

Annual Review Programmatic Groundfish Management Policy February 2019^{1,2}

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1. Introduction

Annual review of the Council’s Programmatic Groundfish Management Policy is mandated by the groundfish FMPs and was last conducted at the February 2018 Council Meeting. Implementation of the Management Policy in 2004 amended the Bering Sea and Aleutian Islands (BSAI) and Gulf of Alaska (GOA) Groundfish FMPs to include a management approach statement, nine policy goals and 45 management objectives. The Management Policy explicitly communicates the need to monitor its continued appropriateness:

“Adaptive management requires regular and periodic review. Objectives identified in this policy statement will be reviewed annually by the NPFMC. The NPFMC will also review, modify, eliminate, or consider new issues as appropriate to best carry out the goals and objectives of this management policy.”

Since 2005, the Council has used a programmatic workplan to track the implementation of its groundfish goals and objectives, which allows for more concise consideration of its actions within the framework of the Management Policy. The workplan, though not required under the FMPs, is updated prior to every Council meeting, laying out the Policy’s Objectives, as well as recent, current, ongoing, and pending Council actions. In this way, and in combination with previous annual reviews, a cumulative record of management actions and outcomes under the Policy is provided. The annual review that the Council will conduct at the February 2019 meeting will rely on the workplan as a reference tool. In this document, the workplan is provided in Table 1. An Appendix is also provided as a background, which describes the development of the PSEIS, its continued relevance, and its relationship to Council actions outside the scope of the Groundfish FMPs.

In order to complete the annual review, the Council will:

- Review the Programmatic Groundfish Management Policy
- Review Council actions relative to the Policy as conveyed in the Programmatic Workplan

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² Prepared by Jim Armstrong, Council staff

- Consider whether modifications to the Management Objectives are called for (noting that any change requires an FMP amendment)
- Consider additional Council actions to better fulfill the Management Policy

2. Groundfish Management Policy

The following text represents the Council's Programmatic Groundfish Management Policy as developed throughout the PSEIS and contained in the groundfish FMPs.

The productivity of the North Pacific ecosystem is acknowledged to be among the highest in the world. For the past 25 years, the NPFMC management approach has incorporated forward looking conservation measures that address differing levels of uncertainty. This management approach has, in recent years, been labeled the precautionary approach. The NPFMC's precautionary approach is about applying judicious and responsible fisheries management practices, based on sound scientific research and analysis, proactively rather than reactively, to ensure the sustainability of fishery resources and associated ecosystems for the benefit of future as well as current generations. Recognizing that potential changes in productivity may be caused by fluctuations in natural oceanographic conditions, fisheries, and other, non-fishing, activities, the NPFMC intends to continue to take appropriate measures to insure the continued sustainability of the managed species. It will carry out this objective by considering reasonable, adaptive management measures as described in the MSA and in conformance with the National Standards, the Endangered Species Act, the National Environmental Policy Act and other applicable law. This management approach takes into account the National Academy of Science's recommendations on Sustainable Fisheries Policy.

As part of its policy, the NPFMC intends to consider and adopt, as appropriate, measures that accelerate the NPFMC's precautionary, adaptive management approach through community or rights-based management, ecosystem-based management principles that protect managed species from overfishing, and where appropriate and practicable, increase habitat protection and bycatch constraints. All management measures will be based on the best scientific information available. Given this intent, the fishery management goal is 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-based considerations into management decisions.

This management approach recognizes the need to balance many competing uses of marine resources and different social and economic goals for sustainable fishery management including protection of the long-term health of the resource and the optimization of yield. This policy will utilize and improve upon the NPFMC's existing open and transparent process to involve the public in decision-making.

Adaptive management requires regular and periodic review. Objectives identified in this policy statement will be reviewed annually by the NPFMC. The NPFMC will also review, modify, eliminate or consider new issues as appropriate to best carry out the goals and objectives of this management policy. To meet the goals of this overall management approach, the NPFMC and NOAA Fisheries will use the PSEIS as a planning document. To help focus its consideration of potential management measures, it will use the following objectives as guideposts to be re-evaluated as amendments to the FMP are considered over the life of the PSEIS.

Prevent Overfishing:

1. Adopt conservative harvest levels for multi-species and single species fisheries and specify optimum yield.

2. Continue to use existing optimum yield cap for BSAI (as stated in current law) and GOA groundfish fisheries.
3. Provide for adaptive management by continuing to specify optimum yield as a range.
4. Initiate a scientific review of the adequacy of F40 and adopt improvements as appropriate.
5. Continue to improve the management of species through species categories.

Promote Sustainable Fisheries and Communities:

6. Promote conservation while providing for optimum yield in terms of providing the greatest overall benefit to the nation with particular reference to food production, and sustainable opportunities for recreational, subsistence and commercial fishing participants and fishing communities.
7. Promote management measures that, while meeting conservation objectives, are also designed to avoid significant disruption of existing social and economic structures.
8. Promote fair and equitable allocation of identified available resources in a manner such that no particular sector, group or entity acquires an excessive share of the privileges.
9. Promote increased safety at sea.

Preserve Food Web:

10. Develop indices of ecosystem health as targets for management.
11. Improve the procedure to adjust ABCs as necessary to account for uncertainty and ecosystem factors.
12. Continue to protect the integrity of the food web through limits on harvest of forage species.
13. Incorporate ecosystem-based considerations into fishery management decisions as appropriate.

