel fishery is broken up into three distinct management areas; fishing begins in the easternmost subarea, then moves westward through the other two. Id. at 8. The pollock fishery does not operate under similar spatial-management measures.

n20 The BiOp's presentation of this information is confusing and opaque at best. The 125 pages of text never include TAC levels for

the BSAI; instead, the information is only given in percentages - e.g. the percentage increase or decrease from prior years, percentage of TAC taken from critical habitat, etc. Such a presentation makes it very difficult for a reviewing court to understand the agency's decisions and to assess their legal sufficiency. Neither has the government's brief always helped the court, because its citations to the record on critical points are sometimes inaccurate. See, e.g., Def.'s Resp., docket no. 205, p. 3 (citing as authority for BSAI TAC levels a chart dealing with total catch in the GOA).

[**40]

Most importantly, however, in early 1998, the North Pacific Fishery Management Council considered the evidence of localized mackerel depletion and proposed significant changes to the mackerel fishery, while no such changes were made regarding the pollock fishery. Beginning in 1999, the mackerel fishery will be split into two seasons, with the TAC split evenly between them. Id. at 104. This measure will therefore cut in half the total number of mackerel taken during the critical winter months. n21 Additionally, the percentage of mackerel caught in sea lion critical habitat will be reduced from the recent levels of 70-98% to 40% by 2002. These changes spatially and temporally distribute the mackerel fishery, and represent significant changes from the status quo that was found to result in localized depletions. These measures are also similar to the changes that NMFS proposed for the pollock fishery as RPAs.

n21 The second season will occur in September through October or November. AR-28 at 32; S1-55 at 104. This division of the mackerel fishery into two seasons provides a much more significant change from 1998 practices than does the division of the pollock fishery into A1 and A2 seasons. See Part III(E)(2)&(3), infra.

[**41]

The Biological Opinion could be written much more clearly. Nevertheless, when viewed under the deferential "arbitrary and capricious" standard, the BiOp contains enough information to justify the no-jeopardy conclusion reached for the mackerel fishery. This conclusion finds further support in the administrative record, particularly in the Environmental Assessment prepared for NEPA compliance, on the environmental effects of the proposed changes to the mackerel fishery on the Steller sea lions. See AR-28. Defendants and intervenors are therefore entitled to summary judgment upholding the determination that the mackerel fishery is not likely to cause jeopardy or adverse modification.

[*1264] **E. Pollock Fisheries Reasonable and Prudent Alternatives**

Broadly speaking, "reasonable and prudent alternatives" (RPAs) are the solutions to the problems inherent in a proposed federal action which lead the consulting agency to find that the action will result in jeopardy. Specifically, the ESA provides, "If jeopardy or adverse modification is found, the Secretary shall suggest those reasonable and prudent alternatives which he believes would not violate subsection (a)(2) of this section and [**42] can be taken by the Federal agency or applicant in implementing the agency action." 16 U.S.C. § 1536(b)(3)(A). n22 Further definition of the term "reasonable and prudent alternatives" is found in the regulations:

Reasonable and prudent alternatives refer to alternative actions identified during formal consultation that can be implemented in a manner consistent with the intended purpose of the action, that can be implemented consistent with the scope of the Federal agency's legal authority and jurisdiction, that is economically and technologically feasible, and that the Director believes would avoid the likelihood of jeopardizing the continued existence of listed species or resulting in the destruction or adverse modification of critical habitat.

50 C.F.R. § 402.02. This definition contains four distinct requirements for any valid RPA: it must (1) be consistent with the purpose of the underlying action; (2) be consistent with the action agency's authority; (3) be economically and technically feasible; and (4) "avoid the likelihood" of jeopardy or adverse modification. Plaintiffs contend that the draft and final RPAs violate the fourth prong of [**43] this definition; the intervenors argue that the RPAs violate the third prong. Defendants argue in support of the RPAs.

n22 Subsection (a)(2) requires the secretary to review agency action to determine whether jeopardy or adverse modification will result.

1. Defining "RPAs" Being Reviewed

In evaluating these challenges, the Court must define what constitutes the RPAs under review. In this case, that is a somewhat complicated question for a number of reasons. The Biological Opinion contains proposes solutions at various levels of generality. The BiOp sets forth three principles that any reasonable and prudent

alternative must accomplish: (1) temporal dispersion of the fishery; (2) spatial dispersion of the fishery; and (3) protection of rookeries and haulouts by implementation of additional no-trawl zones. S1-55 at 114-120. Within the discussion of each general principle, the BiOp then provides more specific goals which "must" be accomplished, for example "distribute the pollock trawl harvest into at least [**44] four seasons (two in the period of January through May and two in the period from June through October)." Id. at 117. The case also involves "draft" and "final" RPAs; the former are found in the December 1998 BiOp, while the latter are the emergency measures that the North Pacific Fishery Management Council adopted ten days later in response to the BiOp. See S1-56 (memorandum from Director of action agency to Director of consulting agency outlining changes; signed concurrence by consulting agency).

The parties discussed these issues at oral argument. The Court agrees with the parties' consensus that the Court should evaluate the management measures as a whole for compliance with the four-prong standard for evaluating RPAs. This represents the middle ground between defining the RPAs as either the three general principles mentioned above or looking at each individual management measure in isolation. There is no serious dispute over the appropriateness of the three general principles; the dispute centers instead over their implementation. On the other hand, looking at the effectiveness of each [*1265] specific measure or its scientific and economic feasibility would provide a distorted [**45] view of the situation. It is therefore appropriate to analyze the overall management scheme proposed.

The Court also finds that it can consider both the draft and final RPAs in evaluating NMFS's compliance with the ESA. The only substantive analysis of the RPAs found in the record is in the Biological Opinion. The action agency, NMFS's Office of Sustainable Fisheries, prepared a memorandum summarizing the Council's changes. The Director of the consulting agency, NMFS's Office of Protected Resources, then signed the memorandum, thereby indicating her approval of the Council's changes. In other words, the voluminous record does not contain a single sentence reflecting the reasons why NMFS found the final RPAs to be adequate. Under these circumstances, the Court looks to the record as a whole, and to the BiOp's section on draft RPAs in particular, to determine whether NMFS acted arbitrary and capriciously.

2. Avoiding Jeopardy and Adverse Modification

Plaintiffs challenge both the proposed and final RPAs for their failure to analyze jeopardy and adverse modification separately. The ESA requires that each federal agency "shall ... insure that any action ... is not likely [**46] to jeopardize the continued existence of any endangered species ... or result in the destruction or adverse modification of habitat of such species." 16 U.S.C. § 1536(a)(1) (emphasis added). Jeopardy relates to the overall continued existence of a species, and examines the effects of an action on the species. n23 Adverse modification, in contrast, concerns the effects of an action on the species' critical habitat. n24 Although there is considerable overlap between the two, the Act establishes two separate standards to be considered. See Conservation Council for Haw. v. Babbitt, 2 F. Supp. 2d 1280, 1287 (D. Haw. 1998). NMFS should therefore have analyzed the two separately or provided an explanation for why, in this case, the two could be treated together. Id.

n23 An action results in jeopardy when it "directly or indirectly, ... reduce[s] appreciably the likelihood of both the survival and recovery of a listed species in the wild by reducing the reproduction numbers, or distribution of that species." 50 C.F.R. § 402.02.

n24 Adverse modification is "a direct or indirect alteration that appreciably diminishes the value of critical habitat for both the survival and recovery of a listed species ... [including] alterations adversely modifying any of those physical or biological features that were the basis for determining the habitat to be critical." 50 C.F.R. § 402.02.

