Public Testimony Sign Up Sheet
Agenda Item D-3 Staff Tasking

	NAME (PLEASE PRINT)	AFFILIATION
1 ✓	Chris Merculief and/or Justin Massey	St. George Traditional Council
2 ✓	Dave Wood	Bering Sea Bottom Trawl Companies
3 ✓	Paul MacGregor	At-Sea Processors
4	Donna Parker	Arctic Storm
5 ✓	Glen Gillion	Aleut Enterprise Corp.
6 ✓	David Benton	MCA
7 ✓	Ben Enticknap	AMCC
8		
9		
10		
11		
12		
13		
14		
15		
16		
17		
18		/
19		
20		
21		
22		
23		
24		
25		

LEFT →

NOTE to persons providing oral or written testimony to the Council: Section 307(1)(I) of the Magnuson-Stevens Fishery Conservation and Management Act prohibits any person " to knowingly and willfully submit to a Council, the Secretary, or the Governor of a State false information (including, but not limited to, false information regarding the capacity and extent to which a United State fish processor, on an annual basis, will process a portion of the optimum yield of a fishery that will be harvested by fishing vessels of the United States) regarding any matter that the Council, Secretary, or Governor is considering in the course of carrying out this Act.

AGENDA D-3
APRIL 2005

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver
Executive Director

ESTIMATED TIME
4 HOURS

DATE: March 30, 2005

SUBJECT: Staff Tasking

ACTION REQUIRED

(a) Review tasking and committees and provide direction
(b) Groundfish Management Policy and Workplan

BACKGROUND

(a) Review tasking and committees and provide direction

The list of Council committees is attached as Item D-3(a)(1). The Ecosystem Committee met by teleconference last month to review a staff discussion paper on the role of regional fisheries management councils in implementing ecosystem approaches to management (EAM). The committee is scheduled to again meet this week to further discuss how the Council might address EAM for Alaska, as well as reviewing the Aleutian Islands special management discussion paper as a starting point for more formally implementing ecosystem approaches for fisheries (EAF) in the North Pacific. An agenda is attached as Item D-3(a)(2).

Item D-3(a)(3) is the three meeting outlook, and Item D-3(a)(4) and Item D-3(a)(5) are the summary of current projects, timelines, and tasking. The Council may wish to discuss tasking priorities to address previously tasked projects that have not yet been initiated (e.g., IFQ amendments, Bering Sea habitat conservation, GOA dark rockfish etc.), and potential additions discussed at this meeting, given resources necessary to complete existing priority projects.

Relative to the Bering Sea habitat conservation amendment, the motion passed in February was to "Initiate an expanded analysis for the Bering Sea, as well as an assessment of gear modification, that tiers off of this EFH EIS analysis to further explore possible mitigation measures in the Bering Sea. The analysis should include the existing alternative, an alternative to leave the rolling closure area open, and options to open the 'red hatched' closed area south of Nunivak Island and north of the Bogoslof area, with other alternatives to be developed." The Council may wish to discuss how to proceed with tasking of this project, again relative to existing priorities.

Relative to the halibut and sablefish IFQ program changes amendment, the Council initiated analysis of four proposals to amend the halibut and sablefish IFQ program: (1) allow non-IFQ species to be frozen onboard while directed fishing for halibut and sablefish; (2) allow category A quota shares to be fished at any time and in any sequence with category B, C, and D quota shares; (3) allow the use of pot longline gear in the Bering

Sea sablefish fishery during June; and (4) remove halibut and sablefish QS from initial recipients who have never fished any of those shares across all regulatory areas. In February, the Council made the following changes: (i) combined the first two issues into one action; (ii) added two discussion points for the analysis of sablefish pots (use of escape rings; and limiting soak time), and (iii) added an alternative to allow voluntary surrender of unused QS and an option to allow a lottery for awarding removed or surrendered QS to qualified crewmen. The Council has not yet prioritized this amendment relative to other tasking.

(b) Groundfish management policy and workplan

In adopting the revised management policy for the groundfish FMPs in April 2004, the Council committed to conduct an annual review of the forty-five objectives that are part of the management policy. Specifically, the FMP language reads:

> Adaptive management requires regular and periodic review. Objectives identified in the management policy statement (Section 2.2) will be reviewed annually by the Council. The Council will also review, modify, eliminate, or consider new issues, as appropriate, to best carry out the goals and objectives of the management policy.

The management approach statement and the 45 objectives are included in the FMP, and are attached as Item D-3(b)(1).

In June 2004, the Council developed a workplan to bring groundfish management in line with its revised management policy. This workplan is reviewed by the Council at each meeting as part of the staff tasking agenda item, and is posted on the Council's website. The workplan, updated to reflect the current status of each item, and its relationship to the management objectives, is attached as Item D-3(b)(2).

At this meeting, the Council is scheduled to review the policy objectives. Item D-3(b)(3) provides a summary of the objectives which may help the review.

Any additions, deletions, or modification to the objectives will require an FMP amendment. The type of NEPA document that would be required to support any change to the objectives will depend on the nature of the change; we would need to determine whether the suggested change has already been analyzed in the PSEIS, and if so, whether there were any significant environmental effects associated with the action.

The Council is also scheduled to redevelop the workplan, as necessary. Some of the items on the workplan have been achieved; the revised workplan might replace these items with other emerging priorities from the management policy.

NPFMC Committees and Workgroups

Revised April 1, 2005

AP Committee

Status: Idle Staff: Chris Oliver	Roy Hyder, Chair Dennis Austin [Vacant]

Council/Board of Fisheries Joint Protocol Committee

Updated: 7/28/03	Council	Board
	Dave Benson	Mel Morris
	Hazel Nelson	Art Nelson
Staff: Jane DiCosimo	Doug Hoedel	Ed Dersham

Council Executive Committee

Updated: 2/3/05	**Chair:** Stephanie Madsen Dennis Austin Jim Balsiger Doug Mecum
Staff: Chris Oliver	Roy Hyder

Crab Interim Action Committee

[Required under BSAI Crab FMP]

Dennis Austin, WDF
Jim Balsiger, NMFS
Doug Mecum, ADF&G

Ecosystem Committee

Updated: January 2005	**Chair:** Stephanie Madsen Jim Balsiger Doug DeMaster
Status: Active	John Iani Dave Fluharty Jim Ayers
Staff: Chris Oliver/David Witherell/Diana Evans	Dave Benton

Enforcement Committee

Updated: July 2003	**Chair:** Roy Hyder Earl Krygier, ADF&G James Cockrell, F&W Protection
Status: Active	Jeff Passer, NMFS-Enforcement Al McCabe, USCG Sue Salveson, NMFS-Mgmt.
Staff: Chris Oliver	Lisa Lindeman, NOAA - GC

NPFMC Committees and Workgroups

Revised April 1, 2005

Finance Committee

Updated: 2/3/05 Status: Meet as necessary Staff: Gail Bendixen/Chris Oliver	**Chair:** Stephanie Madsen Dennis Austin Jim Balsiger Doug Mecum Dave Hanson Roy Hyder Richard Marasco

Fur Seal Committee

Updated: 7/25/03 Status: Active Staff: Bill Wilson	**Chair:** David Benson Anthony Merculief Larry Cotter Paul MacGregor Aquilina Lestenkof Steve Minor

GOA Community Committee

Appointed: November 2004 Staff: Nicole Kimball	**Chair:** Hazel Nelson Patrick Norman Chuck Totemoff Julie Bonney Chuck McCallum Joe Sullivan Ernie Weiss Duncan Fields

Halibut Charter IFQ Implementation

Status: Pending SOC submittal

IFQ Implementation Committee

Status: Reconstituted as shown (July 2003). Staff: Jane DiCosimo	**Chair:** Jeff Stephan Bob Alverson Arne Fuglvog/Cora Crome Dennis Hicks Don Iverson Don Lane	Gerry Merrigan Kris Norosz Paul Peyton David Soma

NPFMC Committees and Workgroups

Revised April 1, 2005

IRIU Technical Committee

Appointed: 7/12/02	**Chair:** Dave Hanson	Teressa Kandianis
	Michelle Ridgway	Matt Doherty
Status: Pending reconstitution	Susan Robinson	Bill Orr
	John Henderschedt	Ed Richardson
Staff:	Donna Parker	Dave Wood
Jon McCracken	Eric Olson	
Marcus Hartley, Northern Econ.	Greg Baker	
Lauren Smoker, NOAA GC	Gerry Merrigan	

Magnuson-Stevens Act Reauthorization Committee

Status: Pending appointment of additional members.	**Chair:** Stephanie Madsen
	Dennis Austin
	Doug Mecum
	Roy Hyder
Staff: Chris Oliver	John Bundy

Non-Target Committee

Updated: 8/6/04	**Chair:** Dave Benson
Appointed: 7/26/03	Jule Bonney
	Karl Haflinger
	Whit Sheard
	Michelle Ridgway
	Eric Olson
	Lori Swanson
Staff: Jane DiCosimo,	Dave Wood
Sarah Gaichas, NMFS	Janet Smoker
	Paul Spencer

Observer Advisory Committee

Updated: February 2004	**Chair:** Joe Kyle	Tracey Mayhew
	LeeAnne Beres	Trevor McCabe
Status: Active	Julie Bonney	Bob Mikol
	Pete Risse	Kathy Robinson
	Kim Dietrich	Susan Robinson
	[Alt: Gillian Stoker]	Arni Thomson
Staff: Chris Oliver/	John Gauvin	Jerry Bongen
Nicole Kimball	Rocky Caldero	Brent Paine

NPFMC Committees and Workgroups

Revised April 1, 2005

Pacific Northwest Crab Industry Advisory Committee

Updated: 6/2/04 Staff: Diana Stram	**Chair:** Steve Minor Keith Colburn Lance Farr Phil Hanson Kevin Kaldestad Garry Loncon Gary Painter	Rob Rogers Clyde Sterling Gary Stewart Tom Suryan Vic Sheibert Arni Thomson, Secretary [non -voting]

Steller Sea Lion Mitigation Committee

Appointed: 2/10/01 Updated: Jan 2004 Pending membership adjustment [formerly SSL RPA Committee; renamed at Feb 02 meeting) Staff: Bill Wilson	**Chair:** Larry Cotter David Benson Jerry Bongen Julie Bonney Shane Capron Tony DeGange Doug DeMaster Steve Drage John Gauvin Sue Hills	John Iani Terry Leitzell Denby Lloyd Chuck McCallum Matt Moir Bob Small Beth Stewart Farron Wallace John Winther

U.S.-Russia International Committee

Status: Pending reconstitution. Staff: Chris Oliver	**Chair:** Stephanie Madsen Dennis Austin John Bundy Earl Krygier CDR. Mike Cerne

VMS Committee

Appointed: 06/02 Status: Idle, pending direction Staff: Jane DiCosimo	**Chair:** Earl Krygier Al Burch Guy Holt	Bob Mikol Ed Page CDR Mike Cerne Lori Swanson

Ecosystem Committee DRAFT Agenda

April 4, 2005 1-5 pm
Aspen Room, Hilton Hotel, Anchorage, AK

1. **Update on national conference**
   - summary table on 'Developing an ecosystem approach to fisheries' detailing the findings of the main conference panel and the ecosystem advisory panel, and the comments of the SSC
   - poster from the national conference describing NOAA's ecosystem goal team

2. **Update on Council-NMFS working group to develop ecosystem national guidelines**

3. **Brief update on current North Pacific ecosystem efforts**
   - summary of Alaska region ecosystem research funding requests
   - summary of the North Pacific Climate Regime and Ecosystem Productivity group
   - summary of the SSC's February multispecies and ecosystem modeling workshop

4. **Review of staff discussion paper on the Council's role in developing an ecosystem approach to management in Alaska**
   - discussion paper emailed to committee on 3/31/05

5. **Review of discussion paper considering area-specific management in the Aleutian Islands**
   - discussion paper, dated 11-18-04, emailed to committee on 3/18/05
   - additional discussion points emailed to committee on 3/31/05
   - summary of the draft conclusions from the Fisheries Oceanography volume on the Aleutian Islands, scheduled to be published this summer

DRAFT NPFMC THREE-MEETING OUTLOOK - updated 3/30/05

April 4, 2005 Anchorage, Alaska	June 1, 2005 Girdwood, Alaska	October 3, 2005 Anchorage, Alaska
BOF Action on State pollock fishery: ***Action as necessary***	CDQ Management of Reserves: ***Initial Review (T)***	CDQ Management of Reserves: ***Final Action (T)***
Bairdi Crab Amendment: ***Finalize Alternatives***	Bairdi Crab Amendment: ***Initial Review (T)***	Bairdi Crab Amendment: ***Final Action (T)***
CDQ Allocations: ***Review and action as necessary***		Crab Overfishing: ***Initial Review (T)***
GOA Rockfish Demonstration: ***Initial Review***	GOA Rockfish Demonstration: ***Final Action (T)***	
GOA Rationalization: ***Action as necessary***	GOA Rationalization: ***Action as necessary***	GOA Rationalization: ***Action as necessary***
PSEIS priorities: ***Review objectives and redevelop workplan***	Halibut Charter IFQ Cost Recovery: ***Review Discussion Paper (T)*** Halibut Charter IFQ: ***Review Proposed Rule (T)***	IFQ Omnibus 5 Amendments: ***Initial Review (T)***
Scallop SAFE: ***Review and Approve***	Joint Protocol Committee - State pollock fishery: ***Discuss***	Joint Protocol Comm. - State pollock fishery: ***Discuss***
Scallop FMP Update: ***Final Action***	MMPA List of Fisheries EA: ***Action as Necessary (T)***	
	Flatfish IRIU Trailing Am80: ***Initial Review (T)***	Flatfish IRIU Trailing Am80: ***Final Action (T)***
	Observer Program: ***Initial Review***	Observer Program: ***Final Action***
Non-Target Species: ***Review Committee Report***		Rockfish Management: ***Review Discussion Paper***
EFP for Salmon Byactch: ***Review and action as necessary***	AI Special Management Area: ***Determine next steps***	Groundfish specs for 2006/07: ***Review proposed specs***
EFP for IWG longline: ***Review and action as necessary***	Ecosystem Chapter: ***Review***	
GOA Other Species Calculation: ***Initial Review***	GOA Other Species Calculation: ***Final Action (T)***	
BSAI P.cod sector allocations: ***Action as Necessary***	BSAI P.cod sector allocations: ***Action as Necessary (T)***	BSAI P.cod sector allocations: ***Initial Review (T)***
BSAI salmon bycatch: ***Finalize Alternatives***	BSAI salmon bycatch: ***Initial Review (T)***	BSAI salmon bycatch: ***Final Action (T)***