Manage Incidental Catch and Reduce Bycatch and Waste:

14. Continue and improve current incidental catch and bycatch management program.
15. Develop incentive programs for bycatch reduction including the development of mechanisms to facilitate the formation of bycatch pools, VBAs, or other bycatch incentive systems.
16. Encourage research programs to evaluate current population estimates for non-target species with a view to setting appropriate bycatch limits as information becomes available.
17. Continue program to reduce discards by developing management measures that encourage the use of gear and fishing techniques that reduce bycatch which includes economic discards.
18. Continue to manage incidental catch and bycatch through seasonal distribution of TAC and geographical gear restrictions.
19. Continue to account for bycatch mortality in TAC accounting and improve the accuracy of mortality assessments for target, PSC bycatch, and non-commercial species.
20. Control the bycatch of prohibited species through PSC limits or other appropriate measures.
21. Reduce waste to biologically and socially acceptable levels.

Avoid Impacts to Seabirds and Marine Mammals:

22. Continue to cooperate with USFWS to protect ESA-listed species, and if appropriate and practicable, other seabird species.
23. Maintain or adjust current protection measures as appropriate to avoid jeopardy to ESA-listed Steller sea lions.
24. Encourage programs to review status of endangered or threatened marine mammal stocks and fishing interactions and develop fishery management measures as appropriate.
25. Continue to cooperate with NOAA Fisheries and USFWS to protect ESA-listed marine mammal species, and if appropriate and practicable, other marine mammal species.

Reduce and Avoid Impacts to Habitat:

26. Review and evaluate efficacy of existing habitat protection measures for managed species.

27. Identify and designate EFH and HAPC pursuant to MSA rules, and mitigate fishery impacts as necessary and practicable to continue the sustainability of managed species.
28. Develop a Marine Protected Area policy in coordination with national and state policies.
29. Encourage development of a research program to identify regional baseline habitat information and mapping, subject to funding and staff availability.
30. Develop goals, objectives and criteria to evaluate the efficacy and suitable design of marine protected areas and no-take marine reserves as tools to maintain abundance, diversity, and productivity. Implement marine protected areas if and where appropriate.

Promote Equitable and Efficient Use of Fishery Resources:

31. Provide economic and community stability to harvesting and processing sectors through fair allocation of fishery resources.
32. Maintain LLP program and modify as necessary, and further decrease excess fishing capacity and overcapitalization by eliminating latent licenses and extending programs such as community or rights-based management to some or all groundfish fisheries.
33. Provide for adaptive management by periodically evaluating the effectiveness of rationalization programs and the allocation of access rights based on performance.
34. Develop management measures that, when practicable, consider the efficient use of fishery resources taking into account the interest of harvesters, processors, and communities.

Increase Alaska Native Consultation:

35. Continue to incorporate local and Traditional Knowledge in fishery management.
36. Consider ways to enhance collection of local and Traditional Knowledge from communities and incorporate such knowledge in fishery management where appropriate.
37. Increase Alaska Native participation and consultation in fishery management.

Improve Data Quality, Monitoring and Enforcement:

38. Increase the utility of groundfish fishery observer data for the conservation and management of living marine resources.
39. Improve groundfish Observer Program and consider ways to address the disproportionate costs associated with the current funding mechanism.
40. Improve community and regional economic impact costs and benefits through increased data reporting requirements.
41. Increase the quality of monitoring and enforcement data through improved technological means.
42. Encourage a coordinated, long-term ecosystem monitoring program to collect baseline information and compile existing information from a variety of ongoing research initiatives, subject to funding and staff availability.
43. Cooperate with research institutions such as the NPRB in identifying research needs to address pressing fishery issues.
44. Promote enhanced enforceability.
45. Continue to cooperate and coordinate management and enforcement programs with the ADF&G, and Alaska Fish and Wildlife Protection, the USCG, NOAA Fisheries Enforcement, IPHC, federal agencies, and other organizations to meet conservation requirements; promote economically healthy and sustainable fisheries and fishing communities; and maximize efficiencies in management and enforcement programs through continued consultation, coordination, and cooperation.

3. Programmatic Workplan

Table 1 provides the programmatic workplan that is an overview of the Council's activities in 2018 that continue to fulfill the Priorities and Objectives of the Groundfish Management Policy. The information in Table 1 was consolidated from the workplan summaries included under agenda item E1 for each of that year's Council meetings and that connect issues on the meeting agendas with elements of the Policy. Also included are ongoing actions and structures within the Council management environment that may not have been specifically listed on meeting agendas, but which continued to achieve the intent of the Policy in 2018 (e.g., EFH consultation policy, inclusion of forage fish in groundfish SAFEs). The first two columns in Table 1 are directly from the FMP policy statement: 1) General Priority, 2) Management Objectives within that Priority. The third column identifies Council activities associated with each Management Objective.

Table 1. Council actions in 2018 in relation to the Priorities (column 1) and Objectives (column 2) of the Council’s Programmatic Groundfish Management Policy. The actions reflected in the table are a mixture of specific Council meeting agenda items and ongoing management processes in 2018.