[**47]

Although NMFS should thus have applied both standards in analyzing the RPAs, NMFS actually failed to apply either standard. For example, the BiOp states that one specific goal of spatial dispersion is to reduce the level of catch taken from critical habitat. The ESA requires consideration of what catch levels would "reduce appreciably the likelihood of survival and recovery" of the Steller sea lions, or would avoid "appreciably diminishing the value of critical habitat." 50 C.F.R. § 402.02. The BiOp, however, only looks at what would be "consistent with past fishery practices and still provide[] a considerable reduction from the current" levels. S1-55 at 118. The Court recognizes the difficult line-drawing issues presented in deciding, for instance, exactly what level of catch inside critical habitat would result in jeopardy or adverse modification. Nevertheless, NMFS must comply with the mandates of the Endangered Species Act, including asking the required questions.

The Council's modifications to the RPAs aggravated this problem. For example, the BiOp stated that temporal dispersion of the winter/spring roe fishery was necessary, and suggested splitting 45% of the winter [**48] TAC into two seasons, beginning [*1266] January 20th and March 1st, respectively. Id. at 117, 121. n25 The Council, however, moved the Bering Sea A2 season's starting date to February 20th, and eliminated the A2 season entirely for the Gulf of Alaska. S1-56 at 3, 5. Additionally, the BiOp proposed allocating 20% of the yearly Bering Sea TAC to the A1 season, and 25% to the A2 season. S1-55 at 121. The Council changed the allocation to 27.5% and 12.5%, respectively. S1-56 at 3. Because the BiOp only related its proposed allocations to current practices rather than the standards for adverse modification and jeopardy, it is impossible for the Court to evaluate the changes made by the Council and to review NMFS's approval of these changes. Similarly, NMFS's failure to analyze either the draft or final RPAs under the appropriate legal standards makes it impossible for this Court to find that the agency has "articulated a rational connection between the facts found and the choice made.'" Pyramid Lake, 898 F.2d 1410 at 1414 (emphasis added).

n25 The record reveals that NMFS scientists, when drafting the RPA section of the Biological Opinion, had proposed that the A2 season start even later, on March 15th. S1-40.

[**49]

3. Fit Between Individual Measures and Principles Guiding RPAs

Furthermore, the plaintiffs correctly argue that several of the individual management measures do not seem to accomplish the RPAs' principles of temporal dispersion, spatial dispersion, and protection of rookeries and haulouts. n26 For example, the BSAI pollock fishery over the last several years has been divided into two seasons: a winter "A" season running from January to March, and a fall "B" season of September and October. S1-55 at 115, 116. In 1998, 45% of the TAC was allocated to the A season, and 55% was allocated to the B season. Id. In finding that the proposed 1999-2001 BSAI pollock fisheries would result in jeopardy, NMFS cited this temporal compression as "of particular concern." Id. at 108.

n26 The Court declines the intervenors' invitation to evaluate the RPAs in light of what actually occurred in the 1999 A1 and A2 pollock seasons. The regulations define RPAs in part as measures which the consulting agency believes would avoid the likelihood of jeopardy and adverse modification. 50 C.F.R. § 402.02. The Court must evaluate whether that belief was arbitrary and capricious. The Court must therefore analyze the RPA's logical effect, viewed when the RPAs were proposed and approved, rather than evaluating the RPAs' actual effect.

[**50]

The final RPAs, however, do not seem to disperse the fishery temporally. The new A1 season begins January 20th, the same day that the A season used to begin. The A2 season is scheduled to begin February 20th, with a five-day "stand-down" period in-between. S1-56 at 3, 5. This stand-down period ensures that the A1 season can only last 26 days. The combined annual harvest for the A1 & A2 seasons is set at 40% of the total yearly TAC, with 27.5% allocated to the A1 season. Id. If the fishery took the entire 27.5% TAC in A1, as permitted, and trawling occurred at the same rate during A1 and A2, it would only take an additional 11 days to catch the A2 TAC. This in turn would mean that the A1 & A2 seasons would end, with 40% of the yearly TAC taken, by March 2nd. Thus, it seems entirely possible that the final RPA would not lengthen the winter fishery at all; the only dispersive effect would be that 40% rather than 45% of the total TAC would be taken. Further, these figures concern percentages of TAC levels rather than tons of pollock caught. If the Bering Sea TAC was increased from, for example 100,000 metric tons to 150,000 metric tons, fishing under the RPAs would actually result [**51] in the removal of more pollock during this period. n27

n27 These numbers are illustrative only, and do not reflect the actual TAC levels. As stated in footnote 20, the Biological Opinion does not contain the Bering Sea's TAC levels in metric tons, so it is impossible for the Court to use the correct figures here.

It is possible that this analysis does not consider some other aspect of the [*1267] problem, which would explain NMFS's approval of this measure as "consistent with the spirit and intent" of the Biological Opinion. This, however, illustrates the problem discussed in the previous subsection of this Order: NMFS has completely failed to analyze how these individual measures avoid jeopardy or adverse modification. NMFS also has not explained how the various management measures work together. At oral argument, counsel responded to this

Court's question about analysis by saying "NMFS is relying on the statistics. We're relying on the numbers ...." Tr. at p. 53, ll. 16-17. The record, however, does not demonstrate [**52] this reliance. "Where an agency fails to articulate a rational connection between the facts found and the choice made, the Court [or counsel] may not supply a reasoned basis for the agency's action that the agency itself has not given." Defenders of Wildlife, 958 F. Supp. at 679 (internal citation and punctuation omitted). Even under the "arbitrary and capricious" standard of review, the government must establish that its RPAs fulfill their purpose of "avoiding the likelihood of jeopardizing the continued existence of listed species or resulting in the destruction or adverse modification of critical habitat." 50 C.F.R. § 402.02. The RPAs in this case may do so, but NMFS has not provided any analysis justifying that conclusion.

NMFS's ESA Section 7 Consultation Handbook makes it clear that NMFS must provide such analysis: "When a reasonable and prudent alternative consists of multiple activities, it is imperative that the [biological] opinion contain a thorough explanation of how each component of the alternative is essential to avoid jeopardy and/or adverse modification." AR-18 at 4-41. NMFS must explain how the management measures proposed fit together to [**53] accomplish the goal of avoiding jeopardy and adverse modification. n28 Without some rational explanation, the Court cannot conduct a meaningful review. The Court therefore finds the RPAs to be arbitrary and capricious under Pyramid Lake, 898 F.2d at 1417, and Defenders of Wildlife, 958 F. Supp. at 679. Accordingly, the Court grants plaintiffs summary judgment on their claims regarding the RPAs.

n28 The ESA itself may not require explanations of RPAs to contain this level of detail. The Handbook's introduction, however, states that it "establishes national policy for conducting consultation" pursuant to the ESA. AR-18 at 0001b. NMFS may therefore be bound by this high standard: "Courts have found agencies to have violated the APA by deviating from an announced policy without sufficient reason." Southwest Center, 143 F.3d at 523 n.4. The Court need not decide this issue however, because NMFS failed to articulate any connection between the facts found and the choice made in the RPAs, or to provide any explanation demonstrating why "the Director believes [the measures] would avoid the likelihood of jeopardizing the continued existence of [Steller sea lions] resulting in the destruction or adverse modification of critical habitat." 50 C.F.R. § 402.02.

