

MEMORANDUM

To: Council, SSC, and AP Members

From: Steve Davis, NMFS
PSEIS Project Manager

Date: April 9, 2002

Subject: Alaska Groundfish Fisheries Programmatic SEIS

Action Required

Review alternatives for revised analysis. Approve approach for further refinement of alternatives. Request Council assistance in finalizing alternatives.

Background

In February the Council adopted a range of eight policy alternatives ranging from the old 1978/1979 FMPs to a No Fishing FMP. The Council requested that NMFS continue to work with the alternatives to make them more specific and differentiable, address problems of having specific tools mixed in with the policy objectives, and to consolidate them if possible. Since February, the PSEIS Team have worked diligently to accomplish this. The team has had numerous discussions with NOAA GC in an attempt to follow their guidance. When questions arose about options, the PSEIS Team consulted with Region and Science Center staff, NMFS Headquarters, Council staff, and with various public stakeholders. This work has led me to conclude that we need to elevate the FMP case studies into each alternative in order to provide the specificity needed to differentiate between the policy alternatives as well as provide the detail necessary to conduct a meaningful scientific analysis of the alternatives before the Council. These FMP case studies are viable plans, that could be adopted by the Council in follow-on actions, or serve as "bookends" for an FMP framework.

This means that in the final Record of Decision (ROD) document, the Council will select a preferred alternative that could contain an amendment to the FMP's policy goals and objectives. In addition, the Council would also be committing to amending its FMPs on a time schedule developed by the Council (in the ROD) in a manner consistent with the FMP framework.

This approach to developing the programmatic alternatives maintains flexibility in Council decision making by providing a range of policy goals and objectives from which to choose as the Council seeks to satisfy its Magnuson Stevens Act obligations. It also provides the Council with

flexibility in selecting those policy goals, objectives, and foreseeable actions that it intends to pursue as FMP amendments in the near future. It captures the full range of policy options and actions approved by the Council at the February 2002 meeting. This approach will provide the specificity needed to satisfy the legal requirements of this PSEIS.

It does, however, constitute a departure from past briefings by NMFS staff and your understanding of the scope of the ROD. Council approval of this approach recognizes that to satisfy the legal requirements of this PSEIS, the Council and NMFS need to commit to a review of different policies as well as the "means" of achieving a change in policy direction. Developing two FMP case studies for each alternative to status quo will allow the Council to seriously consider potential FMP actions that would be further developed by the Council as follow-on amendments relying on its normal FMP decision making process. The time schedule presented in the ROD for developing any follow-on amendments would be determined by the Council after it has identified its preferred alternative, reviewed data requirements, review public comments, and prioritized its policy objectives.

To assist the Council on this agenda item, I have prepared the following materials:

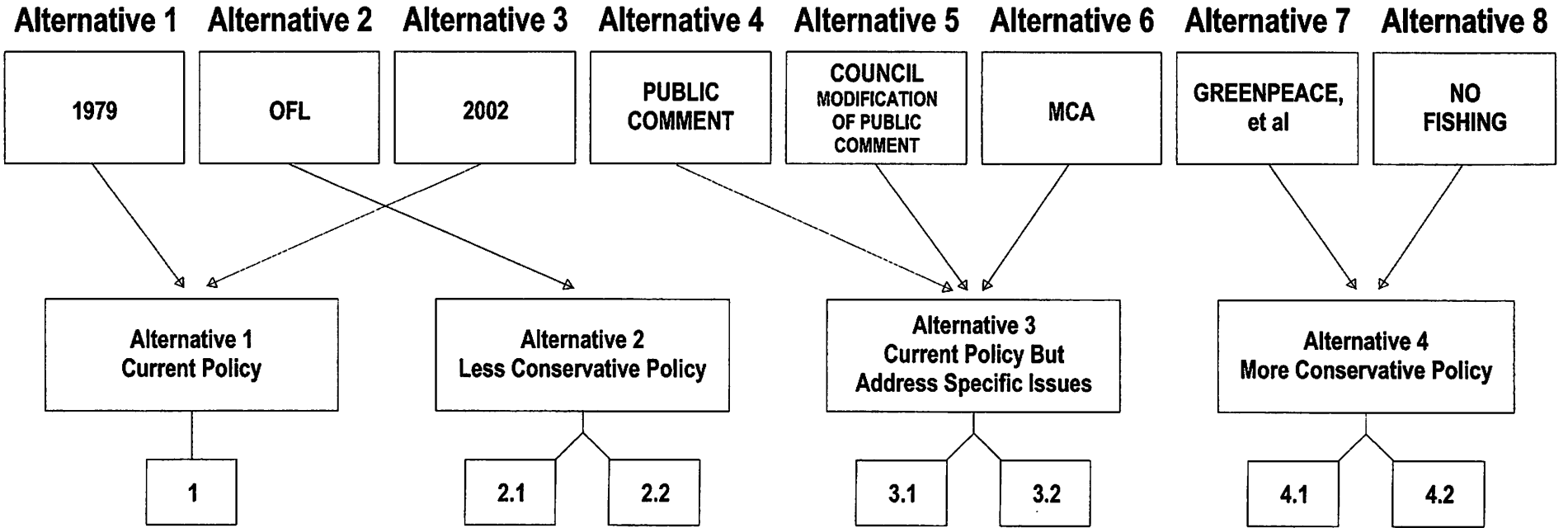
- Two illustrations of how I recommend the policy alternatives be reorganized [Item C-6(b)(1)].
- Recommended policy language for each of the alternatives that builds on decisions made at the February Council meeting [Item C-6(b)(2)].
- Proposed FMP frameworks as a starting point for review and further refinement [Item C-6(b)(3)]. These were developed by the PSEIS Team. The Team seeks comments and guidance from the Council.

At this meeting, I am seeking the following Council action:

- (1) Your approval of the conceptual approach for further development of the PSEIS alternatives.
- (2) I request that the Council work with staff to review and further refine the policy alternatives and their accompanying FMP frameworks.