General Priority	Management Objective	Council Actions
1. Prevent Overfishing <i>Maintain Sustainable Harvest</i>	1. Adopt conservative harvest levels for multi-species and single species fisheries and specify optimum yield.	<ul style="list-style-type: none"> • Proposed and Final Groundfish Specifications for 2019-2020 • CIE reviews for GOA P cod, BSAI yellowfin sole, northern rock sole, Alaska plaice • Squid to ecosystem component category (effective)
	2. Continue to use the optimum yield caps for the BSAI and GOA groundfish fisheries.	
	3. Provide for adaptive management by continuing to specify optimum yield as a range.	
	4. Provide for periodic reviews of the adequacy of F40 and adopt improvements, as appropriate.	
	5. Continue to improve the management of species through species categories.	
2. Promote Sustainable Fisheries and Communities	6. Promote conservation while providing for optimum yield in terms of the greatest overall benefit to the nation with particular reference to food production, and sustainable opportunities for recreational, subsistence, and commercial fishing participants and fishing communities.	<p>These considerations are applied in all Council management recommendations.</p> <p>See specific actions, also under Priorities 1,7 and 8.</p> <ul style="list-style-type: none"> • USCG Reports • NIOSH Report
	7. Promote management measures that, while meeting conservation objectives, are also designed to avoid significant disruption of existing social and economic structures	
	8. Promote fair and equitable allocation of identified available resources in a manner such that no particular sector, group or entity acquires an excessive share of the privileges.	
	9. Promote increased safety at sea.	
3. Preserve Food Web <i>Ecosystem-based Fishery Management</i>	10. Develop indices of ecosystem health as targets for management.	<ul style="list-style-type: none"> • Ecosystem status reports for eastern Dering Sea, Aleutian Islands, and Gulf of Alaska
	11. Improve the procedure to adjust acceptable biological catch levels as necessary to account for uncertainty and ecosystem factors.	<ul style="list-style-type: none"> • Adopted an ABC<maxABC process • For 2019, ABC<maxABC set for Sablefish, GOA Pcod, GOA pollock, EBS Pcod
	12. Continue to protect the integrity of the food web through limits on harvest of forage species.	<ul style="list-style-type: none"> • Forage stocks evaluated in groundfish SAFE reports
	13. Incorporate ecosystem-based considerations into fishery management decisions, as appropriate.	<ul style="list-style-type: none"> • Ecosystem workshop in Feb 2018 • Bering Sea Fishery Ecosystem Plan Initial and Final Reviews

Table 1 (continued). Council actions in 2018 in relation to the Priorities (column 1) and Objectives (column 2) of the Council’s Programmatic Groundfish Management Policy. The actions reflected in the table are a mixture of specific Council meeting agenda items and ongoing management processes in 2018.

General Priority	Management Objective	Council Actions
4. Manage Incidental Catch and Reduce Bycatch and Waste	14. Continue and improve current incidental catch and bycatch management program.	<ul style="list-style-type: none"> • GOA CV Chinook PSC limit adjustments – Initial Review • Pollock IPA Reports on Salmon bycatch • Salmon genetics bycatch composition reports Salmon Adult Equivalency • Model review for 3-river index • Halibut Abundance-Based Management – discussion papers • Halibut retention in BSAI pots • Observer Annual Report for 2017 • 2019 Observer Program Annual Deployment Plan • Trawl EM 2019 Cooperative Research Plan • Fixed gear CV rockfish retention - initial review
	15. Develop incentive programs for bycatch reduction including the development of mechanisms to facilitate the formation of bycatch pools, vessel bycatch allowances, or other bycatch incentive systems.	<ul style="list-style-type: none"> • Halibut deck sorting EFP • Halibut Management Framework (ongoing)
	16. Encourage research programs to evaluate current population estimates for non-target species with a view to setting appropriate bycatch limits, as information becomes available.	<ul style="list-style-type: none"> • Salmon genetics bycatch composition reports 3-River Index • Forage stock evaluated in Groundfish SAFE reports (ongoing) • Halibut Management Framework (ongoing)
	17. Continue program to reduce discards by developing management measures that encourage the use of gear and fishing techniques that reduce bycatch which includes economic discards.	<ul style="list-style-type: none"> • Halibut retention in BSAI pots • Adak pollock/Pacific Ocean perch EFP
	18. Continue to manage incidental catch and bycatch through seasonal distribution of total allowable catch and geographical gear restrictions.	<ul style="list-style-type: none"> • Central GOA Tanner crab gear restrictions • Various area closures, seasons, and gear restrictions (ongoing)
	19. Continue to account for bycatch mortality in total allowable catch accounting and improve the accuracy of mortality assessments for target, prohibited species catch, and noncommercial species.	<ul style="list-style-type: none"> • 2019 Observer Program Annual Deployment Plan • Final Groundfish Specifications for 2019-2020
	20. Control the bycatch of prohibited species through prohibited species catch limits or other appropriate measures.	<ul style="list-style-type: none"> • GOA Tanner crab observer/effort data – discussion papers • Halibut Abundance-Based Management – discussion papers • Bering Sea Snow Crab PSC Limits – initial review
	21. Reduce waste to biologically and socially acceptable levels.	<ul style="list-style-type: none"> • Fixed gear CV rockfish retention – initial review • Halibut retention in BSAI pots • GOA pollock, cod seasonal/allocations – initial review • Sablefish discard allowance – discussion paper

Table 1 (continued). Council actions in 2018 in relation to the Priorities (column 1) and Objectives (column 2) of the Council's Programmatic Groundfish Management Policy. The actions reflected in the table are a mixture of specific Council meeting agenda items and ongoing management processes in 2018.