TAC - Total Allowable Catch
BSAI - Bering Sea and Aleutian Islands
IFQ - Individual Fishing Quota
AFA - American Fisheries Act
HAPC - Habitat Areas of Particular Concern
LLP - License Limitation Program
PSC - Prohibited Species Catch

MSA - Magnuson Stevens Act
GOA - Gulf of Alaska
SSL - Steller Sea Lion
BOF - Board of Fisheries
EFP - Exempted Fishing Permit
CDQ - Community Development Quota
IRIU - Improved Retention/Improved Utilization

SAFE - Stock assessment and fishery evaluation
VMS - Vessel Monitoring System
CV - Catcher Vessel CP- Catcher Processor
SSC - Scientific & Statistical Committee
FMP - Fishery Management Plan
DPSEIS - Draft Programmatic Groundfish SEIS
(T) Tentatively scheduled

ITEM D-3(a)(3)
APRIL 2005

Council Project Summa. Updated March 30, 2005

Mandated Actions	Projected Weeks	Council/ NMFS %	Comments
EFH EIS	0	20/80	Being prepared for Sec. review (NMFS)
HAPC Designation	1	50/50	Being prepared for Secretarial review (NMFS)
Crab FMP EIS	0	50/50	Final rule out.
Aleutian Islands Pollock Allocation	0	50/50	Being prepared for Secretarial review (Bill/NMFS)
GOA Rockfish Demonstration Program	10	80/20	Initial Review in April (Mark/Jim)

Council Priorities

GOA Rationalization	?	90/10	Committee Report in April (Jane,Mark,Nicole, Elaine, contractors, NMFS)
IR/IU flatfish adjustments (Am 79)	0	80/20	Amendment 79 being prepared for Secretarial review
IR/IU flatfish trailing amendments (Am 80)	10	80/20	Initial Review in June (Jon /contract help)
Halibut Charter IFQ	1	90/10	Being prepared for Secretarial Review (Jane/NMFS)
Non-target (other rockfish, other flatfish, other species) developmen	?	80/20	Committee report in April. (Jane/NMFS).
Rockfish management discussion paper	3	80/20	Review in Oct 2005. (Jane/NMFS)
Observer Program (fee and deployment mechanism)	10	80/20	Initial review in June (Nicole/Chris)
BSAI Pacific cod Allocations	?	90/10	Finalize alternatives in April (Nicole/ contract help?)

Other Projects Previously Tasked

BSAI Salmon Bycatch	?	?	Initial Review in June (Diana S./NMFS)
GOA other species calculation		20/80	Initial Review in April (Diana S./NMFS)
GOA Dark Rockfish	?	?	Initial Review in February 2006? (Diana S./NMFS)
Bering Sea *C. bairdi* split	3	90/10	Initial Review in June (Mark/Jon)
IFQ Regulatory Changes (medical, hired skipper, check-in, blocks, QS categories, 4C&4D)	0	90/10	Being prepared for Secretarial Review (NMFS/Jane/Diana E.)
SR/RE retention	4	80/20	Not started. (Jane/NMFS)
Repeal of VIP	2	0/100	Delayed (NMFS)
GOA Salmon and Crab Bycatch Controls	12	80/20	Review areas and trigger levels in June (Diana S./Cathy/ADF&G)
Opilio VIP	2	50/50	Not started -Pending action on existing VIP
Catch/bycatch disclosure (vessel level)	2	70/30	Discussion paper - Postponed

ITEM D-3(a)(4)
APRIL 2005

Other Projects Previously Tasked (Continued)

Paper on fee/loan program for IFQ Charter (NMFS?)	1	10/90	Awaiting Secretarial Approval (NMFS)
Groundfish overfishing definitions	?	10/90	FR notice on NS 1 forthcoming
SSL Trailing Amendment (GOA changes)	0	30/70	Secretarial Review (Bill)
Subsistence halibut amendment	0	90/10	Being prepared for NMFS Review (Jane/NMFS)
AFA s/b caps to quotas and trawl LLP recency	10	80/20	Pending further Council direction
Charter IFQ Community Set-Aside analysis	6	90/10	Awaiting Secretarial Approval (Nicole)
Industry proposal for pollock bycatch	?	90/10	Pending proposal and Council Direction
Scallop FMP update	1	80/20	Final Review in April (Diana S)
Crab Overfishing definition revision	?	10/90	Initial review in October 05 (NMFS/ADF&G/Diana S)
CDQ eligible communities	?	20/80	Pending due to possible Legislation (Nicole)
CDQ Amendment 71 (a) Investment in non-fisheries projects	0	20/80	Being prepared for Secretarial Review (Nicole)
CDQ Amendment 71 (b) Oversight and Allocation	8	50/50	Initial Review in 2005 (NMFS/Nicole)
CDQ quota transfers and alternative plans	0	10/90	Awaiting approval by SOC; comments closed 12/27/04 (NMFS/Nicole)
CDQ: Management of CDQ Reserves	1	10/90	Initial Review in June (NMFS/Nicole)
Bering Sea habitat conservation	4	50/50	Motion passed in February (NMFS/Cathy)
Aleutian Islands Special Management Area	10	90/10	Discussion paper in June (Diana E.)

Project timeline and major tasking for council staff. Updated 3/30/05

Analytical Staff	April	May	June	July	August	September	October
David Witherell, Deputy Director							
Administrative							
EFH and MPAs							
National Meeting Coordination				proceedings printed			
Ecosystem-based Approach	EBM Workshop						
Mark Fina, Sr. Economist							
GOA Rationalization	discuss		discuss				
GOA Rockfish Project (Lead)	Initial Review		Final Action	forward analysis to NMFS			
Jon McCracken, Economist							
Am. 80 IRIU			Initial Review				Final Action
C. bairdi split	discuss		Initial Review				Final Action
Misc. economic assistance							
Jim Richardson, Economist							
GOA Rockfish Project (assist)							
Misc. econ. assistance							
Elaine Dinneford, Fishery Analyst							
Misc Data Support			retirement?				
AKFIN Liaison							
Jane DiCosimo, Sr. Plan Coord		RSP training				AFS mtg 9/11-15	
GOA Rationalization NEPA Lead							
IFQ Issues							
Rockfish Management							
Other species/non-target			Cmtee. Mtg.		Cmtee. Mtg.	Plan Team 9/20-22	
Diana Stram, Plan Coordinator	AL 4/26-5/6					AFS mtg 9/11-15	
GOA Salmon/Crab Bycatch (Lead)							
BSAI Salmon bycatch (Lead)			Initial Review (T)				Final Action (T)
GOA Other spp.	Initial Review		Final Action	forward analysis to NMFS			
Crab Overfishing		5/16-19 pl team					Initial Review (T)
GOA dark rockfish						Plan Team 9/20-22	
Bill Wilson, Protect Species		2 wk AL mid mo.	AFS meeting Coordination			AFS mtg 9/11-15	
Protected species issues	Am. 82 assistance						
Research Summaries							
Diana Evans, NEPA Specialist							
AI Special Management			Review Disc paper				
Am 80 impact analysis			Initial Review				
NEPA assistance	PSEIS report						
Cathy Coon, Fishery Analyst	EFH Coord mtg.						
HAPC EA							
GOA Salmon/Crab Bycatch (assist)							
BSAI Salmon bycatch (assist)			Initial Review (T)				Final Action (T)
Nicole Kimball, Fishery Analyst							
GOA Community Provisions	Comm. Conf. 4/21-23						
CDQ Projects							
Observer Program Analysis		OAC meeting	Initial Review			OAC meeting	Final Action
Community Issues							
BSAI P.cod Allocation							

ITEM D-3(a)(5)
APRIL 2005

Excerpt from Chapter 2 of the BSAI [GOA] Groundfish FMPs

2.2 Management Approach for the BSAI [GOA] Groundfish Fisheries

The Council's policy is to apply 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. The productivity of the North Pacific ecosystem is acknowledged to be among the highest in the world. For the past 25 years, the Council 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. Recognizing that potential changes in productivity may be caused by fluctuations in natural oceanographic conditions, fisheries, and other, non-fishing activities, the Council 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 Magnuson-Stevens Act and in conformance with the National Standards, the Endangered Species Act (ESA), 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 Council intends to consider and adopt, as appropriate, measures that accelerate the Council's precautionary, adaptive management approach through community-based 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 for the well-being of 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 use and improve upon the Council's existing open and transparent process of public involvement in decision-making.

2.2.1 Management Objectives

Adaptive management requires regular and periodic review. Objectives identified in this policy statement will be reviewed annually by the Council. The Council 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 Council and NMFS will use the Alaska Groundfish Fisheries Programmatic Supplemental Environmental Impact Statement (PSEIS) (NMFS 2004) as a planning document. To help focus consideration of potential management measures, the Council and NMFS 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 the 2 million mt optimum yield cap for the BSAI groundfish fisheries. [Continue to use the existing optimum yield cap for the 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 F_{40} 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 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 acceptable biological catch levels 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, vessel bycatch allowances, 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 total allowable catch and geographical gear restrictions.
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 non-commercial species.

20. Control the bycatch of prohibited species through prohibited species catch 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 U.S. Fish and Wildlife Service (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 of extinction or adverse modification to critical habitat for 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 NMFS 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 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.
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 the license limitation program, modified as necessary, and further decrease excess fishing capacity and overcapitalization by eliminating latent licences 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. Develop funding mechanisms that achieve equitable costs to the industry for implementation of the North Pacific Groundfish Observer Program.
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 technology.
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 North Pacific Research Board 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 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.

General Priority (in no particular order of importance)	Specific priority actions	Related to management objective:	Status (updated 2-15-05)	2005				2006				
				Apr	Jun	Oct	Dec	Feb	Apr	Jun	Oct	Dec
Protection of Habitat	a. complete EFH action as scheduled	27	**Amendment approved by Council**									
	b. recommend to NOAA Fisheries increased mapping of benthic environment	29										
	c. develop and adopt definitions of MPAs, marine reserves, etc.	30	discussion paper presented in Feb 05									
	d. review all existing closures to see if these areas qualify for MPAs under established criteria	30	discussion paper presented in Feb 05									
	e. evaluate effectiveness of existing closures	26	discussion paper presented in Feb 05									
Bycatch Reduction	a. complete rationalization of GOA fisheries	17 (32)	analysis ongoing									
	b. complete rationalization of BSAI non-pollock fisheries	17 (32)	partially addressed through IRIU Amd 80 (initial review Jun 05); also Pacific cod sector allocations (discussion paper Apr 05)									
	c. explore incentive-based bycatch reduction programs	15	partially addressed through GOA rationalization; BSAI salmon bycatch initial review in Jun 05									
	d. explore mortality rate-based approach to setting PSC limits	20										
	e. consider new management strategies to reduce incidental rockfish bycatch and discards	17	discussion paper in Jun 05									
Protection of Steller Sea Lions	a. continue to participate in development of mitigation measures to protect SSL including development of an EIS and participation in the ESA jeopardy consultation process	23										
	b. recommend to NOAA Fisheries and participate in reconsideration of SSL critical habitat	23	on hold pending completion of recovery plan									
Prevent Overfishing	a. continue to participate in the development of "lumping and splitting" criteria	5	'other species' category breakouts initiated; other actions on hold pending National Standard 1 guideline revisions									
	b. consider new harvest strategies for rockfish	4	discussion paper in Jun 05									
	c. set TAC at or < ABC	1	**Amendment approved by Council**									
Ecosystem Management	a. revisit calculation of OY caps	11, 4	research paper presented to SSC in Feb 05									
	b. recommend to NOAA Fisheries and participate in the development and implementation of ecosystem indicators as part of stock assessment process	10	development ongoing; ecosystem SAFE chapter to be presented each June; NPRB considering funding a workshop to address									
Improve Data Quality and Management	a. expand or modify observer coverage and sampling methods based on scientific data and compliance needs	38, 39	initial review scheduled for Jun 05									
	b. develop programs for economic data collection that aggregate data	40	partially addressed through GOA rationalization									
	c. modify VMS to incorporate new technology and system providers	41										

Management Objectives from the Groundfish FMPs

* indicates that objective is reflected on Council's workplan

Goal	**Objectives relating to actions already established as part of groundfish management program** (does not preclude further actions under these objectives)	**Objectives relating to actions currently under Council consideration**	**Objectives relating to actions that are on hold from Council consideration, or have not yet been initiated**	**Objectives relating to considerations that are applied to all management actions**
Prevent Overfishing	2. Use existing OY caps. 3. Specify OY as a range.	*4. Periodic reviews of F_{40} and adopt improvements *5. Improve management through species categories		1. Adopt conservative harvest levels
Promote Sustainable Fisheries and Communities				6. Promote conservation while providing for OY 7. Promote management measures that avoid social and economic disruption 8. Promote fair and equitable allocation 9. Promote safety
Preserve Food Web	12. Limit harvest on forage species.	*10. Develop indices of ecosystem health *11. Improve ABC calculations to account for uncertainty and ecosystem		13. Incorporate ecosystem considerations in fishery management
Manage Incidental Catch and Reduce Bycatch and Waste	14. Continue and improve current incidental catch and bycatch program 18. Continue to manage incidental catch and bycatch through seasons and areas 19. Account for bycatch mortality in TAC accounting *20. Control prohibited species bycatch through PSC limits	*15. Develop incentive programs for bycatch reduction *17. Develop management measures that encourage techniques to reduce bycatch	16. Encourage research for non-target species population estimates	21. Reduce waste to biologically and socially acceptable levels