[**54]

4. Scientific and Technical Feasibility

The intervenors contend that the RPAs should also be found to be arbitrary and capricious because NMFS failed to establish that they meet the third part of the definition of an RPA, i.e. that they are "economically and technologically feasible." 50 C.F.R. § 402.02. It remains an open question whether this requirement should be interpreted as referring only to whether the RPA is feasible for the agency, or whether it relates to the effects on third parties. n29 The intervenors, however, contend that NMFS must balance the benefit to the species against the economic and technical burden on the industry before approving an RPA. Such a result would be fundamentally inconsistent with the purposes of the ESA and with case law interpreting the Act. See, e.g., Tennessee Valley Auth. v. Hill, 437 U.S. 153, 57 L. Ed. 2d 117, 98 S. Ct. 2279 (1978) (enjoining the opening of a nearly completed dam because [*1268] opening the dam would wipe out all of endangered species' critical habitat). The "guiding standard" for determination of RPAs is jeopardy, Idaho Dept. of Fish & Game v. NMFS, 850 F. Supp. 886, 896 (D. Or. 1994), vacated as moot, 56 F.3d 1071 (9th Cir. 1995), [**55] not economic impact on third parties such as the fishing industry. n30

n29 See Westlands Water District v. United States Dept. of Interior, 850 F. Supp. 1388, 1425-26 (E.D.Cal. 1994) (noting but not resolving these arguments).

n30 See also Aluminum Co. of America v. Bonneville Power Admin., 175 F.3d 1156, 1999 WL 286085, *6 (9th Cir. 1999) (agency's exercise of statutory obligations to consider economic interests can only be accomplished within framework of compliance with environmental mandates.)

This is not to say, however, that NMFS cannot consider industry concerns when shaping RPAs. NMFS must come up with reasonable and prudent alternatives that are consistent with the purposes of the underlying action and the action agency's authority, that are economically and technologically feasible, and which avoid the likelihood of jeopardy and adverse modification. 50 C.F.R. § 402.02. When faced with a range of possible measures that are consistent with this definition, [**56] NMFS can pick amongst them based on other factors, including effects on the fishing industry. Southwest Center, 143 F.3d at 523; see also Bennett, 520

U.S. at 176 (finding that an important purpose of the "best scientific data" requirement is to avoid needless economic dislocation, and noting that the ESA allows a project to go forward if no RPAs exist and the benefits of the action outweigh harm to the species).

These two determinations are separate steps, however, and contrary to intervenors' arguments, they should not be combined. In the present case, NMFS approved changes in management measures based solely on an attempt to minimize the impact on the fishing industry, without explicitly considering what effect the changes would have on the Steller sea lions. n31 Similarly, although NMFS must explain how the RPAs would avoid jeopardy and adverse modification, they do not have to discuss or recommend every management measure that would achieve these results. The Court therefore rejects intervenors' contention that the RPAs are arbitrary and capricious because they are not economically and technically feasible for the fishing industry.

n31 One NMFS scientist's correspondence describes this problem: "Protective measures for [sea lions] appear to be less urgent than consideration of impacts to the fishing industry. I though that we were still in the role of the consultation agency in deciding what needed to be done for the Stellers and later, as action agency, we would find the best way to implement RPAs with industry concerns in mind. Have I misunderstood the process, or does it appear that several steps are going on at the same time here?" S1-484.

[**57]

Nevertheless, the intervenors point to examples where NMFS's failure to analyze the RPAs according to the applicable legal standards worked to the intervenors' detriment. For example, the Biological Opinion stated that spatial distribution of the TAC should be based on existing study or management areas. S1-55 at 119. The BiOp then recommended combining the Catcher Vessel Operation Area (CVOA) with the Southeast Bering Sea foraging area, which is critical habitat, to form one management complex. Id. Both the foraging area and the CVOA are very large areas; although they overlap substantially, large areas in the CVOA are not Steller sea lion critical habitat. See S1-55 at Fig. 9. Unlike most critical habitat, the foraging area at issue here is not simply around rookeries and haulouts -- it extends far out to sea. Id. The record does not disclose any explanation for treating the two together as a CVOA-CH complex. There is no analysis of how this measure, alone or in combination, is likely to avoid jeopardy or adverse modification, or how it is economically or technically feasible. Although NMFS is not required to pick the best option for the industry any more than for the [**58] species, it must provide [*1269] some analysis of the options it selects. n32 The Court therefore finds that intervenors are also entitled to summary judgment that NMFS arbitrarily and capriciously failed to analyze the RPAs under the appropriate legal standards.

n32 Similarly, the record does not explain the closure of the Aleutian Islands to pollock fishing. This measure is not found in the Biological Opinion; it first arose as part of the Council's changes to the RPAs, and is part of the final measures adopted. Nothing in the record provides any indication of NMFS's analysis as to whether this measure fulfills the four-part definition of reasonable and prudent alternatives.

F. Conclusion

In preparing the December 1998 BiOp, NMFS faced an extremely difficult task. The scientific evidence of the fisheries' effect on the Steller sea lion population remained somewhat uncertain. They faced ongoing litigation from both environmental groups and the fishing industry. NMFS also struggled to reconcile Magnuson Act requirements [**59] with ESA mandates. The North Pacific ecosystem poses complex scientific and management issues, to which there are no easy answers.

NMFS considered the available evidence and the ESA's legal standards, and concluded that the pollock fisheries were likely to result in jeopardy and adverse modification, while the mackerel fishery was not. The Court finds that NMFS is entitled to summary judgment upholding these determinations. n33

n33 Plaintiffs are also entitled to summary judgment regarding the pollock fishery jeopardy determination, and intervenors are entitled to summary judgment regarding the mackerel fishery finding of no-jeopardy.

When assessing the ways to remedy the identified problems, however, NMFS failed to apply the appropriate legal standards or to explain its proposed measures. Instead, NMFS recommended a complicated set of interrelated fishery management measures, which then were modified by the action agency and re-approved by NMFS. The plaintiffs and the intervenors

are entitled to summary judgment [**60] that NMFS violated the Endangered Species Act by failing to articulate a rational connection between the facts found and the choices made regarding the RPAs.

IV. NEPA CLAIMS

A. Standard of Review

Compliance with the National Environmental Policy Act of 1969 (NEPA) is reviewed under the Administrative Procedure Act, 5 U.S.C. § 706(2)(A). Northwest Resource Info. Ctr., Inc. v. NMFS, 56 F.3d 1060, 1066 (9th Cir. 1995). Factual disputes, which implicate substantial agency expertise, are reviewed under the arbitrary and capricious standard, while legal disputes are reviewed under the reasonableness standard. Price Road Neighborhood Ass'n v. United States DOT, 113 F.3d 1505, 1508 (9th Cir. 1997). "In evaluating whether an agency's [environmental impact statement] complies with NEPA's requirements, we must determine whether it contains a reasonably thorough discussion of the significant aspects of the probable environmental consequences." Muckleshoot Indian Tribe v. United States Forest Serv., 177 F.3d 800, 1999 WL 317104, *8 (9th Cir. 1999) (internal quotation omitted). "In [**61] short, we must ensure that the agency has taken a 'hard look' at the environmental consequences of its proposed action." Blue Mountains Biodiversity Project v. Blackwood, 161 F.3d 1208, 1211 (9th Cir. 1998).