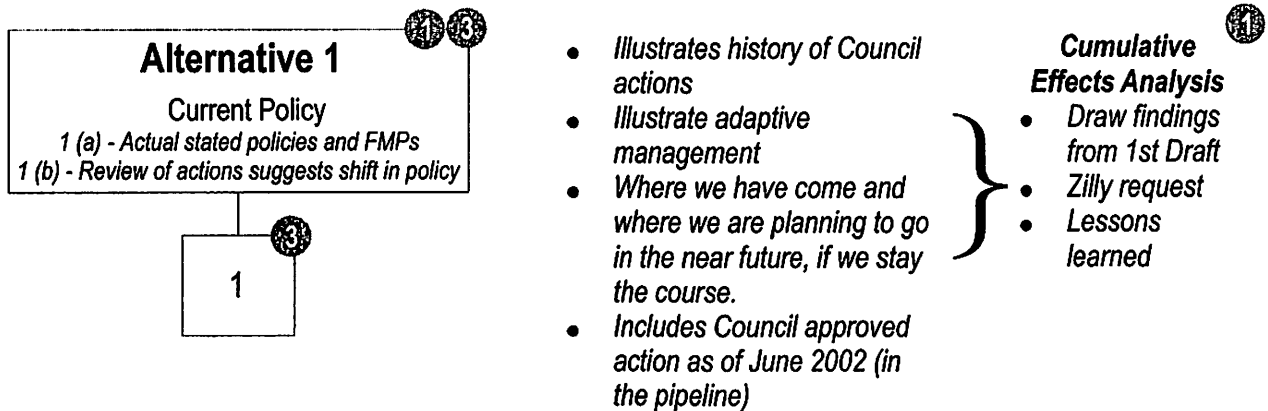
REVISED ALTERNATIVES

February Council Meeting



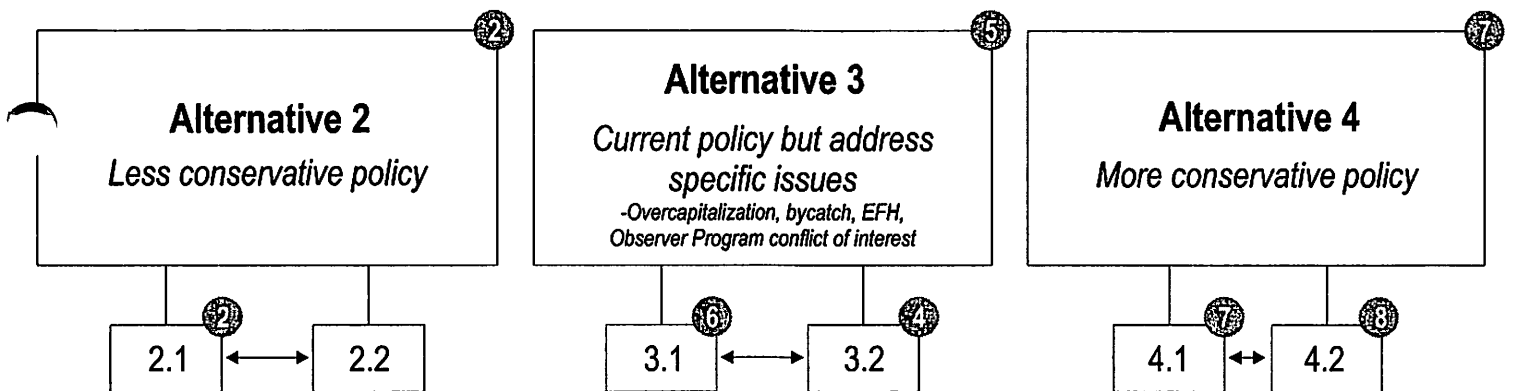
April Council Meeting

ROADMAP TO REVISED ALTERNATIVES



ALTERNATIVE FMP FRAMEWORKS

What are the reasonable alternatives?



Each tool will point to specific objectives and each objective will point to specific tools

R.O.D.



Questions for the decision makers...

Do we want to continue with our current management policy?

Or do we want to change our policy?

What do we want our FMPs to look like?

**ALTERNATIVE 1(a): Current FMP Policy for the Management of BSAI and GOA
Groundfish Fisheries**

Current BSAI Policy Statement (same as original 1979 FMP)

Section 3.2 of Bering Sea/Aleutian Islands FMP Goals for Management Plan

The North Pacific Fishery Management Council has determined that all its fishery management plans should, in order to meet the requirements of its constituency, the resources and FCMA, achieve the following goals:

1. Promote conservation while providing for the optimum yield from the Region's groundfish resource in terms of: providing the greatest overall benefit to the nation with particular reference to food production and recreational opportunities; avoiding irreversible or long-term adverse effects on the fishery resources and the marine environment; and insuring availability of a multiplicity of options with respect to the future uses of these resources.
2. Promote, where possible, efficient use of the fishery resources but not solely for economic purposes.
3. Promote fair and equitable allocation of identified available resources in a manner such that no particular group acquires an excessive share of the privileges.
4. Base the plan on the best scientific information available.

In accomplishing these broad objectives a number of secondary objectives have been considered:

1. Conservation and management measures have taken into account the unpredictable characteristics of future resource availability and socioeconomic factors influencing the viability of the industry.
2. Where possible, individual stocks of fish are managed as a unit throughout their range, but such management is in due consideration of other impacted resources.
3. In such instances when stocks have declined to a level below that capable of producing MSY, management measures promote the rebuilding the stocks. In considering the rate of rebuilding, factors other than biological considerations have been taken into account.
4. Management measures, while promoting efficiency where practicable, are designed to avoid disruption of existing social and economic structures where fisheries appear to be operating in reasonable conformance with the Act and have evolved over a period of years as reflected in community characteristics, processing capability, fleet size and distribution. These systems and the resources upon which they are based are not static, but change in the existing regulatory regime should be the result of considered action based on data and public input.
5. Management measures should contain a margin of safety in recommending allowable biological catches when the quality of information concerning the resource and ecosystem is questionable. Management plans should provide for accessing biological and socioeconomic data in such instances where the information base is inadequate to effectively establish the biological parameters of the resource or to reasonably establish optimum yield. This plan has identified information and research required for further plan development.
6. Fishing strategy has been designed in such a manner as to have minimal impact on other fisheries and the environment.