Goal	**Objectives relating to actions already established as part of groundfish management program** (does not preclude further actions under these objectives)	**Objectives relating to actions currently under Council consideration**	**Objectives relating to actions that are on hold from Council consideration, or have not yet been initiated**	**Objectives relating to considerations that are applied to all management actions**
Avoid Impacts to Seabirds and Marine Mammals	22. Continue to protect ESA-listed and other seabirds *23. Maintain or adjust SSL protection measures 25. Continue to protect ESA-listed and other marine mammals		24. Encourage review of marine mammal and fishery interactions	
Reduce and Avoid Impacts to Habitat	*27. Identify EFH and HAPC, and mitigate fishery impacts as necessary		*26. Review and evaluate efficacy of habitat protection measures for managed species 28. Develop MPA policy *29. Encourage research on baseline habitat mapping *30. Develop goals and criteria for MPAs; implement as appropriate	
Promote Equitable and Efficient Use of Fishery Resources		*32. Maintain LLP and initiate rights-based management programs	33. Periodically evaluate effectiveness of rights-based management programs	31. Provide economic and community stability through fair allocation 34. Consider efficiency when adopting management measures
Increase Alaska Native Consultation			36. Consider ways to enhance local and traditional knowledge collection 37. Increase Alaska Native participation in fishery management	35. Incorporate local and traditional knowledge into fishery management
Improve Data Quality, Monitoring, and Enforcement		*38. Increase utility of observer data *39. Develop equitable funding mechanisms for the NPGOP	*40. Increase economic data reporting requirements *41. Improve technology for monitoring and enforcement 42. Encourage development of an ecosystem monitoring program	43. Cooperate with NPRB to identify needed research 44. Promote enforceability 45. Coordinate management and enforcement programs with Federal, State, international, and local partners

DRAFT

Role of the North Pacific Fishery Management Council in the development of an Ecosystem Approach to Management for the Alaska large marine ecosystems

Prepared by Diana Evans and Bill Wilson

In February 2005, the North Pacific Fishery Management Council's Ecosystem Committee requested staff prepare a discussion paper suggesting ways for the North Pacific Fishery Management Council (NPFMC) to be involved in the development of an ecosystem approach to management (often termed EAM) for the Alaska large marine ecosystems. This paper describes the concept of an ecosystem approach to management, and the Council's current practices in ecosystem-based management in the North Pacific. The paper also presents three options for how the Council may become involved in a regional ecosystem governance structure, the benefits and disadvantages of such a role, considerations for funding, and a discussion of the process for implementing such a structure.

What is an Ecosystem Approach to Management?

The recent ocean commission reports both contain recommendations for ecosystem management. The PEW Oceans Commission report specifically suggests the Nation adopt institutional arrangements for managing marine resources on an ecosystem basis. The U.S. Commission on Ocean Policy gives a more detailed recommendation for an ocean policy that avoids "...the common practice of managing one activity or one part of an ecosystem without considering the impacts on and influence of other parts..." The report states that the Nation's ocean policy should be one that promotes ecosystem-based management of marine resources.

Implementation of ecosystem-based approaches to management may include a wide variety of considerations for governance. Of particular interest to NOAA Fisheries and the North Pacific Council is the context within which Alaskan EEZ groundfish and shellfish fisheries are managed for optimum yield. NOAA Fisheries has embarked on an approach to ecosystem-based management that promotes the sustainability of the Nation's living marine resources "... to determine the science, management and institutional requirements needed to secure the tremendous potential value from these resources..." From this initiative, NOAA Fisheries is developing guidelines for consideration by the Councils for "...rebuilding and sustaining fishery and protected species stocks to their long-term potential to help restore and sustain the long-term performance, productivity and biological diversity of marine ecosystems..."[1]

NOAA proposes an Ecosystem Approach to Management, or EAM, that is broadly-conceived and includes multiple ecosystem values, resources, and stakeholders. An EAM is management that is:

- adaptive,
- geographically specified,
- takes account of ecosystem knowledge and uncertainties,

[1] Quotes from "NOAA Fisheries' Requirements for an Ecosystem Approach to Management of Living Marine Resources. U.S. Dept of Commerce. National Marine Fisheries Service. August 2004."

- considers multiple external influences, and
- strives to balance diverse social objectives.[2]

The EAM approach could include management of large geographic marine areas by regional ecosystem councils, but the governance structure has yet to be determined. Such councils would include all the stakeholders with interest in that region, including the fishery management councils. In Alaska, three geographic areas, or Large Marine Ecosystems (LMEs), have been proposed: the Arctic (Beaufort/Chukchi Seas), the eastern Bering Sea, and the Gulf of Alaska. The management of fishery resources in these areas would be just one of several components considered by the EAM governance body.

Ocean or Ecosystem Councils

Both the PEW Oceans Commission and the U.S. Commission on Ocean Policy have recommended the creation of regional ocean or ecosystem councils. The primary function of a regional ecosystem council appears to be the development of a regional ecosystem assessment, on which are based goals and objectives devised to protect, restore, and maintain, as necessary, the health of the marine ecosystem. NOAA has affirmed the use of regional ecosystem councils in its strategic plan for FY2005-FY2010 as a means to collaborate and coordinate with partners to achieve regional ecosystem objectives.

NOAA Fisheries has drafted a strategy that would establish ten regional marine ecosystem councils, with regions based on Large Marine Ecosystem delineations.[3] The regional marine ecosystem councils would comprise federal, state, local, and tribal decisionmakers, regional fishery management councils, industry and resource users, community and non-governmental organization interest groups, academia, and the public. The ecosystem councils would be responsible for developing a regional marine ecosystem strategy that provides operational goals and objectives for the ecosystem, information on the ecosystem region, and performance metrics for assessing progress. Fishery management councils would modify their FMPs as necessary, to accord with the overarching guidance of the appropriate regional marine ecosystem strategy.

The NOAA Fisheries strategy does not necessarily comport with the U.S. Commission on Ocean Policy report, which did not promote a 'one size fits all' approach to regional ecosystem councils. Rather, the report recommends voluntary regional councils that build on existing partnerships and regional cooperative agreements. The regional fishery management councils have argued that the existing fishery management council process could effectively be used as a basis for establishing further collaboration with other agencies.[4] As highlighted by the U.S. Commission on Ocean Policy, many of the key elements of a regional process are already embodied in the fishery management councils: regional councils based loosely on ecosystem boundaries, incorporation of science in management plans, and an emphasis on local public participation.[5] Also, the Councils already include federal and state representatives from many agencies.

---

[2] NOAA. 2004. New Priorities for the 21st Century – NOAA's Strategic Plan Updated for FY 2005-FY 2010. September 2004. http://www.spo.noaa.gov/pdfs/NOAA%20Strategic%20Plan.pdf

[3] Holliday, M. 2004. Presentation on Guidelines for Regional Marine Ecosystem Approaches to Management. Oct 2004. http://www.nmfs.noaa.gov/sfa/reg_svcs/Council%20stuff/agendapresentations/GuidelinesforEAM.pdf
Lent, R. 2004b. Presentation on the Evolution toward an Ecosystem Approach to U.S. Fishery Management. Nov 9, 2004. www.oceansatlas.org/cds_upload/1100636687610_Lent.Ecosystem_Approach.ppt

[4] Letter to Admiral Conrad Lautenbacher, NOAA Administrator, from the eight regional fishery management council Executive Directors, dated November 18, 2004.

[5] US Commission on Ocean Policy. 2004. An Ocean Blueprint for the 21st Century Final Report of the U.S. Commission on Ocean Policy—Pre-Publication Copy. Washington, D.C., 2004. p. 242.

As recommended by commissions or by NOAA, the regional ecosystem councils are not intended to displace existing authorities. Instead, they would optimally provide an opportunity for managers to coordinate regional information and consider the cumulative impacts of all ongoing activities on ecosystem components. However, the development of an ecosystem policy (consisting of goals and objectives for maintaining ecosystem health) inevitably involves reconciling competing objectives. Vesting such authority in a regional ecosystem council would tend to constrain the regional fishery management councils' and NOAA Fisheries' management.

Many of the detailed questions regarding the implementation of ecosystem councils (or ocean councils; terms used interchangeably in this paper) remain to be answered. Would an ecosystem council figure in a national reporting hierarchy, and if so, how? What exactly would the ecosystem council do? And how would it accomplish its scope of work? Which stakeholders would be represented on the ecosystem council? How would funds be transferred and managed? Would the council's recommendations be binding, and if not, how would they be implemented? A brief discussion of these considerations follows.

U.S. Ocean Action Plan - Cabinet-level Structure and Administration

A consideration for an independent ecosystem council is the national hierarchy to which it would be subject (see illustration in Figure 1). President Bush has established by Executive Order a cabinet-level *Committee on Ocean Policy* "...to coordinate the activities of executive branch departments and agencies regarding ocean-related matters in an integrated and effective manner to advance the environmental and economic interests of present and future generations of Americans."[6] The Committee, chaired by the Chairman of the Council on Environmental Quality, is charged with developing policy and working toward an ecosystem-based approach in making decisions related to land, water, and resource management. Interestingly, this Committee is to consider actions on oceans issues that address governance principles and streamline unnecessary overlapping authorities.

A subsidiary body to the Committee is an *Interagency Committee on Ocean Science and Resource Management*. Among its many responsibilities for coordination of existing coastal and ocean science and technology programs, the Interagency Committee will identify opportunities for improvements in the application of science for ecosystem-based management of ocean resources. The Interagency Committee will be advised by an Ocean Research Advisory Panel and a National Security Council Policy Coordinating Committee. Reporting to the Interagency Committee will be the *National Science and Technology Council Joint Subcommittee on Ocean Science and Policy*. This NSTC Joint Subcommittee will facilitate coordination of ocean science and technology programs, and will provide advice on science and technology for ecosystem-based management and stewardship of resources. The Interagency Committee also will be advised by an *Interagency Working Group on Ocean Resource Management*. Among its responsibilities for facilitating and coordinating the work of existing ocean and coastal interagency groups, the Interagency Working Group will identify opportunities for improvements in the application of science for ecosystem-based management of ocean resources.

As evidenced in the structure above, ecosystem-based management policies and procedures will likely be developed in several high-level committees. How these policies might trickle down from the Cabinet level to a specific EAM in the Alaskan EEZ is unclear. Ecosystem-based management principles are part of the charge of several committees based on the specific mandated focus of each. While there is a common theme of applying science and technology to ecosystem management, the process for how the Alaskan ecosystem-based resource management process connects with the Presidential-level Committee on Ocean Policy is yet to be determined.

---

[6] From "U.S. Ocean Action Plan. The Bush Administration's Response to the U.S. Commission on Ocean Policy. December 2004.

Scope of work of an ocean or ecosystem council

This sectionbriefly touches on several elements of the scope of work for an ecosystem council. It seems logical that one of the first activities of an ecosystem council would be the development of a plan or plans for how it will function and accomplish its goals. Accompanying that planning process would be the need for an administrative structure to facilitate the planning and plan implementation process. And the ecosystem council will require a set of protocols for how it does its work.

Ecosystem Plans

It seems logical that any new body must first define its goals and objectives, and put into place a means for accomplishing those goals. This process would necessarily include a way of monitoring progress toward meeting the goals, and a mechanism for adjusting the work or changing course if progress is not satisfactory. The plan would likely include a component of agency collaboration through regular ecosystem council meetings.

The ecosystem council would initially enter a phase of preparing ecosystem plans, perhaps one plan per LME. Guidelines for development of such plans are not in place; the ecosystem council could conduct a process for developing guidelines or rely on NOAA for suggestions. Or the planning process could mirror some other past exercises similar in nature, such as the Chesapeake Bay Fishery Ecosystem Plan. This planning process would involve collecting data, seeking public comment, collaborating with cooperating agencies, and developing a process for writing and eventually implementing the plan. The ecosystem council also would have to develop a structure and process for monitoring the plan as it is carried out, and evaluating how each plan objective is being met. Measurement tools for such evaluation would be required, and a process for periodic changes to the plan would have to be developed.

Ecosystem Council Administration

An administrative structure would be required for conducting the business of the ecosystem council. This would include identifying an appropriate funding level, putting into place a fiscal management process, identifying a needed staffing complement, establishing a personnel management structure, and securing an appropriate physical plant. There could be at least two options for staffing an ecosystem council: one option would be to have minimal staff and use collaborating agency staffs, either IPA'd or otherwise assigned to the ecosystem council, or by relying on the NPFMC's staff; or a second option might be to hire all staff directly and have them work exclusively for the ecosystem council. In the latter instance, co-locating one or more ecosystem councils for the North Pacific with the NPFMC currently would not be an option unless the latter Council moved its offices. Advantages to either option are obvious – cost versus staff availability. Were the ecosystem council and the NPFMC co-located, perhaps some staff synergy could occur to the advantage of both organizations, regardless of how staff sharing protocols are established, as physical proximity fosters collaboration.

Working Protocols

The ecosystem council would likely develop some kind of cycle for conducting its business, perhaps along the lines of the fishery management councils. This would likely evolve as the organization "finds its feet" and settles into a routine. There could be annual cycles for such activities as holding meetings, collecting data, ocean indicator monitoring, and program funding.

Of particular importance, the ecosystem council would likely need some kind of process for obtaining information and for acquiring feedback on how its programs are working. This may involve developing

its own data collection and management system, if funding permits, or the ecosystem council could piggyback on other agencies' data management structure through contractual arrangements. Regardless of the process for handling data, it will be very important to the success of an ecosystem council to have in place a reliable system for collecting, evaluating, and archiving data on the LMEs under its purview. Such data might include:

- data that measure ecosystem performance,
- data collected to evaluate ecosystem council objectives, and
- new scientific data on a wide variety of ocean components (physical, biological).

One question that might be entertained in this area is the relationship between the ecosystem council(s) and the North Pacific Research Board. The Board's goals are to seek knowledge of the marine ecosystems of the North Pacific, a charge not unlike what an ecosystem council may seek to accomplish. It might be appropriate to consider a dialogue on merging the activities of the ecosystem council(s) and the NPRB at some time in the future, or at a minimum maintaining a close partnership between the entities. Similar dialogues might be entertained with the Exxon Valdez Trustee Council or with a large number of State and Federal agencies and entities that have trust responsibilities to conduct research or related interests and research efforts in the marine environment of the North Pacific. The objective of such dialogues would be to avoid duplication of effort, to identify areas for collaboration and data sharing (and perhaps staff sharing), to pool financial resources, and to coordinate implementation of policies.