General Priority	Management Objective	Council Actions
5. Reduce and Avoid Impacts to Seabirds and Marine Mammals	22. Continue to cooperate with U.S. Fish and Wildlife Service (USFWS) to protect ESA-listed species, and if appropriate and practicable, other seabird species.	<ul style="list-style-type: none"> • Seabird conservation working group update • Cooperation and protective measures (ongoing)
	23. Maintain or adjust current protection measures as appropriate to avoid jeopardy of extinction or adverse modification to critical habitat for ESA-listed Steller sea lions.	<ul style="list-style-type: none"> • SSC protection measures in regulation (ongoing)
	24. Encourage programs to review status of endangered or threatened marine mammal stocks and fishing interactions and develop fishery management measures as appropriate.	<ul style="list-style-type: none"> • Protected species reports, including annual status reports to SSC on marine mammals
	25. Continue to cooperate with NMFS and USFWS to protect ESA-listed marine mammal species, and if appropriate and practicable, other marine mammal species.	<ul style="list-style-type: none"> • Cooperation and protective measures (ongoing)
6. Reduce and Avoid Impacts to Habitat	26. Review and evaluate efficacy of existing habitat protection measures for managed species.	<ul style="list-style-type: none"> • EFH 5-year reviews, including fishing effects model, EFH descriptions
	27. Identify and designate essential fish habitat and habitat areas of particular concern pursuant to Magnuson-Stevens Act rules, and mitigate fishery impacts as necessary and practicable to continue the sustainability of managed species.	<ul style="list-style-type: none"> • EFH and mitigation measures, including area closures and gear restrictions (ongoing) • Council's EFH consultation policy (ongoing) and annual NMFS report
	28. Develop a Marine Protected Area policy in coordination with national and state policies.	<ul style="list-style-type: none"> • Actions are developed complementary to Federal MPA Center (ongoing)
	29. Encourage development of a research program to identify regional baseline habitat information and mapping, subject to funding and staff availability.	<ul style="list-style-type: none"> • Extensive mapping program through NMFS Habitat Division (ongoing) • Research priorities
30. Develop goals, objectives and criteria to evaluate the efficacy and suitable design of marine protected areas and no-take marine reserves as tools to maintain abundance, diversity, and productivity. Implement marine protected areas if and where appropriate.	<ul style="list-style-type: none"> • Bering Sea Fishery Ecosystem Plan includes goals and objectives • Various area closures in place (ongoing) 	

Table 1 (continued). Council actions in 2018 in relation to the Priorities (column 1) and Objectives (column 2) of the Council’s Programmatic Groundfish Management Policy. The actions reflected in the table are a mixture of specific Council meeting agenda items and ongoing management processes in 2018.

General Priority	Management Objective	Council Actions
7. Promote Equitable and Efficient Use of Fishery Resources	31. Provide economic and community stability to harvesting and processing sectors through fair allocation of fishery resources.	<ul style="list-style-type: none"> • Halibut Abundance-Based Management – discussion papers • WGOA pollock vessel limitations
	32. Maintain the license limitation program, modified as necessary, and further decrease excess fishing capacity and overcapitalization by eliminating latent licenses and extending programs such as community or rights-based management to some or all groundfish fisheries.	<ul style="list-style-type: none"> • BSAI Pcod trawl CV analysis – discussion paper • AI Pcod set-aside adjustments
	33. Provide for adaptive management by periodically evaluating the effectiveness of rationalization programs and the allocation of access rights based on performance.	<ul style="list-style-type: none"> • Small sideboards for AFA and Crab Rationalization programs • IFQ discussion papers • Co-op Reports (AFA, AM 80, GOA Rockfish, BSAI Crab) • Unguided charter halibut rental boats • BSAI Pcod sector allocation review workplan • CGOA Rockfish Program reauthorization – discussion paper
	34. Develop management measures that, when practicable, consider the efficient use of fishery resources taking into account the interest of harvesters, processors, and communities.	<ul style="list-style-type: none"> • Halibut retention in BSAI pots • GOA Pollock/Pcod seasonal allocations – initial review • Small sablefish retention – discussion paper
8. Increase Alaska Native & Community Consultation	35. Continue to incorporate local and traditional knowledge in fishery management.	<ul style="list-style-type: none"> • Social Science Planning Team report • Bering Sea Fishery Ecosystem Plan
	36. Consider ways to enhance collection of local and traditional knowledge from communities, and incorporate such knowledge in fishery management where appropriate.	
	37. Increase Alaska Native participation and consultation in fishery management.	<ul style="list-style-type: none"> • Ongoing outreach on BSAI salmon bycatch • Establishment of Community Engagement Committee • Ecosystem workshop in February 2018

Table 1 (continued). Council actions in 2018 in relation to the Priorities (column 1) and Objectives (column 2) of the Council’s Programmatic Groundfish Management Policy. The actions reflected in the table are a mixture of specific Council meeting agenda items and ongoing management processes in 2018.