B. NEPA Obligations

NEPA "is our basic national charter for protection of the environment." 40 C.F.R. § 1500.1(a). "The NEPA process is intended to help public officials make decisions that are based on understanding of environmental consequences, and take actions that protect, restore, and enhance the environment." 40 C.F.R. § 1500.1(c).

[*1270] NEPA therefore requires that when "proposals for legislation and other major Federal actions significantly [affect] the quality of the human environment," the responsible federal agency must prepare a detailed statement which includes the environmental impact of the proposed action, any unavoidable negative environmental effects of the proposal, and alternatives to the proposed action. See 42 U.S.C. § 4332(C). This detailed written document is an Environmental Impact Statement (EIS). 40 C.F.R. § 1508.11. An EIS serves "as an action-forcing device to insure that [NEPA's] policies and [**62] goals" are taken into account during agency decision-making, 40 C.F.R. § 1502.1. The alternatives section, which should "present the environmental impacts of the proposal and the alternatives in comparative form [in order to] sharply define the issue," is therefore "the heart of the" EIS. 40 C.F.R. § 1502.14.

NEPA also requires an agency to continue evaluating a project's environmental effects, even after preparation of an initial EIS. The EIS can form the basis for subsequent NEPA documentation, allowing the agency to incorporate by reference prior discussions of general issues and to focus on the specific issues relevant to the subsequent action. See 40 C.F.R. § 1502.20. If the agency determines that a subsequent action will not have a significant effect on the environment, it can prepare an Environmental Assessment (EA) and Finding of No Significant Impact (FONSI), and can "tier" these documents off the existing EIS. n34 An EA/FONSI is not sufficient, however, in certain circumstances:

> (C) Agencies:
>
> (1) Shall prepare supplements to either draft or final environmental impact statements if:
>
> (i) The agency makes substantial changes in the proposed action that are [**63] relevant to environmental concerns; or
>
> (ii) There are significant new circumstances or information relevant to environmental concerns and bearing on the proposed action or its impacts.

40 C.F.R. § 1502.9(c).

> n34 The regulations define "Environmental Assessment" in relevant part as "a concise public document ... that serves to ... briefly provide sufficient evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact." 40 C.F.R. § 1508.9. The regulations define Finding of No Significant Impact as "a document by a Federal agency briefly presenting the reasons why an action ... will not have a significant effect on the human environment and for which an [EIS] therefore will not be prepared." 40 C.F.R. § 1508.13.

NMFS prepared environmental impact statements for the GOA and BSAI groundfisheries in 1979 and 1981, respectively. The supplemental EIS was released in December 1998. It updated the scientific information known about [**64] the North Pacific ecosystem, and analyzed this information by considering a range of alternative TAC levels under which the fisheries could be conducted. Plaintiffs argue that such a focus violates NEPA by being too narrow. Specifically, plaintiffs

contend that NEPA required preparation of an SEIS "of broad scope, with alternatives and analyses that considered and addressed the fisheries' multiple environmental issues and impacts." Pl. Mem. in Supp., docket no. 182, p. 39. Defendants counter that they properly defined the scope of the SEIS and that they considered an adequate range of alternatives.

C. History of NEPA Compliance/Decision to Prepare SEIS

In support of their argument that NEPA required preparation of a broad SEIS, plaintiffs rely on the history of NEPA compliance in this case. They point out that the Final Supplemental EIS, which NMFS issued in December 1998, was the first EIS prepared regarding the North Pacific groundfisheries in almost twenty years. Since the original EISs were prepared, significant changes occurred within the fishing industry and the FMPs for the GOA and BSAI were each [*1271] amended more than forty times. The North Pacific ecosystem also underwent [**65] major changes, including the steep decline of the Steller sea lion population. n35

n35 See supra Section II(D) for a more detailed discussion of the extensive changes which had occurred in the North Pacific ecosystem during this period.

Since the early 1990s, there has been criticism within NMFS regarding the overall adequacy of the existing documents for NEPA compliance. See, e.g., S2-338, S2-339, S2-347. For example, the record contains a draft letter, written in 1990, stating that the environmental analysis in the original documents "would be considered grossly inadequate by today's standards." S2-338 at 3. Another memorandum, written in 1992, around the time of the emergency listing of the Steller sea lions as a threatened species, called for the preparation of a supplemental EIS, since the existing one treated Steller sea lions as being at "optimum sustainable population levels." S2-339 at 2. Despite these criticisms, however, NMFS did not begin preparation of an SEIS on the groundfisheries until [**66] March 1997, when it published a notice of intent to prepare an SEIS. n36 AR-7. In this scoping notice, NMFS relied on the "new information about the ecosystem, impacts of the fisheries, and management tools" to explain its decision to prepare an SEIS. Id. NMFS also noted the major changes made to the FMPs as relevant to its decision to prepare an SEIS Id. NMFS therefore seems to have acknowledged that an SEIS was necessary under both the "substantial changes to the action" and the "significant new information" prongs of 40 C.F.R. § 1502.9(c).

n36 The regulations require an agency to publish in the Federal Register a notice of intent to prepare an EIS. 40 C.F.R. § 1501.7. This scoping notice should, among other things, invite public participation, determine the breadth and depth of the significant issues to be analyzed in the EIS, and provide a tentative schedule for EIS preparation. Id.

D. Scope of the SEIS

In support of its motion for summary judgment, NMFS relies on the fact that the SEIS [**67] undisputedly included a great deal of new "information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c)(1)(ii). They correctly note that the "Affected Environment" section of the SEIS discussed the various components of the North Pacific ecosystem, updating the information known about each component. For example, the SEIS contains twelve pages on the ESA Section 7 Consultations regarding the Steller sea lion, providing a detailed history of the data available and the actions taken based on that data. S2-250 at 207-218. The SEIS also discussed the changes made to the structure and composition of the fisheries, providing a high level of detail about such things as the various Alaskan communities affected by the fishing industry and the types of vessels used in the industry. See id. at 235-274.

The plaintiffs, however, point out that the SEIS analyzed this detailed new information, not by looking at a range of alternatives reflecting the broad scope of the FMPs, but instead only under a range of alternatives dealing with one particular aspect of the FMPs: TAC levels. The SEIS considered the environmental effects on [**68] the North Pacific ecosystem of using four alternative TAC levels: (A) the status quo method of setting TAC levels annually, for each species complex, within the optimum yield (OY) range based on the biological status of the species and "other ecological and socio-economic aspects of the fisheries"; (B) setting TAC levels at the lower end of the OY range; (C) setting TAC levels at the upper end of the OY range; and (D) no directed groundfishing. S2-350 at 10-11. As a result of this approach, the EIS did not consider how the vast array of new information about the affected environment relates to the other aspects of the fisheries that the FMPs regulate, such as "time and area closures, gear [*1272] restrictions, bycatch limits of prohibited species, and allocations of TACs among vessels delivering to

different types of processors groups, gear types, and qualifying communities." Id. at 9.