Membership of an ocean or ecosystem council

An equally important consideration in determining the scope of an ecosystem council is to consider its membership. All proposals for ocean or ecosystem councils to date have promoted the importance of regional flexibility. Recognizing that representation must vary by ecosystem, the slate of participants can be drawn from the following scales: international, Federal, State, and local stakeholders.

The question of whom to include on an ecosystem council is complex. Both the council's scope of work and the use to be made of its deliberations factor in to the decision. For example, if the findings of the council commit member agencies to any action, the distinction between voting and non-voting members, and the weighting of votes to represent affected interests, becomes critical. On the other hand, if the council's findings are not binding, the council members should be in such a position as to effect change in their representative agencies, so that the output of the ecosystem council is not a mere exercise.

Other considerations include whether to limit the ecosystem council only to government representatives, or whether to broaden it to include private interests. The Ocean Action Plan developed by the Bush Administration has set up a national hierarchy of ocean committees that represent the various government departments, which are advised by a private interest committee; should such a format be applied to an ecosystem council? Additionally, even if the slate of participants is limited to government representatives, does this apply only to Federal and State government departments, or are international or local representatives also invited. The GOA LME, for example, includes waters off the coast of Canada, so an international component would seem appropriate.

The role of science is also an influence on the choice of membership. The scope of work for the ecosystem council includes both policy and scientific elements. On the one hand, the council may be charged with developing an ecosystem plan for the region that balances competing uses. At the same time, the ecosystem council may be used as a forum for collaboration and scientific exchange about ecosystem function. One way to address both uses would be to follow the example of the fishery management council process, and create a scientific committee for the ecosystem council. In Alaska,

however, this function may already be satisfied by annual forums of organizations such as the North Pacific Research Board.

Separate ecosystem councils in Alaska?

Another basic issue is whether separate ecosystem councils would be created for each ecosystem area in the North Pacific, or if a single ecosystem council entity would be responsible for ecosystem management in all areas. If the decision is to create a separate ecosystem council for each LME, the complexity obviously would increase.

From the NPFMC perspective, it seems logical to consider three ecosystem areas for ecosystem council management: the eastern Bering Sea, the Aleutian Islands, and the GOA. This follows the NPFMC's regional FMP management approach. This does not necessarily accord with the LME approach, which identifies three LMEs in Alaska, and does not consider the Aleutian Islands as a separate ecosystem area. The LME approach does, however, recognize subregions within the LMEs, which may allow the Aleutian Islands to be considered independently. The NPFMC is not involved in the Arctic LME, which is not known to contain commercially exploitable fish stocks.

But fishery considerations are not the only factors to affect the ultimate geographic management framework for the ecosystem council(s), as influences such as chronic pollution, an acute environmental disturbance, marine transportation, climate and oceanographic considerations, military activities, and scientific research may end up being important drivers for developing an ecosystem council. For example, an ecosystem council might provide critical coordination among stakeholders in an ecosystem area that experienced a recent environmental disturbance such as a large oil spill, tsunami or other tectonic event, or discovery of a significant mineral resource slated for development.

Obligatory or optional? Accomplishing the goals of the ecosystem council

A fundamental question for the ecosystem council process is whether the recommendations of the ecosystem council will have any weight or influence on activities within the ecosystem area. The primary objection to the concept of ecosystem councils, as voiced during the ecosystem approaches advisory panel at the *Managing Our Nation's Fisheries II* national conference in Washington, D.C. in March 2005, is that the councils may end by adding another layer of bureaucracy to the fishery management process, without any substantive benefits. The ability of the ecosystem councils to influence both fishery and non-fishery activities will depend on the way in which they are framed.

The options for framing the ecosystem council's recommendations are twofold:

- A binding process – the advantages are that a decision of the ecosystem council would most likely be implemented. A declaration with the force of law behind it has more likelihood of success than a non-binding recommendation. However, national discussion to date has emphasized that ecosystem or ocean councils should be voluntary, and so developing a process that results in binding recommendations may not be feasible.
- A non-binding process – this can include a range of formats, from the fishery management council process, where recommendations are non-binding but usually implemented, to an advisory body whose findings may easily be ignored.

In order to avoid becoming an entity whose only responsibility is to develop recommendations that may receive little attention, the ecosystem council will need to find mechanisms to effect its recommendations. One way to accomplish this may be through Memoranda of Understanding between the partner agencies involved in the ecosystem council. Also, the ecosystem council may increase the force of its findings by

seeking out participants who can effect change at their respective agencies (e.g., the heads of the agencies). The ecosystem council may also reinforce its recommendations through its process and protocols. Feedback loops that oblige agencies to report back to the council on their progress in achieving ecosystem objectives can be useful tools.

The relationship, yet to be determined, between the ecosystem council and the newly created Committee on Ocean Policy may also influence the stature of the ecosystem council's recommendations.

The North Pacific Council and an Ecosystem Approach to Management

The North Pacific Council has an opportunity to shape how EAM will be implemented in the region and for fisheries management. Current Alaska EEZ groundfish and shellfish fishery management plans, regulations, and policies are geared primarily toward complying with the Magnuson-Stevens Act, which specifies management for optimum yield. In doing so the Council must comply with ten National Standards, most of which comport with the concept of ecosystem-based management. But the Council is still mandated to obtain optimum yield from the various shellfish and groundfish resources of the North Pacific. Ecosystem considerations in that process, to some, may be secondary to maximizing fishery production.

The Council currently employs many "ecosystem management" initiatives in the annual process of fishery management:

- an "Ecosystem Considerations" chapter in the annual SAFE documents,
- preparation of Environmental Assessments or Environmental Impact Statements for nearly every action taken,
- approval and implementation of a programmatic EIS for the groundfish fisheries that contains specific ecosystem considerations and guidelines the Council will employ in its fishery management process,
- a suite of management measures to protect ecosystem components: these measures include precautionary and conservative catch limits, limits on bycatch and discards, MPAs, and marine mammal and seabird measures[7],
- a new program for reviewing GOA and BSAI ecosystem issues during the June meeting, thus providing an ecosystem-based backdrop to the process of setting fishery quotas at the October and December meetings,
- redesigned GOA and BSAI FMPs that have goals and objectives built around ecosystem components,
- a new initiative to explore more focused ecosystem-based management of fishery resources in the Aleutian Islands, and
- the appointment of a restructured and active Ecosystem Committee to relate to the national dialogue and resultant initiatives on ecosystem-based management.

Given the U.S. Commission on Ocean Policy's recommendations, the President's response and strategy for implementing those recommendations, and NOAA's initiatives to comply with these mandates, the Council is now faced with an opportunity to take a next step in developing an approach for ecosystem-based management in the North Pacific.

[7] Witherell, D., C. Pautzke and D. Fluharty. 2000. An ecosystem-based approach for Alaska groundfish fisheries. ICES Journal of Marine Science 57:771-777.

Fishery management is but one component in an ecosystem approach to management. Other components in the North Pacific region include oil and gas exploration and development, marine transportation, military activities, marine and coastal research and education, pollutant management, other industrial uses, recreation, and cultural considerations. Implementing NOAA's EAM in the North Pacific may involve appointment of one or more regional ecosystem councils that could be comprised of the North Pacific Fishery Management Council, State and Federal agencies, communities, Native interests, industry and marine resource users, conservation groups, the Pacific States Marine Fisheries Commission, and other stakeholders. The regional ecosystem council would then develop a governance structure, a strategy, and implementation plans for conserving the many resources and services the North Pacific and its ecosystem areas provide.

The Council has a clear responsibility for encouraging healthy, productive, and biologically diverse marine ecosystems in which Federal fishing is managed, in order to maintain the sustainability of the Federal fisheries. Participating in regional ocean or ecosystem councils may be beneficial to the NPFMC to the extent that these ecosystem councils may help the NPFMC to better manage Federal fishery resources.

How the North Pacific Council will "fit" into the EAM is an important issue for the Council. The Council may even take the lead in developing how the EAM evolves for the region. NOAA has stated that implementing the EAM will be "incremental and collaborative", involving voluntary participation, collaboration among the many interests, and consensus-based decision making. The fishery management council process routinely employs these criteria, and thus the suggested process is familiar and already practiced in the North Pacific.

This section describes the several options available to the Council with regard to regional ecosystem councils. The three main courses of action are described below: modify the NPFMC to function as an ecosystem council; set up an independent ecosystem council with NPFMC administrative support; or allow ecosystem councils to be developed by another agency, with the NPFMC merely a participant. Each of these options could be developed in many different ways; the discussion below provides only a general description of what each option might entail. A summary of the three options is illustrated in Figure 2.

Option 1: The NPFMC functions as an ecosystem council

As mentioned above, the Council process already includes many of the collaborators who would be involved in an ecosystem council. Represented on the Council itself are NOAA Fisheries, USFWS, the Coast Guard, representatives of the fishery management agencies for the States of Alaska, Washington, and Oregon, and fishing industry representatives. The Advisory Panel includes industry, community, Native, and environmental representatives, and the Scientific and Statistical Committee includes academics and agency scientists. Many other groups participate in the process through regular testimony to the Council.

Other state and federal government representatives that might be involved in management of the ecosystem areas are other divisions of NOAA, other divisions of the State of Alaska, the Departments of Homeland Security and Defense, and the Marine Mammal Commission. International participants might be the International Pacific Halibut Commission and representatives of Canada or the Province of British Columbia. Other participants might represent communities, fishing groups, environmental groups, or representatives from academia. A draft example of the range of interested parties, in this case for the Aleutian Islands, is included as Table 1.

In order for the Council to take on the role of an ecosystem council, the Council's current process would need to be modified. One way to do this might be to create an ecosystem council as a standing committee

of the NPFMC. The ecosystem council would include a broad membership, and would perform the functions of an ecosystem council as envisioned by NOAA, except that as a NPFMC committee, their authority would be to make recommendations to the NPFMC. They would develop goals and objectives for the ecosystem area(s), prepare a comprehensive information base about the area, and determine performance metrics for assessing the health of the ecosystem against the goals and objectives. These products would then be brought before the NPFMC and adopted for the ecosystem area. Once the initial ecosystem plan is developed, the ecosystem council would continue to meet on a regular basis, as often as necessary, to update the plan and to provide a forum for information exchange among the various agencies.

The development of goals and objectives for ecosystem areas can be competitive as the trade offs among activities are reviewed to realize maximum ecosystem benefits. In order to be effective, the NPFMC would have to come to an understanding with the partner agencies participating in the ecosystem council, about reconciling competing objectives, and about the implementation of any recommendations of the ecosystem council.[8] This is complicated by the fact that the ecosystem council would be set up such that its recommendations need to be approved by the NPFMC. One way to address this might be to invite representatives of those agencies who are not already on the NPFMC to a specially convened session and allow them to participate in the approval of the ecosystem plan. Invited agencies would include those with jurisdiction over activities, such as non-fishery activities, that form an important part of the ecosystem plan, and whose implementation of the plan is critical to its success.

One issue to resolve in implementation of this option is the geographical scope of areas under the oversight of the ecosystem council. The NOAA Fisheries strategy for ecosystem councils suggests creating one for each LME, of which there are three in Alaska. Two of these are areas in which the Council manages fishing activities, namely the eastern Bering Sea and the Gulf of Alaska.[9] The NPFMC has no current involvement in the Arctic. If LMEs are determined to be the appropriate vehicle, the NPFMC could set up separate ecosystem councils for each, or perhaps set up a single ecosystem council, with BSAI and GOA working groups. Many of the participants who would be involved in the ecosystem council would be the same, at least for the BSAI and GOA. The NPFMC would need to decide whether it is the appropriate vehicle to foster the development of an ecosystem plan for the Arctic.

There are many benefits to the NPFMC of creating an ecosystem council. First, the opportunity to increase collaboration and exchange with other agencies that impact management of fisheries is beneficial to the NPFMC. The NPFMC does not directly interact with all of the agencies that affect federal fisheries, for example the International Pacific Halibut Commission; and with others, such as the USFWS, a forum for improving the common understanding of the ecosystem may also be desirable. Although the NPFMC has an indirect connection to other agencies through NOAA Fisheries, it may benefit the NPFMC to be directly informed and consulted about actions that affect the federal fisheries. The ecosystem council could serve this function.

Additionally, whether through Magnuson-Stevens Act reauthorization, other national oceans legislation, or through NOAA and NOAA Fisheries policies and guidelines, ecosystem-based management will continue to be developed and perhaps eventually required. NOAA Fisheries' FY2005-FY2010 strategic plan commits the Agency to issuing guidance for ecosystem approaches to fishery management. As expressed in the NOAA strategic plan, this management is likely to promote delineation of marine ecosystems and development of indicators to monitor ecosystem health, particularly in those regions, such

[8] See also de la Mare, W. K. 2005. Marine ecosystem-based management as a hierarchical control system. Marine Policy 29. pp. 57-68.

[9] As discussed in the previous section, the Aleutian Islands fit awkwardly between the two LMEs, but for the purpose of this discussion, they will be considered with the Bering Sea.

as Alaska, where appropriate data are available. The Alaska Fisheries Science Center is already working on developing the science to support this type of management, and their products are already used in annual stock assessments and the analysis of Alaska fishery actions that come before the NPFMC. An ecosystem plan might allow the NPFMC to apply on an ecosystem scale many of the management precepts that have already been developed for the groundfish fisheries in the revised management policy. The NPFMC would be setting an example of best practices which could assist other regions, or NOAA Fisheries nationally, to develop a standardized process for an ecosystem approach to management.

Logistically, there is also an advantage to creating an ecosystem council within the NPFMC process. The NPFMC office is already set up to facilitate NPFMC and committee meetings, and is experienced in successful meeting planning.

Yet there are also disadvantages to creating an ecosystem council within the NPFMC context. The NPFMC is committed to maintaining sustainable fisheries, which require healthy ecosystems. However, the NPFMC's jurisdiction and mandate remains federal fisheries management. Getting overly involved in non-fishery issues, in terms of NPFMC and staff time and resources, may redirect staff effort and resources from fishery management activities. The NPFMC already has a full workload, and lower-priority issues are on hold pending staff time to address them. The NPFMC will need to weigh the tradeoff between the benefit of being involved in an ecosystem council and the hindrance of shifting effort from basic fishery issues.