General Priority	Management Objective	Council Actions
9. Improve Data Quality, Monitoring and Enforcement	38. Increase the utility of groundfish fishery observer data for the conservation and management of living marine resources.	<ul style="list-style-type: none"> • Observer Annual Report for 2017 • 2019 Observer Program Annual Deployment Plan – (includes fixed gear EM) • Trawl EM 2019 Cooperative Research Plan • Observer tenders – update
	39. Develop funding mechanisms that achieve equitable costs to the industry for implementation of the North Pacific Groundfish Observer Program.	<ul style="list-style-type: none"> • Observer Fee Analysis – under development
	40. Improve community and regional economic impact costs and benefits through increased data reporting requirements.	<ul style="list-style-type: none"> • Economic Data Reports (ongoing) • Economic SAFE Reports (ongoing)
	41. Increase the quality of monitoring and enforcement data through improved technology.	<ul style="list-style-type: none"> • EM implementation (ongoing)
	42. Encourage a coordinated, long-term ecosystem monitoring program to collect baseline information and compile existing information from a variety of ongoing research initiatives, subject to funding and staff availability.	<ul style="list-style-type: none"> • Research priorities • Ecosystem SAFE • Bering Sea Fishery Ecosystem Plan
	43. Cooperate with research institutions such as the North Pacific Research Board in identifying research needs to address pressing fishery issues.	<ul style="list-style-type: none"> • Research priorities
	44. Promote enhanced enforceability.	<ul style="list-style-type: none"> • Enforcement precepts (ongoing) • Mixing of guided/unguided charter halibut
	45. Continue to cooperate and coordinate management and enforcement programs with the Alaska Board of Fish, Alaska Department of Fish and Game, and Alaska Fish and Wildlife Protection, the U.S. Coast Guard, NMFS Enforcement, International Pacific Halibut Commission, Federal agencies, and other organizations to meet conservation requirements; promote economically healthy and sustainable fisheries and fishing communities; and maximize efficiencies in management and enforcement programs through continued consultation, coordination, and cooperation.	<ul style="list-style-type: none"> • The Council maintains long history of cooperative management with all involved agencies and entities. The Council recognizes and works to achieve the shared goals of its many partners in stewardship of Alaska’s fisheries and its supporting ecosystems. Besides those partners listed in Objective 45, the Council maintains effective working relationships with international, national, and Alaska organizations.

4. Next Steps

As stated above, annual review of the Programmatic Management Policy is established in the BSAI and GOA Groundfish FMPs. In order to satisfy this self-imposed standard, staff monitors the correspondence between near-term Council actions and Policy Objectives through continual updates to the workplan which are presented at each Council meeting.

While staff intends to continue with the meeting-by-meeting updates that area provided in Staff tasking, it may be that the Council would like to reconsider the periodicity of the more comprehensive review. Additionally, a comprehensive discussion of the Policy has been conducted annually as at this February meeting. The Council may find that conducting the comprehensive review every two or every three years could provide a better match with the cycle of Council actions. It is not infrequently that a Council action, from initial development of an idea to a final Council recommendation will span across multiple years. Extending the period for comprehensive review could perhaps capture more clearly the arc of the Council's application of the Programmatic Management Policy.

Finally, especially if the Council does not choose to extend the period for comprehensive review, there may be some benefit to tasking staff to include actions beyond the limit scope of the groundfish workplan. It has been the Council's habit to loosely apply the groundfish management publications to its management actions in other fisheries (e.g. the Arctic halibut management). Staff could include Council actions into their fisheries in a similar format if the Council desires.

A. Appendix

A-1. The Alaska Groundfish Fisheries Programmatic SEIS

The original EISs for the GOA and BSAI groundfish FMPs were finalized in 1979 and 1981, respectively. In 1998, a Supplemental EIS (SEIS) updating both FMPs was prepared because the fisheries had changed considerably through amendments, regulations, and adaptations to federal law. Additionally, information on marine mammals, sea birds, and fishes were different from that in the original FMPs, including ESA listings for some species. Finally, information about ecosystem processes, the impacts of fisheries, and available management tools had changed since the original EISs.

The 1998 SEIS focused much of its attention on the annual TAC specification process and how prohibited species catch limits were determined. Although TAC specification was the *action* that the SEIS addressed, the analysis addressed a range of related information, including location and timing of fisheries, 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, trophic levels, habitat alterations, as well as impacts to coastal communities, society, the economy, and the domestic and foreign groundfish markets, in-season management, enforcement, monitoring, stock assessment, and summary analyses. The 1998 SEIS also incorporated updated scientific information about the North Pacific ecosystem and analyzed this information by considering a range of alternative total allowable catch (TAC) levels.

A.1.1 Litigation

The adequacy of the 1998 SEIS was challenged in District Court (*Greenpeace v. National Marine Fisheries Service*) with plaintiffs arguing that the 1998 SEIS was deficient because it only analyzed alternatives dealing with TAC levels. In its decision, the court determined that the *action* under review in the SEIS should have been the *FMPs* and the numerous regulations managing the groundfish fisheries, rather than the TAC setting process. The decision asserted that NEPA requires NMFS to analyze how the federally-permitted groundfish fisheries (which are consequences of the *FMPs*) affect the North Pacific ecosystem. The court ruled in favor of the plaintiffs that the 1998 SEIS was legally inadequate under NEPA and remanded the document back to NMFS for additional analysis, with direction that a “Programmatic” SEIS (PSEIS) be prepared.

A.1.2 Preparation of the PSEIS

In October 1999, a five year process of PSEIS preparation was begun as NMFS published an NOI announcing a PSEIS that would analyze groundfish management under the *FMPs* as a large-scale program.



Figure 1. Timeline of events involved in preparation of the Council's Groundfish PSEIS.

The “multi-tiered” PSEIS was envisioned as one that would serve to streamline the NEPA process by allowing future EAs and EISs that focus on specific federal actions to reference analyses in the PSEIS. A programmatic EIS is usually prepared at the onset of a new federal program, but in this case, since the GOA and BSAI FMPs had been in place for approximately 25 years, the PSEIS provided a comprehensive review of the existing FMPs. The PSEIS was developed to fulfill NEPA requirements by evaluating the FMPs (as the federal action) for their impacts on the human environment. This evaluation would be achieved by:

- Updating the information contained in the original EISs by providing a historical review of how the groundfish fisheries and the environment have changed since publication of the original EISs.
- Describing how new scientific and fishery information is being utilized.
- Describing the cumulative effects of past, present, and reasonably foreseeable future groundfish fisheries management on the marine ecosystem.
- Analyzing current and alternative management regimes to determine their potential impacts on the human environment.