Current GOA Policy Statement (adopted through Amendment 14 in 1985)

Section 2.1 of GOA FMP Goals and Objectives for Management of Gulf Groundfish Fisheries

The North Pacific Fishery Management Council (NPFMC or the Council) is committed to develop long-range plans for managing the Gulf of Alaska groundfish fisheries that will promote a stable planning environment for the seafood industry and will maintain the health of the resource and the environment for the seafood industry and will maintain the health of the resource and the environment. In developing allocations and harvesting systems, the Council will give overriding considerations to maximizing economic benefits to the United States. Such management will:

1. Conform to the National Standards and to the NPFMC Comprehensive Fishery Management Goals.
2. Be designed to assure that to the extent possible:
 1. Commercial, recreational, and subsistence benefits may be obtained on a continuing basis.
 2. Minimize the chances of irreversible or long-term adverse effects on fishery resources and the marine environment.
 3. A multiplicity of options will be available with respect to future use of the resources.
 4. Regulations will be long-term and stable with changes kept to a minimum.

Principal Management Goal. Groundfish resources of the Gulf of Alaska will be managed to maximize positive economic benefits to the United States, consistent with resource stewardship responsibilities for the continuing welfare of the Gulf of Alaska living marine resources. Economics benefits include, but are not limited to, profits, benefits to consumers, income and employment.

To accomplish this goal, a number of objectives will be considered:

Objective 1: The Council will establish annual harvest guidelines, within biological constraints, for each groundfish fishery and mix of species taken in that fishery.

Objective 2: In its management process, including the setting of annual harvest guidelines, the Council will account for all fishery-related removals by all gear types for each groundfish species, sport fishery and subsistence catches, as well as by directed fisheries.

Objective 3: The Council will manage fisheries to minimize waste by:

1. Developing approaches to treating bycatches other than as a prohibited species. Any system adopted must address the problems of covert targeting and enforcement.
2. Developing management measures that encourage the use of gear and fishing techniques that minimize discards.

Objective 4: The Council will manage groundfish resources of the Gulf of Alaska to stimulate development of fully domestic fishery operations.

Objective 5: The Council will develop measures to control effort in a fishery, including systems to convert the common property resource to private property, but only when requested to do so by industry.

Objective 6: Rebuilding stocks to commercial or historic levels will be undertaken only if the benefits to the United States can be predicted after evaluating the associated costs and benefits and the impacts on related fisheries.

Objective 7: Population thresholds will be established for economically viable species complexes under Council management on the basis of the best scientific information, and acceptable biological catches (ABCs) will be established as defined in this document. If population estimates drop below these thresholds, ABC will be set to reflect necessary rebuilding as determined in Objective 6.

ALTERNATIVE 1(b): Current policy as reflected in Council actions (drafted by the PSEIS Team as a possible substitute)

Management Approach

Continue to work toward the goals of maintaining sustainable fisheries, protecting threatened and endangered species, and to protect, conserve, and restore living marine resource habitat through existing institutions and processes. Continue to manage the groundfish fisheries through the current risk averse conservation and management program that is based on a conservative harvest strategy. Under this management strategy, fishery impacts to the environment are mitigated as scientific evidence indicates that the fishery is adversely impacting the ecosystem. Management decisions will utilize the best scientific information available; the management process will be adaptive to new information and reactive to new environmental issues; incorporate and apply ecosystem-based management principles; consider the impact of fishing on predator-prey, habitat, and other important ecological relationships; maintain the statutorily mandated programs to reduce excess capacity and the race-for-fish; draw upon federal, state, and academic capabilities in carrying out research, administration, management, and enforcement; and consider the effects of fishing and encourage the development of practical measures that minimize bycatch and adverse effects of essential fishing habitat. This strategy is based on the assumption that fishing does produce some adverse impact on the environment and that as these impacts become known, mitigation measures are developed and FMP amendments are implemented. To meet the goal of this overall program, the Council and NMFS will seek to achieve the following management objectives:

Prevent Overfishing:

1. Adopt conservative harvest levels for single species fisheries and specify Optimum Yield (OY). [M, MSA-NS1; R, NAS SF]
2. Continue to use existing OY cap for BSAI and GOA groundfish fisheries.
3. Provide for adaptive management by continuing to specify OY as a range. [M, MSA to set OY; D to set as range]

Preserve Food Web:

4. Incorporate ecosystem considerations into fishery management decisions. [R, NAS SF]
5. Continue to protect the integrity of the food web through limits on harvest of forage species.