In addition to staff time, the NPFMC also needs to consider the cost of spearheading an ecosystem council in Alaska. If the ecosystem council is a standing committee of the NPFMC, the NPFMC is responsible for funding the ecosystem council. This may include the logistical costs of hosting a committee meeting and staff travel expenses; it may include travel expenses of other participants, time spent by staff both logistically and substantively planning the meeting, and preparing reports for the NPFMC, and the cost of hosting a special NPFMC session with invited participants to discuss the ecosystem council's recommendations. Unless additional funding is sourced, these costs would all come out of already-allocated NPFMC funding.

Variations on Option 1

There are many ways in which this option could be developed.

- The discussion above describes an ecosystem council that is set up as a standing committee of the NPFMC, which meets regularly during the year. The NPFMC would, in turn, convene a special session periodically, perhaps with additional participants invited to represent other agencies, to act on the ecosystem council/committee's recommendations.
- Another variation would be for the NPFMC to simply "become" the ecosystem council, without the intervening stage of a standing committee. This could be considered either as an interim measure while a different structure was developed, or a longer term strategy. In such a scenario, the NPFMC might first take steps to more formally and visibly demonstrate that it intends to begin a process of ecosystem management within the framework of its continuing responsibilities for ecosystem-based fishery management. The NPFMC could do this more intentionally by, for example, convening an annual special NPFMC meeting devoted entirely to ecosystem management. The NPFMC may consider inviting to the meeting representatives of those agencies with marine ecosystem responsibilities, with whom it does not regularly interact for fishery management purposes. The NPFMC could receive a series of reports on the "state of the oceans" within which it manages fisheries, and establish a frame of reference it subsequently would use when setting TACs for the coming year and for making other management decisions in the coming year. This meeting could generate a special "ecosystem report", either prior to or

subsequent to the meeting, that would replace the ecosystem considerations appendix to the annual SAFE documents. The report would be more of a synthesis and a statement of NPFMC policy for incorporating ecosystem management principles in its annual decision making process. Under this scenario, the NPFMC would essentially expand its role and work load. However, this might be a more expeditious way of moving into intentional ecosystem management with potentially a smaller cost and under a shorter time line.

Option 2: An independent ecosystem council is created, with administrative assistance from the NPFMC

Another option would be to create an independent ecosystem council, that is administratively supported by the NPFMC. This could be set up as an Alaska ecosystem council, with subcommittees for the BSAI, GOA, and Arctic ecosystem areas (if LME delineations are utilized), or as three separate ecosystem councils. The ecosystem council would have responsibilities as outlined above, to develop and update an ecosystem plan, to monitor ecosystem health with respect to the performance metrics outlined in the plan, and to provide a forum for information exchange among users and managers of activities within the ecosystem.

The ecosystem council could be set up to mirror the NPFMC structure and process. Seats could be designated for Federal and State agencies, local and Native authorities, user groups, and academics. Some groups could be accommodated as non-voting members, if necessary. The ecosystem council could perhaps be equated to the management arm of the North Pacific Research Board. The ecosystem council members would need to be senior position-holders, such as the Chair of the NPFMC, and the Regional Administrator of NMFS Alaska Region, with the authority to commit their agencies to the findings of the ecosystem council.

Administratively, the ecosystem council would benefit greatly from NPFMC support. As discussed under Option 1 above, the NPFMC is set up to support and staff a council process. Financially, the NPFMC is also in a position to receive and manage funding channeled through NOAA Fisheries to support an ecosystem council. However, the ecosystem council would have staffing requirements that are unlikely to be met by the existing NPFMC staff. At least one or more dedicated ecosystem council staff would likely be required, and the scope of the enterprise would determine whether the NPFMC Executive Director would be able to oversee the ecosystem council and staff, or whether a separate Executive Director would be required.

Due to costs involved, the creation of the ecosystem council may be dependent on a funding source becoming available. Some of the administrative support of the ecosystem council could be borne by the NPFMC. Questions to be resolved would include whether ecosystem council members are compensated, the frequency of meetings, and staffing for the ecosystem council.

Many of the benefits of an ecosystem council, as discussed in Option 1 above, would also accrue by the creation of an ecosystem council. The close staffing relationship of the ecosystem council and the NPFMC would foster a strong partnership, and the NPFMC would participate on the ecosystem council thus benefiting from agency collaboration and increased ecosystem awareness. At the same time, the focus of the NPFMC remains on fishery management, and staff or resources would not be as diverted as they would be under Option 1.

The ecosystem council would benefit from increased impartiality, as its findings would not be subject to the approval or disapproval of a fishery-focused NPFMC. This may be some disadvantage to the NPFMC, as it has no control over the findings of the ecosystem council, other than through its participation. The

NPFMC would still provide staffing and administrative support to the ecosystem council, which would tax the NPFMC's resources to some extent, but to a far lesser degree than in Option 1.

Variations on Option 2

There are many ways in which this option could be developed, along the lines of the discussion above.

- The ecosystem council could be set up as an ecosystem council, but with designated co-chairs. The co-chairs could be the Chair of the NPFMC and the Commissioner of the State of Alaska Department of Fish and Game (or their representatives). Developed as such, this option would have much in common with Option 1. As designated co-chairs of the ecosystem council, fishery interests would have an important voice on the ecosystem council. Administratively and analytically, the burden of supporting the ecosystem council could be shared between the NPFMC and ADF&G. As a separate entity, the ecosystem council would be representative of all parties involved in the management of the Alaskan marine ecosystems, without having to modify the NPFMC process to accommodate other agencies. However, because of the fishery co-chairmanship, the ecosystem council may not be vested with the same degree of impartiality as under other scenarios.
- A different type of partnership might lead to an option that looks more like Option 3. The NPFMC could explore setting up an ecosystem council in conjunction with NOAA Fisheries and the National Ocean Service. Again, a partnership that would spread the burden of administrative and analytical support would alleviate pressure on NPFMC staff and resources. Partnering with NOAA Fisheries would ensure a strong consideration of fishery interests in the deliberations of the ecosystem council. This variation on Option 2 would allow the NPFMC some control in the initial development of the scope of the ecosystem council, in terms of representation and mandate, but other interests, including non-fishery interests, would also play an important role.
- A melding of these variations was discussed by the Council's Ecosystem Committee, and is illustrated in Figure 3. This variation proposes a partnership among the NPFMC, NOAA Fisheries, and the State of Alaska to develop an ecosystem council.

Option 3: Another agency sets up an ecosystem council

The NPFMC may also choose not to be proactive in the development of an ecosystem council. What would it mean for the NPFMC if another agency were to set up an ecosystem council? In this case, the ecosystem council or councils (depending on whether one is created for each LME) would likely be set up as an overarching, voluntary governance authority. Members would include the same participants as in the cases above. It is likely that the organizer of the ecosystem council would be a NOAA agency, since the NOAA strategic plan addresses the creation of councils; however, this agency may not necessarily be NOAA Fisehries. The NPFMC would likely participate as a member of the ecosystem council, but would not have any additional authority over its findings. However, as part of their national guidelines on an ecosystem approach to management, NOAA Fisheries or NOAA could choose to oblige the fishery management councils to comply with the ecosystem council's ecosystem plan.

The consequences for the NPFMC of an external ecosystem council depend largely on the way in which the ecosystem council is formed, the relative voice of the NPFMC and/or of fishing interests, and the degree to which findings of the ecosystem council are binding to NPFMC management. Participating in the ecosystem council might realize the same benefits to the NPMFC as discussed in Option 1, without the attendant costs. The NPMFC would be able to participate in a collaborative forum of information exchange, which would complement its existing efforts to consider ecosystem interactions in fishery management. Merely participating in the ecosystem council, rather than 'running' it, reduces the amount of Council and staff time and resources that would be co-opted.

At the extreme, the NPFMC could be a small voice on the ecosystem council, but be bound by its output. The Council is likely to be more adversely impacted by under-representation than other agencies. The marine environment is difficult for humans to control; most ecosystem drivers are beyond our ability to affect. Should action be necessary to counteract imbalance in the ecosystem, there are only a few ways in which to effect change by modifying human activities. Homeland security or military activity is unlikely to be curbed by an ecosystem council. Pollution, whether sourced on land or from ocean traffic, is also more difficult to control. Fishing comprises much of the marine activity in Alaskan waters, and has a successful management structure that can easily effect change. Therefore, changes to accommodate ecosystem imbalance are likely to be absorbed by the fisheries.

As yet, it is unknown how such an ecosystem council would develop.

Schedule and Budget Considerations for Implementing an Ecosystem Council Process in the North Pacific

To date, the North Pacific Council has been involved in discussions internally about the possible alternative processes and ways in which EAM might be initiated in the North Pacific. These efforts have included a draft discussion paper and presentations to the Council's Ecosystem Committee.

If the development of an ecosystem council or ocean council continues, and if the North Pacific Council wishes to continue to promote and develop initial conceptual plans for an ecosystem council, two important considerations will have to be addressed: a time line for development and eventual implementation of an ecosystem council process (also illustrated in Figure 4), and a budget to support that process.

Time Line

The *ad hoc* conceptual development currently under way by North Pacific Council staff, guided by the Council's Ecosystem Committee, could continue but in a more deliberative manner. This more deliberate process might be termed "Concept Development" and would proceed in a manner not unlike the development of other North Pacific Council programs. The process would be an iterative process, involving the public and other marine stakeholder representatives, with a series of draft concepts vetted through the North Pacific Council process which would most likely involve iterative reviews by the AP, SSC, the Council, and the public. One issue to consider is whether the North Pacific Council should have the review and/or approval role in this process? How open should this process be? If the Concept Development process is similar to North Pacific Council meetings, would special meetings be required or would additional time be built into already-planned future meetings?

Another necessary component of the development of an EAM for the North Pacific is the involvement of other potential stakeholders. Many entities are involved in use of the physical or biological resources in the marine environment, in marine research, in monitoring programs for oceanographic and weather prediction, or other interests. These entities include other Federal and State agencies, marine transportation companies, undersea cable data transmission and communication interests, the military and Homeland Security, coastal communities, larger Alaskan and other Pacific Rim human population and commerce centers, universities, and international marine resource management and research collaboratives (PICES, INPAFC, PSC, IPHC, etc.). What entities would be seated on the ecosystem council; how would they be invited? What might be the process for involving stakeholders – what incentives would be necessary to ensure full participation in this important planning process?

As mentioned above, would the North Pacific Council have not only a review role but also an approval role? Figure 5 illustrates the need for a decision-making body to coordinate stakeholders and collaborating agency input. Would the North Pacific Council guide and direct, or have a lesser role of encouraging and suggesting? To what degree will this Concept Development process require legal advice, and from what entity – NOAA GC or other legal counsel entity? As the planning process proceeds, decisions will need to be made – who makes them, to what degree might these decisions be binding? And what entities would they be binding upon? If merely a planning group, then the ecosystem council could still operate as a coordinating body, and perhaps could evolve into an effective organization for coordinating ocean research, ocean uses, and ocean policy development.

The development of an EAM for the North Pacific has some of its origins within NOAA. Thus it will be necessary to continue to involve the larger NOAA agency in the Concept Development process. A process for "keeping NOAA in the loop" will be necessary. Similarly the President's Ocean Policy Council will have keen interest in monitoring how the EAM Concept Development process matures for the North Pacific. Would the North Pacific Council take the responsibility or initiative to provide a feedback loop to the Ocean Policy Council, or would that better be accomplished by NOAA itself?

As the above process continues, perhaps over a 6 month to 1 year (or more) period of time, the concept would evolve to a point where more specific alternative processes and structures for the ecosystem council would emerge. The initial concept for a North Pacific ecosystem council, or multiple ecosystem councils, would require staff, administrative structure, funding, working protocols, and a physical location. Co-location with the North Pacific Council would be logical and possibly desirable, but currently the North Pacific Council would likely be unable to house a significant additional staff complement. Regardless where housed and how administrated, the key issue is how the selected ecosystem council concept performs and what its working relationships with the North Pacific Council would be. The initial activities and deliberations of the ecosystem council would continue to be "tuned" in an iterative process, with frequent reassessment through a public and stakeholder review process.

With a suite of alternatives gaining favor, a next step would likely be an effort to focus on a preferred alternative. Perhaps the North Pacific Council would have before it either well-defined specific alternatives, or a matrix of options under a series of alternative structures. The iterative process described above would continue until an alternative emerges that appears to have stakeholder, public, and NOAA/Ocean Policy Council support, resulting in a longer-term structure that most would eventually agree will serve the goals of an EAM process in the North Pacific.

With a more long-term structure, the ecosystem council would have in place a working protocol and annual cycle of activities that would be considered more permanent. As it proceeds to follow the protocols developed in the above process, the ecosystem council would likely need to be guided by:

- Ecosystem Plans – developed in-house or through contract, or both
- Advisory Committees – perhaps from different stakeholder groups
- Science Panels – continued and adaptive input of new scientific information will be critical to the functioning of the Ecosystem Council
- LME Committees – one per LME to act like a Plan Team?
- Budget and Finance Committee –
- Data Management Panel – could be integrated with the Science Panel, perhaps; need linkages to other agency and stakeholder data bases and a means to manage data and informational products developed in-house

With an ecosystem council and its working protocols in place, the EAM process for the North Pacific would then proceed in an adaptive manner, addressing issues and changing course as dictated by new information or new policies developed through its stakeholder and public input. Feedback loops would be part of the adaptive process whereby new scientific information, changes in climate regime, new user groups, major events such as an oil spill, or other changes in the North Pacific ecosystem would be addressed by the ecosystem council. The ecosystem council would evolve from this adaptive process, and hopefully be structured such that it can adapt and change as necessary to meet new future challenges.

Other considerations required in the above process:

- To what degree will this process require conformation with NEPA? If the ecosystem council creates a new activity that affects the human environment, then yes – but is the mere development of the concept of EAM in the North Pacific also under NEPA?
- What level of legal advice will be required? Or legal protection?
- What might be the future synergisms between the ecosystem council and the North Pacific Council in co-location, staff sharing, combined meetings, and other efficiencies to save time and cost in performing EAM? Should this process have as a component an alternative to merge operations, or should EAM at its outset clearly exclude any possible merger?
- How will EAF relate to EAM? Currently the North Pacific Council is investigating a possible EAF in the Aleutian Islands. Clearly EAF would necessarily be a North Pacific Council program, but to what degree might the Concept Development of EAM be adapted for EAF, or *vice versa*?
- Is a sunset provision desirable? That is, should the process and initial work of an ecosystem council have a defined end point at which time its performance is evaluated and decisions made about continuing?