A.1.3 Alternatives in the PSEIS

The four alternatives in the PSEIS consisted of four different policy statements, each presented in a standard framework that would provide management flexibility and allow for adaptation as new information on the ecosystem and the fisheries was obtained. Each of the alternatives was composed of three elements:

1. A management approach statement that described the goals, rationale and assumptions behind the alternative;
2. A set of management objectives that complemented and further refined the goals set forth in the management approach; and,
3. Except for the No Action Alternative, a pair of example FMP “bookends” that illustrated and framed the range of implementing management measures under that alternative.

The management approach and objectives served to define the direction the Council wished to follow in the management of the fisheries. The example bookends provided practical inputs for analyzing the physical, biological and socioeconomic impacts of the alternatives, and provided the public with a picture of the management measures that could achieve the goals of each of the alternatives going into the future. The *Preferred Alternative*, which was approved and incorporated into the FMPs (BSAI Am. 81, GOA Am. 74), reflects the Council’s current Groundfish Management Policy and Management Objectives. The range of potential management measures, as illustrated by the example FMP bookends (PA.1 and PA.2) retained management flexibility under the MSA to adaptively manage the fishery through future FMP amendments.

A.1.4 Preferred Alternative FMP Bookends

Preferred Alternative FMP Bookend 1 (PA.1) comprised a conservative management approach that continued existing risk-averse practices, increased conservation-oriented constraints on fisheries, formalized precautionary practices in the FMPs, and initiated scientific review of management measures to assess and improve fishery management.

This FMP bookend built on existing conservative procedures for determining ABC, annual quotas, and the existing suite of closed areas, and implemented changes to the TAC-setting process following a comprehensive review. Precautionary practices such as setting TAC less than or equal to the ABC, and

specifying MSSTs for Tier 1-3 stocks in accordance with NS Guidelines, would be formalized in the FMPs. The NPFMC and NOAA Fisheries would continue to use and improve harvest control rules to maintain a spawning stock biomass with the potential to produce sustained yields on a continuing basis, and to distribute allocations by area, season, and gear as appropriate. Efforts to develop ecosystem indicators to be used in TAC-setting, as per ecosystem management principles, would be continued. In order to balance the needs of social and economic stability with habitat protection and resource conservation, the NPFMC and NOAA Fisheries would develop a Marine Protected Area (MPA) efficacy methodology, including the development of definitions, program goals, objectives, and criteria for establishing MPAs. Additionally, existing habitat and bycatch area restrictions would be maintained. Measures would also be retained to protect ESA-listed species. To minimize bycatch, a moderate reduction of PSC limits in the BSAI would be initiated, and PSC limits or other appropriate measures for protection of crab, herring and salmon would be authorized in the GOA. Effective monitoring and timely reaction to change in the environment and the fisheries would be enhanced through improvements in the Observer Program and existing reporting requirements.

Existing programs addressing excess capacity and overcapitalization were maintained under this example FMP, with continued development of rights-based management to be undertaken as needed. In order to mitigate adverse impacts of fisheries management decisions on fishing communities, and to comply with other national directives, procedures to encourage increased participation of Alaska Natives in fishery management, would be pursued.

Preferred Alternative FMP Bookend 2 (PA.2) accelerated adaptive precautionary management by increasing conservation measures that would provide a buffer against uncertainty, instituted research and review of existing measures, and expanded data collection and monitoring programs.

This FMP bookend significantly accelerated precautionary management by incorporating an uncertainty correction into the estimation of ABC for all species. The current precautionary practice of setting TAC less than or equal to ABC would be formalized in the FMP. The calculation of the OY caps would be periodically reviewed to determine their relevancy to current environmental conditions and stock levels. Criteria would be developed and implemented for using key ecosystem indicators in TAC-setting, and other precautionary practices such as developing appropriate harvest strategies for rockfish stocks. In implementing this bookend, data would be collected, and analysis undertaken to allow the specification of MSSTs priority stocks in Tiers 4-5. The development of criteria to manage target and nontarget species consistently, and for removing some stocks from the other species and non-specified species management categories, would initially involve breaking sharks out of the other species category for TAC setting and management purposes in the BSAI, as well as breaking sharks and skates out of the other species category in the GOA.

This FMP bookend also reexamined area restrictions in the BSAI and the GOA by reviewing the existing system of closure areas in the BSAI and the GOA in conjunction with developing MPAs. PA.2 considered adopting MPAs, with a guideline of 0 to 20 percent of the EEZ (3 to 200 nm) being closed. The objective of these measures was to provide greater protection to a full range of marine habitats within the 1,000-m bathymetric line. This incorporated an Aleutian Islands management area to protect coral and living bottom habitat, and also any modification to the 2002 Steller sea lion closures. The closed area would indirectly mitigate adverse effects due to fishing. The guideline aimed to provide greater protection for a wide range of species, from Steller sea lions to slope rockfish to prohibited species, while at the same time respecting traditional fishing grounds and maintaining open area access for coastal communities. Additionally, the bookend would extend the existing BSAI bottom-trawl ban on pollock to the GOA.

To increase precaution regarding bycatch, existing PSC limits would be reduced, and limits would be set for all prohibited species in the GOA, with appropriate in-season closure areas. The achievement of these bycatch reductions was expected to be realized through the comprehensive rationalization of all fisheries (except those already part of a cooperative or IFQ program), which reduces concentrated effort in the fisheries, or through bycatch incentive programs implemented in this example FMP.