Reduce and Avoid Bycatch:

6. Continue current bycatch management program.
7. Continue to manage bycatch through seasonal distribution of TAC and geographical gear restrictions.
8. Continue to account for bycatch mortality in monitoring annual TACs.
9. Control the bycatch of prohibited species through PSC limits.
10. Continue program to require full utilization of target species.
11. Continue to respond to evidence of population declines by closing areas and implementing gear and seasonal restrictions in affected areas.

Avoid Impacts to Seabirds and Marine Mammals:

12. Continue to cooperate with USFWS to protect ESA-listed and other seabird species. [M, ESA - listed species; D, other species]
13. Maintain current protection measures in order to avoid jeopardy to ESA-listed Steller sea lions. [M, ESA]

Reduce and Avoid Impacts to Habitat:

14. Respond to new scientific information regarding areas of critical habitat by closing those regions to all fishing (i.e., no-take marine reserves such as Sitka Pinnacles).
15. Evaluate the impacts of trawl gear on habitat through the stepwise implementation of a comprehensive research plan, to determine appropriate habitat protection measures.
16. Continue to evaluate candidate areas for marine protected areas. [R, EO 13158]

Allocation Issues:

17. Continue to reduce excess fishing capacity, overcapitalization and the adverse effects of the race for fish. [M, SFA to continue AFA Pollock cooperative program; D, other programs; R, NAS SF]
18. Provide economic and community stability by maintaining current allocation percentages to harvesting and processing sectors.

Increase Alaska Native Consultation:

19. Continue to incorporate traditional knowledge in fishery management.
20. Continue current levels of Alaska Native participation and consultation in fishery management. [R, EO 13084]

Data Quality, Monitoring and Enforcement:

21. Continue the existing reporting requirements and Observer Program to provide catch estimates and biological information.
22. Continue on-going effort to improve community and regional economic impact assessments.
23. Increase the quality of monitoring data through improved technological means.

ALTERNATIVE 2: Less Conservative Policy

Management Approach

Amend the current FMPs to establish a more aggressive harvest strategy while still preventing overfishing of target groundfish stocks. The goal would be to maximize biological and economic yield from the resource. Such a management approach will be based on the best scientific information available, take into account individual stock and ecosystem variability; involve and be responsive to the needs and interests of affected states and citizens; continue to work with state and federal agencies to protect threatened and endangered species; maintain the statutorily mandated programs to reduce excess capacity and the race-for-fish; draw upon federal, state, and academic capabilities in carrying out research, administration, management, and enforcement; and consider the effects of fishing and encourage the development of practical measures that minimize bycatch and adverse effects of essential fishing habitat. This strategy is based on the assumption that fishing does not have an adverse impact on the environment except in specific cases as noted. To meet the goal of this overall program, the Council and NMFS will seek to achieve the following management objectives:

Prevent Overfishing:

1. Prevent overfishing by setting an Optimum Yield (OY) cap at the sum of OFL or the sum of the ABCs for each species.
2. Provide for adaptive management by continuing to specify OY as a range. [M - MSA to set OY; D - to set as range]

Preserve Food Web:

(none)

Reduce and Avoid Bycatch:

3. Monitor the bycatch of prohibited species but eliminate PSC limits.
4. Manage bycatch through closure areas for selected gear types.
5. Initiate scientific review to examine whether existing closed areas achieve protection goals.