Financial

Currently, the EAM Concept Development process is funded by the North Pacific Council through commitment of staff resources and the time and efforts of the North Pacific Council's Ecosystem Committee. To date, little cost has been involved. But as the North Pacific Council proceeds with Concept Development as described above, and perhaps more deliberately chooses to enter into a more formal process of Concept Development and begin the iterative process required to evolve the ecosystem council for the North Pacific, dependable funding will be required. Sources of funds could either come from within the North Pacific Council's annual budget, from within NOAA Fisheries or a higher level NOAA budget appropriation, or from a special appropriation from Congress.

An advantage to having the North Pacific Council fund the process, at least initially, is that it demonstrates fairly clearly this fishery management council's seriousness about implementing EAM. It also advantages this council as it would be taking the lead, which may have policy advantages. The North Pacific Council may have to realign its operating budget, and commit staff or hire new staff, to work more deliberately on Concept Development. Decisions would be required on which staff and what ongoing workloads would be affected.

Level of budget required for Concept Development would depend on how much effort the North Pacific Council and NOAA choose to invest. Funds would be required to support a lead manager of this effort, dedicated staff, working space, travel, stakeholder involvement, rent, secretarial support, and record keeping. Costs would vary depending on the number of Council meetings involved, the number of months or years the Concept Development process would require, the number of stakeholders involved and their funding needs, geographic locations for Concept Development meetings and the associated travel and

logistics required, and the nature of documents, public notices, reports, or proceedings generated by the process.

Eventually the ecosystem council will require a separate budget of sufficient magnitude to accomplish the policy objectives set out for it. Would this budget be a pass-through using the North Pacific Council? Or would annual funding be effected through a line item in NOAA Fisheries' budget or perhaps NOAA's budget? And as previously mentioned, what benefit might a close relationship to the North Pacific Research Board process provide to the development of a funding strategy? Table 2 lists some of the considerations for funding an ecosystem council.

Next steps

Should the Council decide to proceed with any of the options for developing ecosystem councils, there may be more support for a more middle of the road approach – one that establishes an independent ecosystem council but still couples it to the existing NPFMC structure. This connection could be geographic and administrative only, or it could involve a closer policy connection.

Regardless of the general relationship between the councils, there likely would be some kind of a close connection between the NPFMC and the ecosystem council, since fishery management would be perhaps one of the largest activities occurring in the North Pacific and its ecosystem areas.

The process for developing an ecosystem council involves much planning and decisionmaking. Many basic questions have to be resolved, and there is no clear guidance on the way forward. The stages of planning that could be required to implement a variation of Option 1 or Option 2, are discussed in the previous section and illustrated in Figures 4 and 5.

A key element that needs to flow through all stages of planning, however, is the importance of public participation. The literature to date on ecosystem management insists on the importance of a collaborative and transparent process in developing new mechanisms for management. Should the Council consider pursuing a variation of either Option 1 or Option 2 as described in this paper, many of the questions regarding the ecosystem council's geographic jurisdiction, scope of work, and membership could appropriately be worked out in the public forum. The ecosystem council will have the maximum credibility, and arguably, utility, if it is developed in a transparent process with iterative stakeholder input.

The planning and implementation of an ecosystem council is likely to be a complex process, involving many stakeholders and collaborating agencies. There is, as yet, no national guidance on the creation of ecosystem councils, and only few regional examples of similar collaborations. Given that Alaska encompasses three LMEs, and diverse stakeholders and jurisdictions, it may be appropriate to move forward with a pilot program, rather than attempting from the outset to create a council structure for the whole of Alaska. Selecting a distinct subarea as a pilot case would allow developing and testing of the structure, protocols, work products, and utility of such an ecosystem council, in an area with a smaller pool of interested parties.

The Aleutian Islands may be an appropriate subunit for such a pilot case. As discussed above, although the Aleutian Islands are not identified as a Large Marine Ecosystem, the LME approach includes consideration of distinct subareas within the LMEs. The Aleutian Islands area-specific management discussion paper, currently under NPFMC review, provides ample justification to support consideration of the Aleutian Islands as a distinct ecosystem area.

Figure 1. Coordinated ocean governance structure proposed in the U.S. Ocean Action Plan

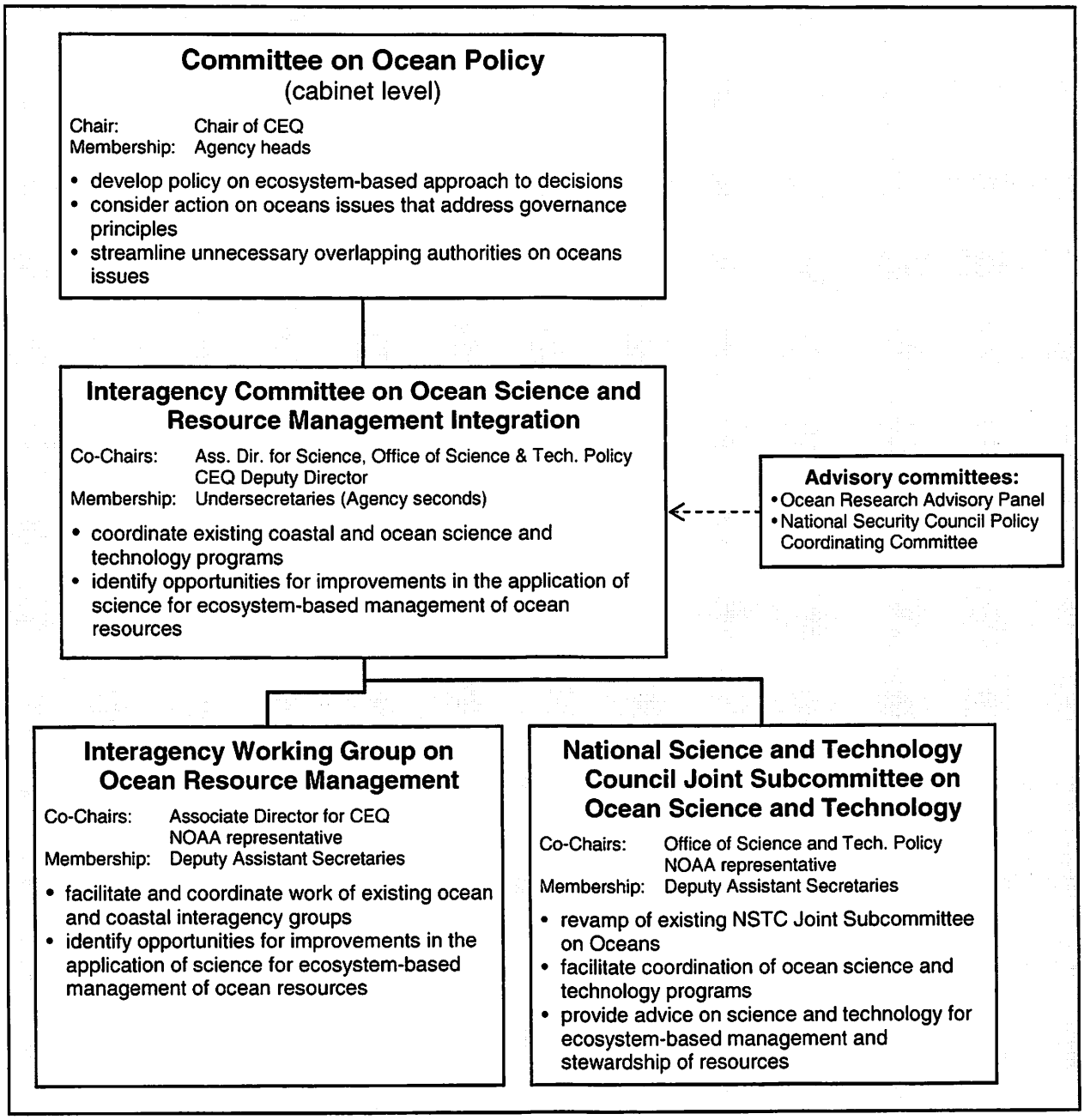
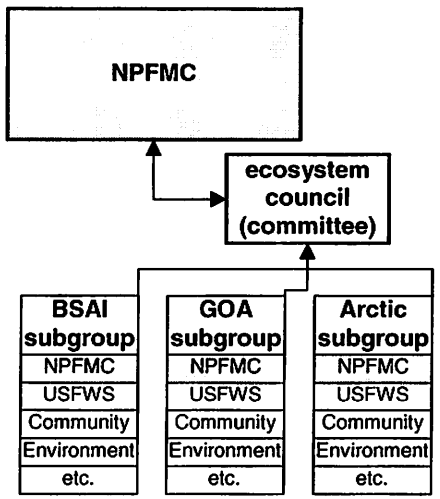


Figure 2. Three options for NPFMC participation in ecosystem councils

OPTION 1

The NPFMC functions as an ecosystem council

- The ecosystem council is a standing committee of the NPFMC
- The NPFMC acts on the ecosystem council's recommendations in a special session, inviting other agencies to the table as necessary



Pros:

- fosters collaboration and exchange among agencies managing activities in ecosystem
- NPFMC controls final output of council
- logistically feasible – structure in place

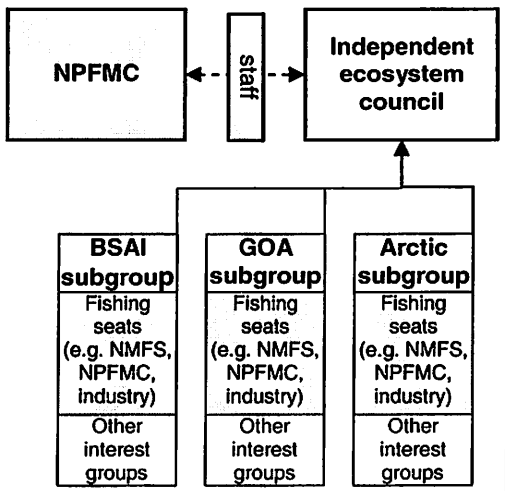
Cons:

- redirects NPFMC and staff effort from other fishery management issues
- cost (staff, resources)

OPTION 2

Independent ecosystem council with NPFMC admin support

- Independent ecosystem council mirroring NPFMC in structure
- Much of the administrative and staffing support provided by the NPFMC



Pros:

- benefits of collaboration as with Option 1
- not as time consuming as Option 1 to NPFMC and staff efforts
- ecosystem council would be more impartial

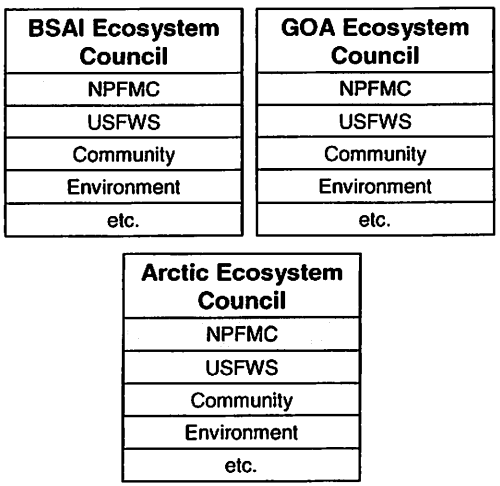
Cons:

- NPFMC is not final arbiter of council reccs
- still staffing costs, but less than Option 1 if there is an independent funding source

OPTION 3

Another agency sets up an ecosystem council

- The NPFMC waits to see what develops, and participates in the ecosystem council when it is set up



Pros:

- no cost to NPFMC
- NPFMC can participate in the forum without redirecting effort from other activities

Cons:

- NPFMC has no input into/control over design, jurisdiction, or mandate of council
- if council's output is binding, could be disadvantageous to NPFMC

Figure 3. Variation of Option 2: setting up an ecosystem council with support from the NPFMC, NOAA Fisheries, and the State of Alaska