In accordance with ecosystem principles, the Council and NOAA Fisheries would seek to cooperate with the USFWS to develop fishing methods that reduce incidental take of all seabird and marine mammal species in the longline and trawl fisheries. Procedures would also be pursued to increase consultation with and representation of Alaska Natives in fishery management by incorporating local and traditional knowledge. Increased observer coverage and improvements to the observer data would enhance effective monitoring and timely reaction to change in the environment and the fisheries. Additionally, this bookend explored programs that would expand the mandatory economic data collected from industry while protecting confidentiality.

A-2. Evaluating the Continued Applicability of the Programmatic SEIS

The U.S. Supreme Court has held that supplementing an existing EIS is necessary only if there remains major Federal action to occur. As found in *Oregon Natural Resources Council v. Harell*, “an agency need not supplement an EIS every time new information comes to light after the EIS is finalized. To require otherwise would render agency decision-making intractable.” In other words, a supplement to an EIS is needed only if the new information is sufficient to show a proposed or remaining action will affect the quality of the human environment in a significant manner or to a significant extent *not already considered*. The Groundfish PSEIS was designed to anticipate the need to adapt management to a continually changing environment. The purpose of the FMP “bookends” was to characterize the range likely future management measures in that environment.

Nevertheless, because fisheries management is dynamic, and because the Council and Agency have broad discretion to manage fisheries consistent with the MSA, the Council and Agency have a duty to continually evaluate new information relevant to the impacts of their actions and also to continually review the sufficiency of the PSEIS in light of those changing conditions. When the conditions and information are significantly different in degree or in kind from the impacts considered in the existing PSEIS, the Council and the agency must prepare a supplement to that PSEIS. The Council monitors conditions and information in a number of ways that are discussed below.

A.2.1 2015 Supplemental Information Report (SIR)

The Programmatic Workplan and FMP-mandated annual review both focus on the *activities* of the Council relative to the Groundfish Management Policy. In order to address changes that have occurred in the human environment since the development of the PSEIS, and to review the accumulated information about the managed groundfish fisheries and their impacts, a more wide-ranging analysis is needed. An approach for this analysis is the preparation of a Supplemental Information Report (SIR), which is a “non-NEPA” document, that the courts have supported as an appropriate tool for determining whether a given EIS continues to provide NEPA compliance. After reviewing discussion papers in 2012 on the timing and need for supplementing or updating the PSEIS, the Council chose to develop a SIR to formally address this issue. The supporting analysis:

- Reviewed changes to the FMPs since the 2004 PSEIS.
- Identified new information and new circumstances since 2004.
- Evaluated whether impacts predicted in the PSEIS were still valid.

Noting that the Council and NMFS could choose to supplement the PSEIS at any time for a variety of reasons, the SIR focused on whether the triggers had been met that would *require* the Council and NMFS to supplement the PSEIS. There are two conditions (triggers) that would require supplementing an EIS:

1. If NMFS and the Council made a substantial change in the proposed action (i.e., the management of the Federal groundfish fisheries) that is relevant to environmental concerns, or
2. If there are significant new circumstances or information relevant to environmental concerns and bearing on the management of the groundfish fisheries or their impacts.

Regarding condition #1, the SIR summarized changes to the management program since the 2004 PSEIS, all of which have been subject to NEPA analysis. The SSC and Council considered these changes in their discussions of this issue in 2012. The SSC discussed the management changes at the March 2012 Council meeting and found them to be consistent with the preferred alternative evaluated in the 2004 PSEIS. This helped determine that the changes do not represent a substantial change to federal management of the groundfish fisheries that is relevant to environmental concerns.

The Council evaluated the information in the draft SIR and concluded that the management program was still consistent with the Preferred Alternative in the PSEIS, that a supplemental EIS was not required, and that they would choose not to initiate a new PSEIS.

Regarding condition #2, the SIR provided a comprehensive review of the circumstances and information relevant to environmental concerns, and bearing on the management of the groundfish fisheries or their impacts. Expert reviewers (stock assessment scientists and other fishery science specialists) found that the new information reported in this SIR did not suggest that a new analysis would result in a significantly different conclusion for almost all resource components. Some exceptions included added uncertainty in assessing the condition of some fish stocks or previous conclusion with respect to whales. Nevertheless, the necessity to supplement the PSEIS needs to be based on the federal action (management of the groundfish fisheries) as a whole.

In its evaluation of the draft SIR, the Council concluded that the new circumstances and information were not sufficient to trigger supplementing the PSEIS. For those components where there may have been a new conclusion, the experts noted that the groundfish fisheries are not having a significant impact. In 2015, NOAA Fisheries in the AK Region determined, based on the analyses of the SIR that the “2004 PSEIS continues to provide NEPA compliance for the groundfish FMPs and a supplemental NEPA document is not necessary”

A-3. Council Actions Outside the Scope of the Groundfish FMPs but Affected by the PSEIS

The Management Objectives established within the Groundfish Management Policy were intended to support decision making under the BSAI and GOA Groundfish FMPs. However, the Policy’s explicitly ecosystem-based fishery management approach and the comprehensive nature of its objectives reflected an evolution in Council thinking about the scope of its responsibilities. This advance contributed to a number of forward-thinking actions outside of the Groundfish FMPs which are described below beginning with the most recent.