1. Federal Action Under Review

The plaintiffs argue that this approach violates NEPA for a number of reasons. NEPA requires preparation of an SEIS when "the agency makes substantial changes in the proposed action that are relevant to environmental concerns;" or when "there are significant new circumstances [**69] or information relevant to environmental concerns and bearing on the proposed action or its impacts." 40 C.F.R. § 1502.9(c). Applying these standards to the present case, plaintiffs argue that the FMPs as a whole, not the method used to set TAC. levels, is "the proposed action" about which there are significant new circumstances and to which substantial changes have been made. Pl. Mem. in Supp., docket no. 182, p. 42. In support of this argument, plaintiffs point to the scoping notice, which indicated that the SEIS would analyze:

... decisions about location and timing of each fishery, harvestable amounts, exploitation rates, exploited species, groupings of exploited species, gear types and groupings, allocations, product quality, organic waste and secondary utilization, at-sea and on-land organic discard, species at higher and lower trophic levels, habitat alterations, and relative impacts to coastal communities, society, the economy, and the domestic and foreign groundfish markets.

AR-7 at 2. As prepared, however, the SEIS discussed these issues generally, but did not consider a range of alternatives dealing with them. Plaintiffs argue that by narrowing the range [**70] of alternatives to those specifically dealing with TAC levels rather than the FMPs as a whole, NMFS failed to "take a hard look" at the environmental consequences of the agency action, the FMPs.

NMFS responds that the federal action under review in the SEIS was not the FMPs generally, but rather was merely the more limited issue of "setting of TACs in the GOA and BSAI groundfish fisheries." S2-350 at 2. They argue that the scoping notice reflected this narrow focus as well: "NMFS announces its intention to prepare a supplemental environmental impact statement (SEIS) on the Federal action by which the total allowable catch (TAC) specifications and prohibited species catch limits ... are annually established and apportioned." AR-7. A "proposed alternative is reasonable only if it will bring about the ends of the federal action" being considered. Citizens Against Burlington, Inc. v. Busey, 290 U.S. App. D.C. 371, 938 F.2d 190 (D.C. Cir. 1991). "When the purpose is to accomplish one thing, it makes no sense to consider the alternative ways by which another thing might be achieved." City of Angoon v. Hodel, 803 F.2d 1016, 1021-22 (9th Cir. 1986). Thus, NMFS argues that the [**71] range of alternatives was properly tailored to meet this definition of the federal action at issue.

NMFS's argument is legally flawed. Although NMFS contends that the scoping notice and the SEIS clearly establish that the federal action under review was only the setting of TAC levels, both documents are in fact ambiguous on this point. The language quoted above, on which NMFS relies, indicates a narrow scope. On the other hand, the scoping notice also stated that "the SEIS will analyze the process by which annual TAC specifications and prohibited species catch limits are determined, together with the procedures for implementing changes to these processes." AR-7 at 2 (emphasis added). The notice then defines "the process" as including the numerous elements relied on by plaintiffs, quoted above.

The SEIS itself reflects similar ambivalency. The section describing the "purpose" of the SEIS detailed the

changes that have occurred since the original EISs were prepared for the [*1273] original FMPs (1978 and 1981). These include changes in the following: 1) the BSAI and GOA ecosystems and our understandings of them; 2) the marine species and population frequencies of marine mammal, [**72] seabird, and fish in the biological assemblages of the BSAI and GOA; 3) the marine species listed under the Endangered Species Act, some of which may be affected by the BSAI and GOA groundfish fisheries; 4) the information about the biological characteristics of the groundfish stocks; 5) the information about the ecosystem impacts of the fisheries; 6) the fishery management tools that are being used or are available; 7) the characteristics of the groundfish fleets; and 8) the distributions of catch by fleet, area and season.

S2-350 at 2. Plaintiffs are correct that this discussion demonstrated a need for a broad SEIS, which analyzed the effect of this myriad of changes on the North Pacific ecosystem. The SEIS then continued: "A programmatic SEIS was developed to analyze and display the effects of the fisheries on the affected human (biological, physical, and economic) environment. ... The scope of actions in this analysis includes a range of levels for setting of TACs in the GOA and BSAI groundfish fisheries." S2-350 at 2. This language implies both a broad scope (programmatic SEIS) and a narrow one (scope of action concerns TAC levels). While the SEIS contained language [**73] indicating that the federal action under review was merely the setting of TAC levels, the weight of the language pointed to a broader scope. n37

n37 Additionally, the SEIS refers repeatedly to the fact that it is a "programmatic analysis" of the fisheries as they affect the environment. See, e.g., S2-350 at 2, & vol. 2 at p. 2. The government's counsel conceded at oral argument that the document should be treated as a programmatic analysis. Tr. at p. 105. Programmatic analyses look to the environmental consequences of a project as a whole, and do not necessarily contain the same level of detail or specificity as a site or project-specific EIS. See Resources Ltd. v. Robertson, 35 F.3d 1300, 1306 (9th Cir. 1993). Instead, they often form the basis for tiering future NEPA documents focusing on specific facets under review. NMFS's description of the SEIS as "a programmatic analysis" provides further support for the conclusion that the SEIS must be a broad document considering the FMPs as a whole.

[**74]

Furthermore, as discussed below, a narrow SEIS dealing only with TAC levels would not satisfy NEPA. The FMPs involve "a myriad of interrelated regulations to manage the fisheries." In light of the significant changes to these FMPs and the new information about the broad range of issues covered by these regulations, the Court concludes as a matter of law that NEPA required a broad programmatic SEIS in order to fairly evaluate the dramatic and significant changes which have occurred in the GOA and BSAI groundfisheries.

2. Cumulative Effects Analysis

The plaintiffs correctly argue that NEPA required creation of a document that thoroughly analyzed the cumulative effects of the FMPs:

Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions .... Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

8 C.F.R. § 1508.7. "If several actions have a cumulative environmental effect, this consequence must be considered in an EIS." Blue Mountain, 161 F.3d at 1214 [**75] (internal quotation omitted). Plaintiffs therefore argue that the SEIS needed to analyze the changes to the FMPs.

Each amendment to the FMPs may have been individually minor and therefore properly dealt with in an EA/FONSI rather than in an SEIS. See Greenpeace Action v. Franklin, 14 F.3d 1324, 1332 (9th Cir. 1992) (1991 amendments too minor to warrant an EIS). Nevertheless, NEPA does not permit NMFS to continue making individually [*1274] minor but collectively significant changes to the FMPs without preparing an SEIS analyzing these changes. "Significance exists [and thus an EIS must be prepared] if it is reasonable to anticipate a cumulatively significant impact on the environment. Significance cannot be avoiding by ... breaking [an action] down into small component parts." 40 C.F.R. § 1508.27(b)(7). By preparing only EA/FONSIs for each FMP amendment, NMFS tried to avoid "significance" for many years. The Court has no doubt that the vast changes to the FMPs have reached the threshold of "cumulatively significant impact on the environment," thereby requiring preparation of an SEIS addressing these vast changes. For the same reasons, NMFS cannot then break the FMPs [**76] down "into small component parts" by analyzing only the setting of TAC levels rather than these FMPs in their entirety. The Court therefore concludes that NEPA's cumulative effects provision requires a programmatic analysis of the FMPs in their current form.

E. Range of Alternatives Considered

1. Fully Informed Decisions

The Court's determination that the SEIS must be treated as a broad, programmatic analysis of the FMPs as a whole leads directly to its conclusion that the range of alternatives considered was inadequate. One of the goals of the NEPA process is "to identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment." 40 C.F.R. § 1500.2(e). The regulation regarding alternatives, 40 C.F.R. § 1502.14, provides:

Based on the information and analysis presented in the sections on the Affected Environment (§ 1502.15) and the Environmental Consequences (§ 1502.16), [the alternatives section] should present the environmental impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear [**77] basis for choice among options by the decisionmaker and the public.