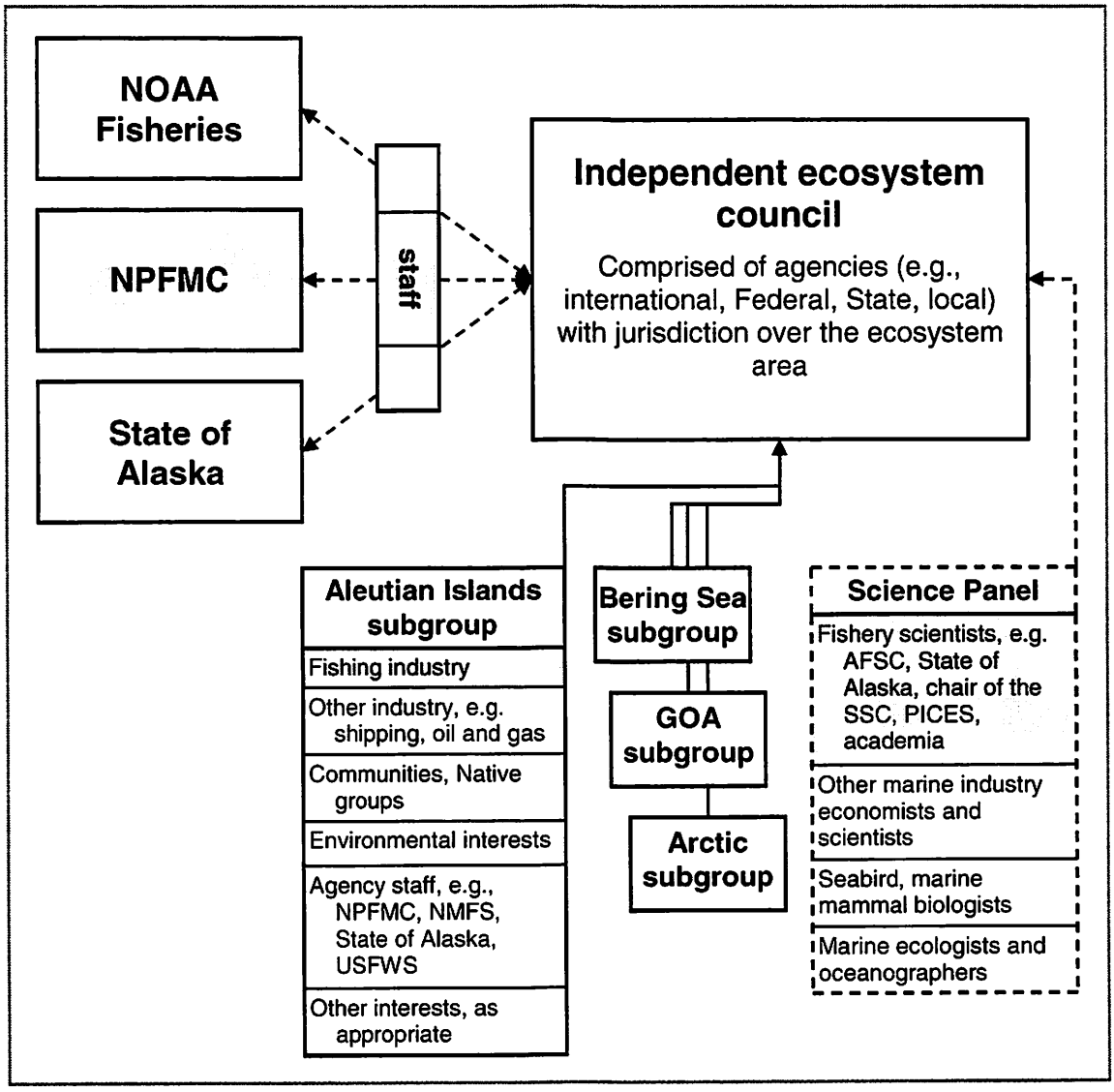


Figure 3. Illustration of a process of implementing an ecosystem council

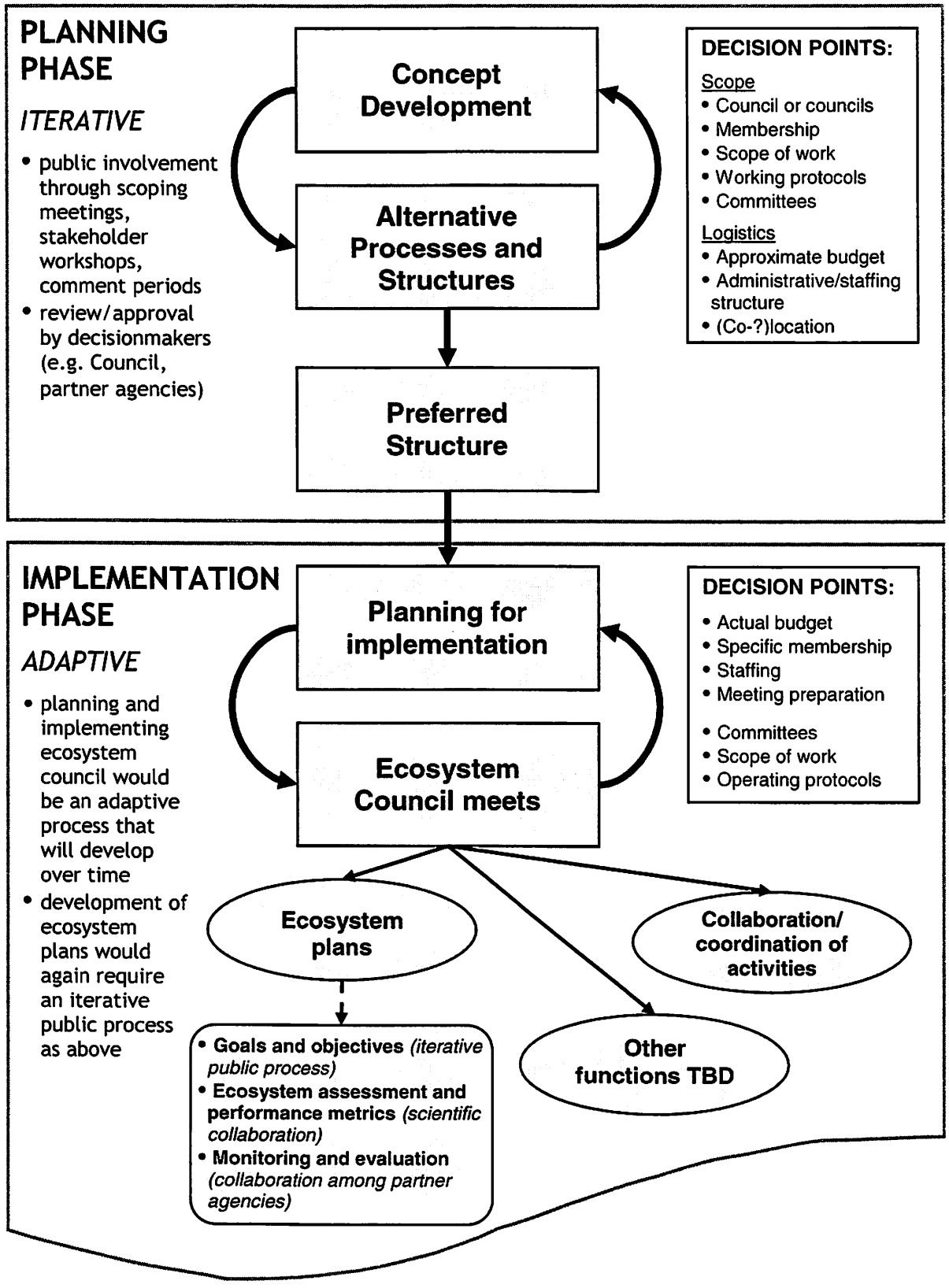


Figure 4. Illustration of the structure of a planning process and ecosystem council

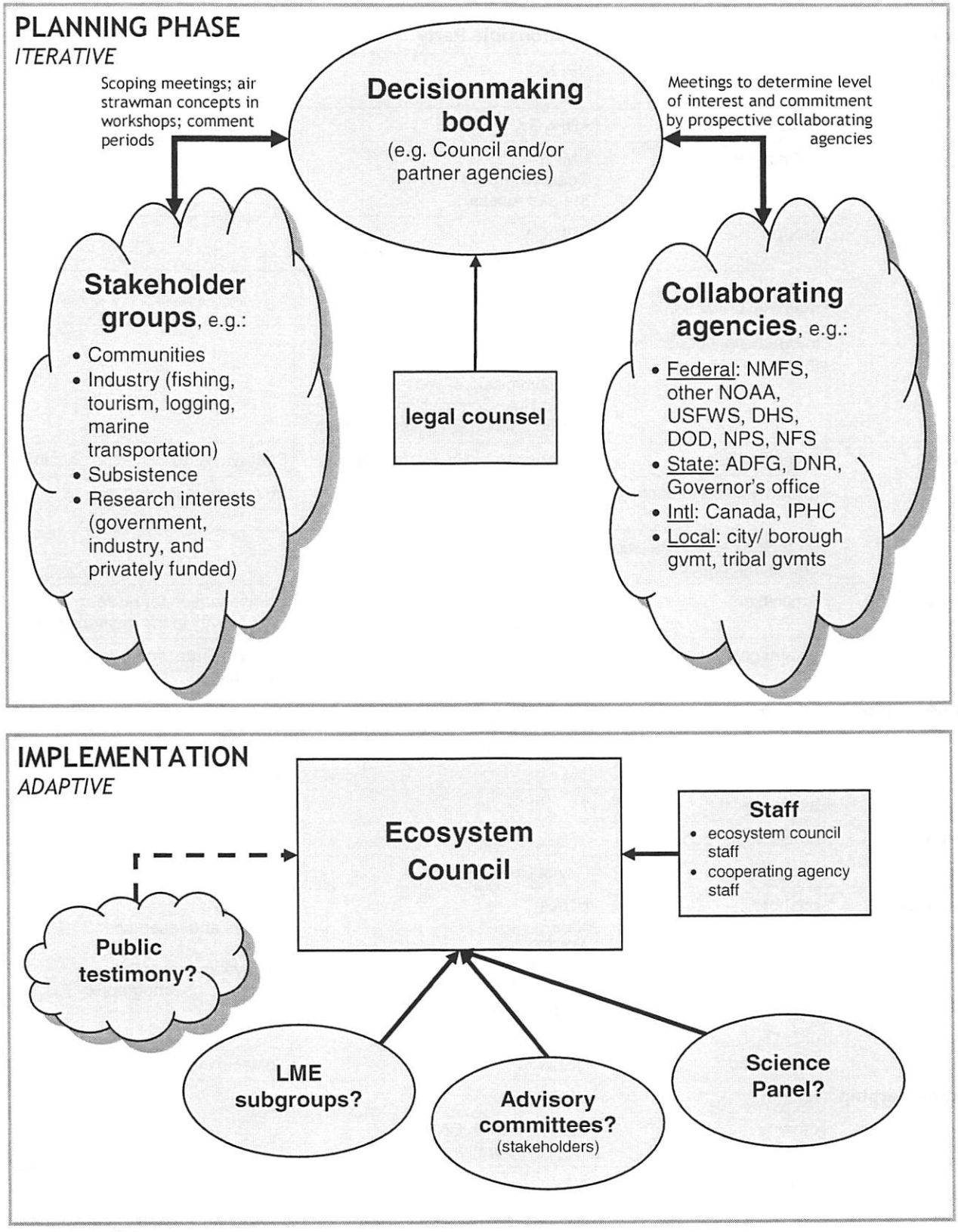


Table 1. List of Activities/Collaborators in the Aleutian Islands (NOTE: this is a draft, and is not intended to be viewed as an exhaustive list)

Activity		Responsible Party	
Fishing	Federal management	NPFMC NMFS	
	State management	ADF&G	groundfish, salmon, crab
	enforcement	NMFS Coast Guard State of Alaska	
	groups	APICDA Aleut Enterprise Corporation	
	seabird and marine mammal protection	NMFS Protected Resources USFWS	
	international cooperative management	IPHC North Pacific Anadromous Fish Commission Donut Hole Commission Pacific Salmon Commission/Treaty	
Military	homeland security	Department of Homeland Security	Shemya, Attu?, listening ship in Adak
	military site restoration	US Air Force US Navy	Environmental cleanup
	undersea cable installation and maintenance	?	
Energy	Amchitka	Department of Energy (old Atomic Energy Commission)	Compensation for nuclear fallout, radioactivity in the environment
	oil and gas	Minerals Management Service	Planning area, some reserves but no exploitation
Transportation	shipping	City of Dutch Harbor Coast Guard Port authorities?	Tacoma, Seattle, Portland, Kodiak, Asia
	aviation	?	
Tourism	cruise ships, ecotours		
	sport fishery	City of Dutch Harbor	
Research	offshore	NOAA NMFS ADF&G USFWS UAA/UAF PICES – North Pacific Marine Science Organization	AOOS surveys and research surveys surveys and research Amchitka, oceanographic
	land-based	USFWS	Volcanic monitoring
Land ownership	refuge	USFWS	
	other	State of Alaska DNR Aleut Corporation	
	communities	Adak Atka Nikolski, Unalaska/Dutch Harbor, Akutan, False Pass	depending on the boundary of the AI

Table 2. Preliminary considerations for funding an ecosystem council

Stage	*Funding Considerations*	*Conditioning factors*
Planning	• Staff time to conceptually develop the plan • Stakeholder meetings/workshops • Collaborative meetings with prospective partners • Analysis of options	• Length of the planning process • Number of iterations between decisionmakers and stakeholders
Implementation	<u>Meetings of the council</u> • Number of participants on council • Number of standing committees (e.g., AP, SSC, LME subgroups) • Whether members are compensated (e.g., salary, travel and expenses)	• Number of meetings annually • Number of Federal government versus other government or private members (for Federal government members, costs could be distributed across agencies) • Will the council pay expenses for desirable members who otherwise would not attend? • Location and length of meeting, including distance traveled by members
	<u>Staff</u> • Director • Analytical staff (prepare meeting materials; write, monitor, and evaluate ecosystem plan) • Administrative staff (including meeting planning, office management, and secretarial support)	• Number of staff • Support from other agencies • Scope of work of council • Number of meetings
	<u>Office requirements</u> • Overhead (rent, office supplies, etc.)	• Number of staff • Co-location with other agency (e.g., NPFMC)
Ballpark example of costs based on NPFMC experience	Cost of meeting in Anchorage - $80,000 / meeting - including cost of room rental; travel and expenses for North Pacific Council, SSC, AP; Council member compensation; copying of meeting materials Cost of office space for 2 staff - $30,000 / year - including office rental, supplies, utilities, etc.	

Ecosystem Committee Minutes

April 4, 2005 1-4 pm
Aspen Room, Hilton Hotel, Anchorage, AK

Committee: Stephanie Madsen (Chair), Jim Balsiger, David Benton, Jim Ayers, David Fluharty (by teleconference), John Iani (by teleconference), Doug DeMaster (3-4 pm), Chris Oliver (staff), David Witherell (staff), Diana Evans (staff)

Others present included Bill Wilson, Cathy Coon, Sue Salveson, Peter Jones, Heather McCarty, Peggy Parker, Donna Parker, and Paul MacGregor.

The Ecosystem Committee discussed the five items on its agenda. The Committee set the morning of May 11th for their next meeting, to be held by teleconference, and also determined to meet immediately prior to the June Council meeting.

1. Update on national conference

Mr Oliver reviewed the findings of the main conference panel on the issue of 'Developing an Ecosystem Approach to Fisheries' from the *Managing Our Nation's Fisheries II* conference in Washington, DC, in March 2005. The Committee discussed the conference, and noted the differences among regions apparent during the conference. These differences impact the issuance of national guidance on ecosystem-based fishery management, which may limit regional flexibility if it is embodied in regulation, and also the ability of scorecards to make comparisons across regions. The importance of interagency coordination was also raised.