A.3.1 Council’s Ecosystem Approach (2014)

In February 2014, the Council adopted an Ecosystem Approach management policy that expressed the Council’s intent to continue moving towards EBFM:

Ecosystem Approach for the North Pacific Fishery Management Council

Value Statement

The Gulf of Alaska, Bering Sea, and Aleutian Islands are some of the most biologically productive and unique marine ecosystems in the world, supporting globally significant populations of marine mammals, seabirds, fish, and shellfish. This region produces over half the nation's seafood and supports robust fishing communities, recreational fisheries, and a subsistence way of life. The Arctic ecosystem is a dynamic environment that is experiencing an unprecedented rate of loss of sea ice and other effects of climate change, resulting in elevated levels of risk and uncertainty. The North Pacific Fishery Management Council has an important stewardship responsibility for these resources, their productivity, and their sustainability for future generations.

Vision Statement

The Council envisions sustainable fisheries that provide benefits for harvesters, processors, recreational and subsistence users, and fishing communities, which (1) are maintained by healthy, productive, biodiverse, resilient marine ecosystems that support a range of services; (2) support robust populations of marine species at all trophic levels, including marine mammals and seabirds; and (3) are managed using a precautionary, transparent, and inclusive process that allows for analyses of tradeoffs, accounts for changing conditions, and mitigates threats.

Implementation Strategy

The Council intends that fishery management explicitly take into account environmental variability and uncertainty, changes and trends in climate and oceanographic conditions, fluctuations in productivity for managed species and associated ecosystem components, such as habitats and non-managed species, and relationships between marine species. Implementation will be responsive to changes in the ecosystem and our understanding of those dynamics, incorporate the best available science (including local and traditional knowledge), and engage scientists, managers, and the public.

A.3.2 Bering Sea Fishery Ecosystem Plan (2018)

In December 2018, the Council adopted the Bering Sea Fishery Ecosystem Plan (BSFEP), thereby endorsing the Plan's interpretation of ecosystem-based fishery management (EBFM), its ecosystem goals and strategic objectives, and the practical application of the BSFEP framework. As a living document, the BSFEP can evolve to continually reflect progress on best practices for EBFM. In developing the BSFEP, the Council explicitly considered the relationship between the ecosystem approach envisioned for the FEP and existing Groundfish Management Policy, and found no inconsistency.

The BSFEP includes a Core strategic planning document that provides ecosystem goals and strategic objectives. The status of Bering Sea ecosystem components will be monitored through the annual Ecosystem Status Report for the Bering Sea that is provided during review and harvest specifications for groundfish stocks. As Council priorities are developed concerning EBFM in the Bering Sea, Action Modules will be initiated to analyze specific issues and connect them to management solutions.

A.3.3 Arctic FMP (2009)

In 2009, the Council approved, and NMFS implemented, a new FMP for Fish Resources of the Arctic Management Area (Arctic FMP). The Council's action recognized the different and changing ecological conditions of the Arctic, including warming trends in ocean temperatures, the loss of seasonal ice cover,

and the potential long term effects from these changes on the Arctic marine ecosystem. In recognition that the emergence of unregulated, or inadequately regulated, commercial fisheries could have adverse effects on the Arctic ecosystem and marine resources, and on the subsistence way of life for residents of Arctic communities, the FMP closed all waters of the U.S. Arctic EEZ to commercial harvest of finfish, mollusks, crustaceans, and all other forms of marine animal and plant life.

The Council's management policy for the U.S. Arctic EEZ is an ecosystem-based management policy that proactively applies judicious and responsible fisheries management practices, based on sound scientific research and analysis, to ensure the sustainability of fishery resources, to prevent unregulated or poorly regulated commercial fishing, and to protect associated ecosystems for the benefit of current users and future generations. The management policy recognizes the need to balance competing uses of marine resources and different social and economic goals for sustainable fishery management, including protection of the long-term health of the ecosystem and the optimization of yield from its fish resources. The policy recognizes the complex interactions among ecosystem components and seeks to protect important species utilized by other ecosystem component species, potential target species, other organisms such as marine mammals and birds, and local residents and communities.

A.3.4 Aleutian Islands Fishery Ecosystem Plan (2007)

The development of the AIFEP was a direct implementation of the Groundfish PSEIS management policy. The Council received the unique ecosystem characteristics and processes of the Aleutian Islands and discussed whether the Aleutian Islands should be managed under a separate groundfish FMP, but eventually opted the AIFEP, where the FEP could serve as a nexus to specifically focus on ecosystem issues in the AI in the context of EBFM.

The AIFEP was developed to achieve the following purposes:

- a) to integrate information from across the FMPs with regard to the Aleutian Islands, using existing analyses and reports such as the Groundfish PSEIS, the EFH EIS, and the Ecosystem Considerations chapter of the BSAI Groundfish SAFE.
- b) to identify a set of indicators for the Aleutian Islands to evaluate the status of the ecosystem over time
- c) to provide a focal point to develop and refine tools, such as ecosystem models to evaluate the indicators
- d) to identify sources of uncertainty and use them to determine research and data needs
- e) to assist the Council in setting management goals and objectives, and understanding the cumulative effects of management actions

The relationship between the FEP and other Council documents and projects was envisioned as a synergistic one. The purpose of the FEP, however, is to look holistically at the AI ecosystem, at the relationships between the different FMP fisheries, physical and biological characteristics of the ecosystem, human communities, and other socio-economic activities ongoing in the ecosystem area. The FEP has no legal standing and is purely a guidance document and resource for the Council.