Avoid Impacts to Seabirds and Marine Mammals:

6. Cooperate with USFWS to protect ESA-listed seabird species. [M, ESA]
7. Maintain current protection measures to avoid jeopardy to ESA-listed Steller sea lions. [M, ESA]

Reduce and Avoid Impacts to Habitat:

8. Evaluate the impacts of trawl gear on habitat through the implementation of the existing research plan, and determine appropriate habitat protection measures.
9. Continue to evaluate candidate areas for marine protected areas. [R, EO 13158]

Allocation Issues:

10. Continue to reduce excess fishing capacity, overcapitalization and the adverse effects of the race for fish. [M, SFA to continue AFA Pollock cooperative program; D other programs; R, NAS SF]

Increase Alaska Native Consultation:

11. Continue to incorporate traditional knowledge in fishery management.
12. Continue current levels of Alaska Native participation and consultation in fishery management.

Data Quality, Monitoring and Enforcement:

13. Continue the existing reporting requirements and Observer Program to provide catch estimates and biological information.
14. Continue on-going effort to improve community and regional economic impact assessments.
15. Increase the quality of monitoring data through improved technological means.
16. Adopt the recommended research plan included in this document.

ALTERNATIVE 3: Current Policy but Address Specific Issues (overcapitalization, bycatch, EFH, Observer Program conflict of interest)

Management Approach

Accelerate precautionary management measures through community or rights-based management, ecosystem management principles, increased habitat protection and additional bycatch constraints. This policy objective seeks to provide sound conservation of the living marine resources; provide socially and economically viable fisheries and fishing communities, 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 MSA and other MSA provisions, the National Standards and the National Academy of Science's Sustainable Fisheries Policy Recommendations and the requirements of other applicable law, based on the best scientific information available. Under this approach, more conservative mitigation measures may be taken to respond to social, economic or conservation needs, or if scientific evidence indicates that the fishery is negatively impacting the environment.

Prevent Overfishing:

1. Adopt conservative harvest levels for single species fisheries.
2. Provide for adaptive management by continuing to specify OY as a range. [M - MSA to set OY; D - to set as range]
3. Initiate a scientific review of the adequacy of the existing OY range and implement improvements accordingly. [D, MSA]

Preserve Food Web:

4. Incorporate ecosystem considerations into fishery management decisions. [R, NAS SF]
5. Develop indices of ecosystem health as targets for management. [R, EPAP]
6. Develop a conceptual model of the food web. [R, EPAP]
7. Formalize a procedure for incorporating uncertainty and ecosystem factors in setting ABCs.
8. Initiate a research program to identify the habitat needs of different species that represent the significant food web. [R, EPAP]

Reduce and Avoid Bycatch:

9. Continue current bycatch management program.
10. Developing incentive programs for bycatch reduction.
11. Initiate research program to evaluate current population estimates for non-target species with a view to setting bycatch limits as information becomes available.

Avoid Impacts to Seabirds and Marine Mammals:

12. Continue to cooperate with USFWS to protect ESA-listed and other seabird species. [M, ESA - listed species; D, other species]
13. Initiate joint research program with USFWS to evaluate current population estimates for all seabird species that interact with the groundfish fisheries.
14. Maintain current protection measures in order to avoid jeopardy to ESA-listed Steller sea lions. [M, ESA]

Reduce and Avoid Impacts to Habitat:

15. Develop goals, objectives and criteria and then 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. [R, NRC MPA; R, EO 13158]
16. Develop a research program to identify regional baseline habitat information and mapping.
17. Evaluate the impacts of all gear on habitat through the implementation of a comprehensive research plan, to determine appropriate habitat protection measures.
18. To protect habitat, restrict bottom trawling and create incentives for transitioning to gear types with less adverse impact on sensitive habitats.

Allocation Issues:

19. Further decrease excess fishing capacity and other adverse effects of the race for fish by extending programs such as community or rights-based management to all groundfish fisheries. [R, NAS SF]
20. Maintain LLP program.
21. Provide for adaptive management by periodically evaluating the effectiveness of rationalization programs and the allocation of property rights based on performance.
22. To support fishery management, extend the cost recovery program to all groundfish fisheries.
23. Provide economic and community stability by maintaining current allocation percentages to harvesting and processing sectors.

Increase Alaska Native Consultation:

24. Continue to incorporate traditional knowledge in fishery management.
25. Initiate a research study to collect traditional knowledge from communities, and include information in fishery management.
26. Increase Alaska Native participation and consultation in fishery management.