40 C.F.R. § 1502.14. n38 The SEIS in this case, however, does not "sharply [define] the issues and [provide] a clear basis for choice among options" related to the FMPs. It does not help future decision-makers assess whether the fisheries should continue to be conducted under the current structure of the FMPs, or whether other alternatives would be more beneficial. The

Environmental Protection Agency's final comments on the SEIS correctly note that NEPA's requirement that NMFS "rigorously explore and objectively evaluate all reasonable alternatives," dictates

inclusion of more comprehensive alternatives which look at and programmatically address all elements of the FMP (i.e. location and timing of each fishery, harvestable amounts, exploitation rates, exploited species, groupings of exploited species, gear types and groupings, allocations, product quality, organic waste and secondary utilization, at-sea and on-land organic discard, species at higher [*1275] and lower trophic levels, habitat alterations, and relative impacts to coastal communities, society, the economy, and the domestic and foreign groundfish [**78] markets) and varies TAC levels outside of the present status quo range.

Pl. Ex. 3 at p. 5, attached to docket no. 182. As written, however, the SEIS does not provide decision-makers with any way of assessing the trade-offs between gear-restrictions and bycatch, for example, or the way that the timing of the various fisheries interact. The difficulty of the issues presented in the Biological Opinion and its Reasonable and Prudent Alternatives highlight the need for consideration of the range of environmental effects of the various regulations contained in the FMPs. One important goal of NEPA is to help "public officials make decisions that are based on understanding of environmental consequences." 40 C.F.R. § 1500.1(c). The SEIS does not provide the information necessary for decision-makers to make fully informed choices. The SEIS is therefore inadequate under NEPA.

n38 The section further provides that agencies shall:

(a) Rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly discuss the reasons for their having been eliminated.

(b) Devote substantial treatment to each alternative considered in detail including the proposed action so that reviewers may evaluate their comparative merits.

(c) Include reasonable alternatives not within the jurisdiction of the lead agency.

(d) Include the alternative of no action.

(e) Identify the agency's preferred alternative or alternatives, if one or more exists, in the draft statement and identify such alternative in the final statement unless another law prohibits the expression of such a preference.

(f) Include appropriate mitigation measures not already included in the proposed action or alternatives.

40 C.F.R. § 1502.14.

[**79]

2. "Practical Analysis" of Fisheries

NMFS contends that by analyzing the fisheries under various TAC levels, the SEIS nevertheless considered the full range of environmental impacts from the fisheries as conducted under the array of regulations contained in the FMPs. Specifically, NMFS argues that this Court should defer to NMFS's determination "that an examination of the fishery under alternative TAC levels would result in a practical analysis of the environmental impacts of the fisheries." S2-350 at 3 (emphasis added). NMFS contends that this determination is entitled to substantial deference, and therefore that analysis of alternative TAC levels fulfills NEPA's purpose of ensuring informed decision-making regarding the FMPs in their entirety.

The case law providing for substantial deference to an agency's determination of the scope of an EIS, however, does not support NMFS's argument. NMFS relies on cases involving deference to an agency's decision about the scope of the federal action under review. See. e.g., Kleppe v. Sierra Club, 427 U.S. 390, 49 L. Ed. 2d 576, 96 S. Ct. 2718 (1976) (deference to agency's determination that no regional proposal for federal action existed and therefore [**80] no regional EIS was necessary); Marsh, 490 U.S. at 376-77 (deference to agency's determination that new information did not require preparation of a supplemental EIS). These cases do not require the Court to defer to NMFS's assertion that an analysis of TAC levels will provide a practical analysis of the fisheries. The SEIS completely lacks any explanation of why and how analysis of TAC levels "results in a practical analysis" of the impact of the fisheries, as governed by a myriad of regulations. NMFS merely stated: "Analysis of the 'process' or actual procedure employed by the NMFS in developing annual TAC specifications would not be as illustrative of the impacts that could occur to the environment as a result of a change from the current TAC levels under the current baseline." Id. Judicial deference to such an unexplained assertion on a critical point would render judicial review meaningless. Even under "arbitrary and capricious" review, the appropriate inquiry is "whether the agency 'considered the relevant factors and articulated a rational connection between the

facts found and the choice made.'" Pyramid Lake, 898 F.2d at 1414 [**81] (emphasis added). Here, the government's failure to explain the connection between setting various TAC levels and the impact of other fishery regulations is not entitled to deference, and even if the Court were to defer, the result would be the same. The Court cannot excuse NMFS's total failure to analyze or explain this critical point. The Court concludes that an analysis of the fisheries under various TAC levels was not sufficient to fulfill NEPA's requirements. n39

> n39 This conclusion is even stronger when one realizes that the three of the four "alternatives" were closely related to the status quo. As the EPA final comments correctly point out, "Not only were the alternatives limited to variations of TAC, but three of the four existed within the current status quo range: Alternative A maintained the entire range, Alternative B low-balled the existing range, and Alternative C high-balled the existing range. Alternative D, which called for ceasing all fishing activities ... seems unreasonable and therefore unlikely to be considered." Pl.'s Ex. 3 at p. 5, attached to docket no. 182.

[**82]

[*1276] **3. Programmatic Analysis**

Clearly, a programmatic analysis would not require consideration of detailed alternatives with respect to each aspect of the plan -- otherwise a programmatic analysis would be impossible to prepare and would merely be a vast series of site specific analyses. See Robertson, 35 F.3d at 1306 ("specific analysis is better done when a specific development action is to be taken, not at the programmatic level."). The level of detail necessary in an EIS is directly related to the scope of the federal action under review. California v. Block, 690 F.2d 753, 761 (9th Cir. 1982). Thus, if a multi-step project is proposed that nevertheless has a very broad scope at the initial stage, a high level of detail may be required even in a programmatic EIS. Id. at 765. In the present case, however, the programmatic EIS was necessary because of the significant cumulative effects of the amendments to the FMPs over the years, rather than because there were particular new amendments pending. The programmatic EIS should therefore present a more general picture of the environmental effects of the plans, rather than focusing narrowly [**83] on one aspect of them.

F. NEPA Conclusion

The administrative record in this case demonstrates that NMFS's employees faced a very difficult task in preparing this SEIS. The "Affected Environment" section synthesized a great deal of new information regarding the North Pacific ecosystem, and took an important step toward full compliance with NEPA. The Act, however, requires NMFS to analyze the ways in which the groundfisheries effect the North Pacific ecosystem, and to provide decisionmakers and the public with a document that will help further informed decision-making as to the consequences of these plans. The present SEIS, by focusing its analysis only on TAC levels, does not fulfill this mandate. Accordingly, the Court grants plaintiffs' motion for summary judgment as to their NEPA claims, and denies defendants' cross-motion.

V. CONCLUSIONS

For the reasons discussed above, the Court finds that NMFS did not act arbitrarily or capriciously in concluding that the pollock fishery was likely to jeopardize the Steller sea lions but that the mackerel fishery was not likely to cause such a result. The Reasonable and Prudent Alternatives, however, were arbitrary and capricious [**84] on this record because they were not justified under the prevailing legal standards and because the record does not support a finding that they were reasonably likely to avoid jeopardy. The Court further finds that NEPA required preparation of a programmatic supplemental environmental impact statement analyzing the environmental impacts of the FMPs as a whole on the North Pacific ecosystem.