Data Quality, Monitoring and Enforcement:

27. 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.
28. Improve community and regional economic impact assessments through increased data reporting requirements.
29. Increase the quality of monitoring data through improved technological means.
30. Establish a coordinated, long-term ecosystem monitoring program to collect baseline information and compile existing information from a variety of ongoing research initiatives.
31. Adopt the recommended research plan included in this document.

ALTERNATIVE 4: More Conservative Policy

Management Approach

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 on the environment. Modify precautionary conservation and management measures as appropriate once scientific information is available. 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. 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 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 and wasteful race-for-fish. This strategy is based on the assumption that fishing does produce adverse impacts on the environment but due to lack of information and uncertainty, we know little about these impacts. This strategy would result in a number of significant changes to the FMPs that would significantly curtail the groundfish fisheries until more information is known about the frequency and intensity of fishery impacts upon the environment. Expanded research and monitoring programs will fill critical data gaps. Once more is known about fishery effects on the ecosystem, scientific information can be used to modify and relax the precautionary measures initially adopted. To meet the goals of this overall program, the Council and NMFS will seek to achieve the following management objectives:

Prevent Overfishing:

1. Prevent overfishing by transitioning from single-species to ecosystem-oriented management of fishing activities.
2. 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.

Preserve Food Web:

3. Develop and implement a Fishery Ecosystem Plan. [R, EPAP, NRC]
4. Conserve native species and biological diversity at all relevant scales of genetic, species, and community interactions.
5. Reduce the ABC to account for uncertainty and ecological considerations for all exploited stocks, including genetic, life history, food web and habitat considerations.
6. Set fishing levels in a highly precautionary manner to preserve ecological relationships between exploited, dependent, and related species.

Reduce and Avoid Bycatch:

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. Increase the accuracy of bycatch mortality assessments by accounting for unobserved mortality of target, non-target, and PSC.
9. Reduce bycatch, discards and PSC limits (e.g., by 10%/year for five years).
10. Phase out fisheries with >25% bycatch rates.
11. Establish PSC limits for salmon, crab and herring in the Gulf of Alaska.
12. Set stringent bycatch limits for vulnerable non-target species based on best available information.

Avoid Impacts to Seabirds and Marine Mammals:

13. Set protection measures immediately 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.
14. Initiate joint research program with USFWS to evaluate current population estimates for all seabird species that interact with the groundfish fisheries and modify protection measures based on research findings.
15. Increase existing protection measures for ESA-listed Steller sea lions by further restricting gear in critical habitat and setting more conservative harvest levels for prey base species.

Reduce and Avoid Impacts to Habitat:

16. 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 to 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.
17. To protect habitat and reduce bycatch, prohibit trawling in fisheries that can be prosecuted with more selective gear types and establish trawl closure areas.
18. Manage fisheries in an explicitly adaptive manner to facilitate learning (including large no-take marine reserves that provide experimental controls).
19. Protect marine habitats, including EFH, HAPC, ESA-designated critical habitats and other identified habitat types.
20. Commit to funding a comprehensive research plan in order to provide baseline habitat atlas.

Allocation Issues:

21. 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.

Increase Alaska Native Consultation:

22. Utilize traditional knowledge in fishery management, including monitoring and data-gathering capabilities, through co-management and cooperative research programs.
23. 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.

Data Quality, Monitoring and Enforcement:

24. 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.
25. Improve community and regional economic impact assessments through increased data reporting requirements.
26. Improve enforcement and in-season management through improved technological means.
27. 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.
28. Adopt the recommended research plan included in this document.

KEY:

M Mandatory
R Recommended
D Discretionary (if no indication, action is discretionary)

EO Executive Order
EPAP Ecosystem Principles Advisory Panel Recommendations on Ecosystem-Based
Management

MSA NS# Magnuson Stevens Fishery Conservation and Management Act National Standard #

NAS SF National Academy of Sciences Policy Recommendations for Sustainable Fisheries

NMFS BYC NMFS National Bycatch Plan

NRC MPA National Research Council Marine Protected Areas Report