Accordingly, the Court GRANTS plaintiffs' motion for summary judgment, docket no. 181, on their Endangered Species Act claims regarding the pollock fishery's jeopardy determination, and that the Reasonable and Prudent Alternatives are arbitrary and capricious. The Court also GRANTS plaintiffs' motion on their National Environmental Policy Act claim. The Court DENIES plaintiffs' motion in all other respects. [*1277] The Court GRANTS intervenors' motion, docket no. 187, as it relates to NMFS's failure to analyze the RPAs under the appropriate legal framework, and as to the mackerel fishery no-jeopardy determination. The Court DENIES intervenors' motion in all other respects. The Court GRANTS defendants' motion, docket no. 184, as it relates to the pollock jeopardy determination and the mackerel non-jeopardy [**85] finding. The Court DENIES defendants' motion in all other respects.

Pursuant to the ESA, the Court will therefore order a remand of the Biological Opinion to the National Marine Fisheries Service, for preparation of Revised Final

Reasonable and Prudent Alternatives consistent with this Order. Pursuant to NEPA, the Court will also enter an order remanding the Environmental Impact Statement to NMFS for action consistent with this Order. The Court directs plaintiffs to serve and file a proposed Order of Remand by July 19, 1999. Objections to the proposed order shall be filed on or before July 30, 1999. The Court SCHEDULES a status conference for Friday, August 6, 1999 at 9:00 a.m. to consider the form of the Order of Remand and to set a briefing schedule in connection with further proceedings consistent with this Order.

IT IS HEREBY ORDERED.

DATED this 13th day of July, 1999.

THOMAS S. ZILLY

UNITED STATES DISTRICT JUDGE

Donna Parker AMA 2/7/02

DRAFT
PSEIS Purpose and Need Statement

The purpose and need of the PSEIS is two-fold:

First, to assist the public and the decision-makers in understanding and evaluating the impact of significant management changes in the North Pacific fisheries since the original FMPs for the GOA and the BSAI were developed[1] by:

1 Analyzing the consequences of cumulative impacts on the human environment (biological, physical, economic, and social) from management actions taken since the original FMPs were developed;[2] and

2 Accurately describing and assessing the current management regime and its impacts on the human environment.[3]

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[1] Judge Zilly stated that, "NEPA require[s] a broad programmatic SEIS in order to fairly evaluate the dramatic and significant changes which have occurred in the GOA and BSAI fisheries." *Greenpeace v. National Marine Fisheries Serv.*, 55 F. Supp. 2d 1248, 1273 (W.D. Wash. 1999). Moreover, he stated that "NEPA requires continuing environmental analysis for changes to ongoing federal actions, such as the dozens of amendments to the FMPs for the North Pacific fisheries." *Greenpeace*, 55 F. Supp. 2d at 1258.

[2] Judge Zilly stated that the PSEIS should contain a thorough analysis of the cumulative effects of the FMPs. *Greenpeace*, 55 F. Supp. 2d at 1273. In order to analyze cumulative effects, the Court ruled that NMFS must analyze the impacts of past actions. *Id.* As Judge Zilly stated, "'Cumulative impact is the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably future actions . . . Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.'" *Id.* (*quoting* 40 C.F.R. § 1508.7)

[3] Judge Zilly stated that, "NEPA's cumulative effects provision requires a programmatic analysis of the FMPs in their current form." *Greenpeace*, 55 F. Supp. 2d at 1274. The PSEIS should help "future decision-makers assess whether the fisheries should continue to be conducted under the current structure of the FMPs, or whether other alternatives would be more beneficial." *Id.*

Second, to provide the public and the decision-makers with the appropriate tools to design policy guidelines for the future[4] by:

3 Developing a reasonable range of alternative policy approaches that allows the public and the decisionmakers to take a "hard look" at possible effects on the human environment from proposed actions;[5]

4 Understanding and assessing the trade-offs of proposed alternative policy approaches and the hypothetical management actions which might flow from them;[6]

5 Providing the public and the decision-makers with a reference and planning document that will assist in future decision-making and the identification of research priorities.[7]

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4 As Judge Zilly noted, "NEPA requires that environmental information [be] made available to decision-makers, including the Council and the Secretary of Commerce, as well as the public, for use in such decision-making as the creation and amendment of the FMPs." *Greenpeace*, 55 F. Supp. 2d at 1253.

5 Judge Zilly stated, "One of the goals of the NEPA process is to 'identify and assess the reasonable alternatives to proposed actions that will avoid or minimize adverse effects of these actions upon the quality of the human environment.'" *Greenpeace*, 55 F. Supp. 2d at 1274 (quoting 40 C.F.R. § 1500.2(e)). NEPA does not, however, mandate particular results. It simply prescribes the necessary process. "If the adverse environmental effects of the proposed action are adequately identified and evaluated, the agency is not constrained by NEPA from deciding that other values outweigh the environmental costs." Robertson v. Methow Valley Citizens Council, 490 U.S. 332, at 350-52 (1989).

6 Judge Zilly criticized the previous SEIS because it did "not provide decision-makers with any way of assessing the trade-offs between gear-restrictions and bycatch, for example, or the way that the timing of the various fisheries interact." *Greenpeace*, 55 F. Supp. 2d at 1275.

7 According to Judge Zilly, NEPA "requires NMFS to analyze the ways in which the groundfish fisheries affect the North Pacific ecosystem, and to provide decisionmakers and the public with a document that will help further informed decisionmaking as to the consequences of these plans." Greenpeace, 55 F. Supp. 2d, at 1269.

Donna Parker AMA 2/7/02

Alt. : Rationalized, Sustainable Ecosystem Approach

Management Approach

Accelerate precautionary management measures through rights-based management, habitat protection and bycatch constraints. This policy objective seeks to provide sound conservation of the living marine resources, provide socially and economically viable fisheries, minimize human caused threats to protected species, maintain a healthy marine resource habitat, and incorporate ecosystem considerations into management decisions. Further, these objectives seek to maintain the balanced goals of the National Standards and the National Academy of Science's Sustainable Fisheries Policy Recommendations based on the best scientific information available. Under this approach, more conservative mitigation measures may be taken if scientific evidence indicates that the fishery is negatively impacting the environment.

Objectives:

1) Maintain healthy stocks important to commercial, recreational and subsistence fisheries;
2) Prevent overfishing and rebuild depressed stocks important to commercial, recreational and subsistence fisheries;
3) Reduce fishing conflicts that involve protected species and birds;
4) Promote efficient use of resources, but not solely for economic purposes;
5) Prevent preemption of one sector or fishing community by another;
6) Minimize bycatch to the extent practicable;
7) Increase long-term economic and social benefits to the nation and North Pacific fishing communities from the marine resources;
8) Protect and conserve marine resource habitat;
9) Promote a stable planning environment for the seafood industry and fishing communities by keeping regulations stable when possible;
10) Reduce excess fishing capacity and define and assign fishing rights fairly;
11) Continue to include bycatch mortality in TAC accounting;
12) Continue to improve catch accounting and monitoring of harvest; and
13) Maintain the institutions necessary to achieve these goals.

Tools

The Council and NMFS will evaluate potential mitigation measures using the following tools:

1) Except as noted below there baseline management framework would retain the existing regulations as a starting point.
2) Continue to adopt conservative harvest levels for single species and retain OY cap.
3) Continue to collect scientific information and improve upon MSST by obtaining biological information necessary to move Tier 4 species into Tiers 1-3.
4) Incorporate the NRC's sustainable fisheries policy recommendations into the FMPs.

5) Evaluate the procedure to determine ABCs and consider more risk averse modifications based on the best scientific information.
6) Continue to include bycatch mortality in catch accounting and increase research on target, non-target and PSC unobserved mortality in order to increase accuracy of mortality assessment.
7) Develop incentive programs that reduce bycatch of non-target species and maximize yield of targeted species, such as VBA's and HMAP.
8) Continue programs to reduce discards by developing management measures that encourage the use of gear modification and fishing techniques that reduce discards, and revise the IRIU flatfish retention requirements.
9) Expand surveys to further evaluate population estimates for non-target species so that bycatch limits can be based on the best scientific information.
10) Continue to cooperate with USFW to protect ESA-listed seabird species and continue seabird avoidance research.
11) Continue to avoid jeopardy of SSL and adverse modification to CH.
12) Analyze whether existing MPAs adequately protect habitat. Establish MPA criteria and define the purpose of MPA. Implement an experimental design to test the efficacy of a pilot program.
13) Establish designation of EFH and HAPC and consider implementation of mitigating measures.
14) Extend rights-based management to further reduce excess fishing capacity and other adverse effects of the Olympic system.
15) Extend cost recovery fee program to all rights-based management systems, giving credit for industry incurred management, monitoring and catch accounting expenses, including observers and scales.
16) Increase collection and use of traditional and Alaska Native knowledge in fishery management.
17) Increase the utility of groundfish observer data and consider full federal funding of the observer program.
18) Continue on-going efforts to improve community and regional economic impact assessments.
19) Increase the quality of monitoring data through improved technological means.

Alaska Marine Conservation Council

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February 5, 2002

To: David Benton, Chairman
North Pacific Fishery Management Council
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Anchorage, AK 99501-2252

CC: James W. Balsiger, Administrator, Alaska Region
National Marine Fisheries Service
P.O. Box 21668
Juneau, AK 99802-1668

RE: Draft Programmatic SEIS alternatives

Dear Mr. Benton:

We appreciate efforts underway by the National Marine Fisheries Service and the NPFMC to revise the alternatives in the Draft Programmatic Groundfish SEIS (Draft PSEIS). Although it is a difficult task, the Alaska Marine Conservation Council believes these revisions are necessary to produce useful comparisons.

NMFS's "Strawman Alternatives" are presented as a continuum of programmatic groundfish management approaches, policy objectives, and tools to achieve the goals of the policy changes. NEPA requires that the alternatives span a spectrum of management approaches from overfishing to no fishing. Somewhere in between these bookends, we will find strategies to sustain a healthy ecosystem and provide for robust fisheries.

AMCC is primarily interested in the objectives and tools of each alternative aimed at minimizing bycatch and conserving habitat. We support analysis of many of the items in the strawman alternatives and we offer the following additional items to be applied throughout the spectrum of alternatives.

Objectives/ tools to protect, restore, and conserve marine habitat:

- Launch a focused research initiative to map essential fish habitat and habitat areas of particular concern. This could be done through agency programs and cooperative research with industry. Improved knowledge on the distribution of habitats will facilitate ongoing efforts to design appropriate measures to mitigate adverse effects of fishing practices.

- Establish incentives for transitioning from bottom trawl gear to gears that have less bycatch and impact on sensitive habitats.

- Zone use of bottom trawl gear to areas where impacts on habitat are minimized.

- Provide analysis regarding gear impacts on habitat and how effects caused by changes in fishing practices or incentives for gear conversions would affect economic opportunities.

- Make changes in the observer program to facilitate 1) collection of habitat information and 2) thorough documentation of non-target species as components of the living seafloor. This could be done through more flexibility in placing observers and additional training for observers on species identification.

Objectives/tools to avoid bycatch in the groundfish fisheries:

- Develop incentive programs for bycatch reduction such as:
    - Reward fishermen who demonstrate low bycatch rates with more fishing opportunity
    - In a rationalized fishery, reward exemplary quota share holders with a "bonus quota"
    - Use a prescribed low bycatch rate as a stewardship criterion for extending the privilege to hold quota share over time

- Ratchet down PSC caps and designate caps for prohibited species currently without bycatch limits.

- Increase research of and account for unobserved mortality on target, non-target and PSC species.

The continuum of management objectives is based primarily on fisheries interactions with the marine biological environment. As noted in the PSEIS Team Suggestions for Revisions to the Alternatives (C-1(a)(supplemental), "...objectives relating to the economic and socioeconomic elements of the human environment...do not have a direct relationship to the continuum." Therefore, we recommend that each alternative that evaluates objectives for capacity reduction and ending the race for fish include standard criteria including:

- Reward clean fishing (promote low bycatch and minimize impact on ocean habitat)
- Create opportunity for future generations of independent fishermen
- Prevent excessive consolidation and vertical integration of the seafood industry
- Preserve healthy competition among seafood processors
- Promote healthy community fishing economies and maintain diverse independent fishing fleets
- Recognize historic regional fishing and processing patterns

- Require good stewardship of the public's marine resources as a condition for continuing participation in IFQ fisheries

There are multiple tools that could implement the above criteria. AMCC would like to see the analysis link tools for rationalization with objectives for communities and conservation management.

Finally, we support the inclusion of Objective 20 to Alternatives 2 and 3, as recommended in the supplemental handout, PSEIS Team Suggestions for Revisions to the Alternatives.

Sincerely,

Ben Enticknap
Fisheries Project Coordinator

Nancy Brisco
NDAGC
C-1 2/6/02

NARROW v. BROAD
(Language and analyses)

PROJECT LEVEL v. PROGRAMMATIC EISs

MACRO v. MICRO ANALYSES

Zilly's Opinion looks at the application of NEPA law. His remand order provides specific guidance.

His opinion tells basically tells us that NMFS was too narrow, when it should have been broad. He tells us that we need to be broad in three areas: Defining the Federal Action
Cumulative Effects Analysis
Development of Alternatives

I. Defining the Federal Action: Our purpose and Need was broad, but then we chose a narrow federal Action.. Page 18. NMFS.."discussion demonstrated a need for a broad SEIS..."

His remand Order, paragraph 1, provides specific guidance on defining the Federal Action. He goes from narrow to broad. ""...all activities... that address the conduct of the GOA and BSAI ...FMPs as a whole...

II. Cumulative Effects

Zilly recognized the significance of incremental changes over the last 20 years and the lack of analytically accounting for them. Page 19. "The Court has no doubt that the vast changes to the FMPs have reached the threshold of "cumulatively significant impact on the environment, thereby requiring preparation of an SEIS addressing these vast changes..."

His Remand Order paragraph 3 provides us guidance to provide a "...general picture of environmental effects...."

III. The Development of Alternatives

From TAC setting (narrow) to FMP level (broad)

He relates this section to the federal Action defined broadly... Page 19, 20: The alternatives should reflect the impact of the various fishery regulations contained in the FMP (not a specific detail of the FMP.

His remand Order captures this in paragraph 4: "reasonable management alternatives" (our macro level).