2. Update on Council-NMFS working group to develop ecosystem-based fishery management national guidelines

Mr Oliver summarized the outcome of the working group's first meeting, which took place in late March. Guidelines are still in the conceptual stage at the moment, and a timeline for developing guidelines and a procedure for vetting drafts through the Councils and the public will likely be determined at the next working group meeting, in late April. Members of the Committee are particularly interested in understanding the available levels of public participation in developing national and regional guidelines. It was also mentioned that the working group should keep track of any efforts to develop guidelines for the broader ecosystem management process.

3. Brief update on current North Pacific ecosystem efforts

Dr Balsiger and Mr Jones (NMFS, Alaska Region) gave a brief update on the funding outlook for ecosystem efforts in the Alaska region for the next three years. The Council also received briefing material on the North Pacific Climate Regime and Ecosystem Productivity group, and the recent SSC ecosystem modeling workshop.

4. Review of staff discussion paper on the Council's role in developing an ecosystem approach to management in Alaska

The Committee discussed the paper at length. The Committee recommends that the Council consider exploring a model based on Option 2, to set up an independent ecosystem council, with support (administrative and staffing) from the NPFMC, NOAA Fisheries, and the State of Alaska. The Committee

recommends that the approach be initiated on a pilot basis for the Aleutian Islands. The Council will receive the staff discussion paper at this meeting, so will likely be unable to act on the Committee's recommendation until the June meeting; in the meantime, the Committee requests that the Council chair, and Council staff, be authorized to contact the State of Alaska, and other potential collaborators, to determine whether there is interest in pursuing this idea. Should the Council concur with the Committee's recommendation, a workshop would be planned, to which all agencies or organizations with interest in the Aleutian Islands would be invited, to further elaborate the idea.

The Committee was clear that the details of the ecosystem council would need to be worked out in an open forum, with participation by collaborating agencies and stakeholders. Both the name of the group, and its membership, are yet to be determined. In general, however, the approach favored by the Committee would explore the creation of an independent ecosystem council whose membership would consist of representatives of agencies or organizations with jurisdiction over the ecosystem area to be managed. This group would be advised by an area subgroup, composed of stakeholders in the area. The stakeholders would include agency technical staff, industry representatives (commercial fishing, shipping, etc.), Native and community representatives, environmental representatives, and other appropriate parties. The Committee also discussed the need for a science panel. The Committee referred to Table 1 in the staff paper to discuss possible members of both the ecosystem council and the Aleutian Islands subgroup.

The Committee clarified that it does not see the creation of an ecosystem council as in any way relinquishing the NPFMC's authority over fishery management. The ecosystem council would provide a mechanism for dialogue with other agencies, to understand the impacts of agency actions on other agencies' activities. This would be a voluntary council, and its recommendations would have no force of law. The advantage of representing agencies with jurisdiction over the area of the ecosystem council is that it provides a mechanism for the ecosystem council's recommendations to be implemented by the participating agencies.

The Committee proposes the Aleutian Islands as a pilot area for developing the ecosystem council; yet the Aleutian Islands may not fit into the LME concept for ecosystem management that has been adopted by NOAA. However, Dr Balsiger indicated that based on his discussions with Dr DeMaster, identifying the Aleutian Islands as a distinct subregion is likely to be compatible with the LME concept.

5. Review of discussion paper considering area-specific management in the Aleutian Islands

The Committee reviewed the staff discussion paper. The Committee addressed the issue of the geographic boundary of the Aleutian Islands, as raised in the paper, namely whether the Aleutian Islands should be defined as the subarea identified in the BSAI groundfish FMP, or should also include the Fox Islands to the east. Members of the Committee expressed a preference for retaining the existing subarea bounds, from a management and policy perspective. Material before the Committee suggests that this may be supported by recent scientific research.

The Committee discussed whether an ecosystem approach to fisheries management would more appropriately be addressed by discussion within each FMP, or by an overarching Fishery Ecosystem Plan (FEP). The Committee felt there was confusion about the interrelationship of the FMPs and a FEP, and indeed about the definition and content of a FEP. Dr Fluharty suggested that the 1999 Ecosystems Principles Advisory Panel Report to Congress gave an explanation of this relationship, and staff will provide further information on this issue at the next Committee meeting.

The Committee agreed to address the SSC's recommendation to develop a statement of the goals and objectives for the analysis at the next meeting.

Enforcement Considerations
For
NOAA Fisheries and N. Pacific Fishery Management Council Staff

Developed by NOAA Fisheries Enforcement and the U.S. Coast Guard

April 2005

NOAA OFFICE FOR LAW ENFORCEMENT
And
UNITED STATES COAST GUARD
GUIDANCE FOR EFFECTIVE FISHERIES ENFORCEMENT

Regulations are constantly being written and most of those in place seem to be in a continual state of change. North Pacific Fishery Management Council, NMFS Sustainable Fisheries, Protected Resources, and Habitat staff are tasked with the creation and revision of the regulations. Although involving enforcement personnel in the process is essential, it is difficult to include enforcement on every conference call and at every meeting. With that in mind, the following is provided for consideration by those who are assigned a project which include elements of enforcement.

Before approval and implementation of a management plan, the following measures are enforcement's advice as it relates to the plan's efficacy. The basis for these principles is the historical experience of over twenty years of enforcing the many and varied regulations promulgated under the Magnuson, and later, the Magnuson-Stevens Act on a nationwide basis

Please note that the information in this precepts paper is intended only as general guidance. Depending on the specific design of any regulatory program, the enforcement tools and strategies used in that program may require mixing or even deviation from the individual enforcement precepts mentioned in this paper. The information contained in this paper in no way limits NMFS ability to employ the enforcement technique(s) that it considers most appropriate for accomplishing the goals of a specific regulatory program.

REGULATIONS ARE MORE ENFORCEABLE IF THEY ARE:

Simple and easy to understand - The more complicated the rule, the higher likelihood of creating loopholes and legal defenses. Straightforward requirements that are black and white without exceptions make it more difficult for intentional violators and conspirators to evade enforcement. For example, possession of an undersize halibut on a commercial vessel is clearly a simple prohibition. It is illegal regardless of where taken or how it was harvested or any other variable, condition or stipulation.

Simple regulations are easier for industry to comply with. Complex regulations result in errors, misunderstandings, and cause industry to simply ignore them.

To the extent possible, consideration should be given to consistently similar management measures amongst the Fishery Management Plans (FMP) and regulatory areas.

Few as possible - Adding too many control measures frustrate the industry as well as enforcement. Too many regulations allow for more possibilities for mistakes to be made and reports to be forgotten; and it gives more work for enforcement. Reports should be consolidated

where possible, and instructions made simple. Regulations sometimes have to be very restrictive, but compliance should be easy for the industry.

Fish is accountable and traceable throughout the wholesale process - The intent of this requirement is for there to be traceability of product wherever found. This enables enforcement to intercept unlawful seafood at various funnel points such as airports and Customs borders. With required documentation and labeling, everything could be traced back to the responsible harvester.

Supported by appropriate penalties up to and including permit revocation and criminal charges for the most egregious offenses - The Penalty schedule of NOAA General Counsel is constantly evaluated to ensure it is sufficient to effectively penalize civil offenders commensurate with their violations. However, chronic repeat offenders who do not possess resources to pay their fines may warrant permit sanctions or revocations. Those who commit egregious crimes must be punished via criminal sanctions up to the felony level. In these cases, incarceration may be the appropriate avenue of attaining justice. (See PENALTY section below for more on this subject)

WHAT IS MORE DIFFICULT TO ENFORCE:

Man power intensive regulations - The halibut and sablefish IFQ regulations are manpower intensive. Enforcement will never have enough manpower to monitor more than a small fraction of the total offloads. This requires constant shifting effort from port to port, while not having adequate resources to properly be pro-active towards serious offenders. Use of technologies such as VMS and electronic logbooks can allow enforcement to monitor remotely, reducing manpower needs.

Complex or convoluted regulations - Regulations such as by-catch limits on catcher vessels are nearly impossible to enforce at-sea. Enforcement of these regulations requires monitoring the entire catch during offload. At that time, it is too late for the vessel to do something about any overages it may have. The fisherman must rely on their ability to estimate catch composition at sea to stay in compliance.

Lack of accountability - Fish can become "legal" merely by doctoring the records, without traceable accountability, or the ability to audit. Records to track fish from harvest, to the offload, and through the processing and shipping add to good accountability.

Estimates - Regulations requiring a vessel captain to estimate catch, catch composition, and/or discards are difficult to enforce. Using estimates may work just fine for managing a fishery. However, enforcement cannot prove the false reporting of an estimated weight of a discard, nor can we establish how close an estimate must be before we can cite someone.

Finally, any new plan or regulation must take into consideration the enforcement resources of the NMFS and the Coast Guard in terms of maximum capable enforcement contacts and

investigative effort. Nationwide enforcement is spread thin, so adding more regulations to enforce, usually means decreasing, or in some cases ceasing, effort in other areas.

PENALTIES

Once regulations are in place, penalties are discussed. The goal of regulatory enforcement agencies is to ensure compliance, whereas prosecution agencies exist to assess responsibility and punish violations. The NOAA Fisheries Office for Law Enforcement (OLE) has both mandates. These two mandates often lead to conflict when we are criticized for not pursuing cases of wrongdoing more aggressively, and then criticized for being too heavy handed when pursuing major civil and criminal violations. OLE works with various NOAA and NMFS divisions, the Fishery Management Councils, NOAA General Counsel, and the U.S. Attorney's Office to determine the appropriate prosecution method for an offense. OLE has one of the most versatile selections of penalties of any agency in the United States. For civil violations, these include verbal warnings, fix-it notices, written warnings, summary settlement fines, as well as monetary penalties permit sanctions, permit suspensions, and permit revocations from NOAA General Counsel. There are also options for hearings with a Civil Administrative Law Judge or with a federal judge in federal civil court. Our goal is to seek the least penalty to gain compliance. If a penalty is too low, it may result in being the cost of doing business. If a penalty is too high, a person discovering they have committed a civil violation may decide to cover up the error instead of reporting it. Or, they may feel the need to challenge the violation in court, not to claim innocence, but to petition for a lower penalty. For criminal violations, penalties include monetary penalties, home confinement, and/or imprisonment. Criminal investigations and prosecutions are saved for the intentional violators who commit the violation many times, conspire with others, or those who intentionally commit one serious offense where a civil penalty would not be appropriate or adequate.

MATRIX of MANAGEMENT MEASURES

The U.S. Coast Guard and NOAA OLE completed a matrix to help fishery managers and staff better understand enforcement aspects related to certain management measures. It is important to note these guidelines address the enforceability of the regulation, not necessarily the merits of the regulation. Where it is applicable and important to enforcement agencies, the guidelines address safety, economics and biology considerations.

These guidelines provide a matrix to rapidly identify how enforceable a management measure is by at-sea cutter patrols, aircraft patrols, and dockside enforcement. The matrix is supplemented by an analysis defining each management measure, outlines the enforcement advantages and disadvantages of the measure, and then concludes with a recommendation on how to write regulations to make the management measure the most enforceable. For ease of organization, the management matters are listed and described alphabetically.

Matrix Defining the
Enforceability of Fishery Management Measures

	At-Sea Ship	At-Sea Aircraft	Dockside
Limiting Amount/Percent Landed			
Limiting Amount/Percent Onboard			
Prohibiting Retention			
Closed Areas			
Closed Seasons			
Gear/Vessel Restrictions			
ITQs/IFQs			
Recordkeeping & Reporting			
Permits			
Size Restrictions			

KEY

Reasonable
Possible with some difficulty
Impractical

LIMITING AMOUNT / PERCENTAGE ON BOARD

Definition: This management measure aims to reduce non-target species (and minimize it's mortality) by limiting the amount or percentage of a non-target species allowed on board a fishing vessel.

Advantages:

- Allows for the potential for at-sea enforcement. If at-sea boarding determines that the limit / percentage is met, then the fishing vessel may be directed home to preclude further retention.

Disadvantages:

- Full and accurate count of catch onboard cannot easily be done at sea during in most fisheries (due to species mixing, loading, icing, safety of boarding party in accessing fish hold at sea, etc.).

- High-grading may be an issue.

Recommendations:

- Regulations should specify how much primary catch is required to justify retention of non-target species, and in what amounts. This is necessary to preclude non-target species from becoming a targeted catch.

- Consider prohibitions which regulate types of gear or types of operations to minimize non-target catches.

- Policies should incorporate industry best practices and consider any industry recommendations.

- Segregating catch at sea would facilitate enforcement.

- This provision works best with frozen product. Also, where there are only two species retained, segregation would help enforcement.

PROHIBITING RETENTION

Definition: This enforcement measure aims to restrict retention by prohibiting the retention of a certain species aboard fishing vessels.

Advantages:

- Prohibition violations are easier to document and enforce than regulations that allow a limited percentage to be retained.
- Allows for at-sea enforcement. Once fish are landed, detecting a violation for retention of prohibited species is easy if enforcement is present.

Disadvantages:

- May create an incentive to hide prohibited species from observers or to underreport prohibited species catch if it influences the fishing season.

Recommendations:

- Consider prohibitions which regulate types of gear or types of operations to minimize non-target catches.
- Policies should incorporate industry best practices and consider any industry recommendations.

CLOSED AREAS

Definition: Fishing in specific area is restricted.

Advantages:

- Fairly easy to monitor if below recommendations are followed.
- Very easy to monitor with VMS. However, even with VMS cueing, a response asset is generally required to document the violation for prosecution.
- Easy to document presence in the closed area by aircraft overflight and over the horizon cutter monitoring. It is tougher to document fishing activity, depending on the fishery and gear type.

Disadvantages:

- Without VMS, the effectiveness is directly proportional to the surveillance effort.

Recommendations:

- Clearly defined areas. Use exact latitude/longitude and straight lines. Avoid simply stating distance offshore, center point and radius, or depth contours.
- Regular shaped areas. In most situations, closed areas are easier to enforce if they are square or rectangle shaped, since it is more clear cut that a vessel is west/east, north/south of an indicated line, and therefore, in or outside a closed area.
- Large closed areas are preferred in most situations. Small closed areas with open areas in between make it easier to cheat by enabling a vessel to quickly enter and exit a closed area. However, if making smaller areas opens fishing grounds, then there may be less incentive to violate the closed area restriction.
- If possible, close an area to all activity; limit grand-fathering and other exemptions. Where practical, areas should be closed to all types of fishing as well as transiting fishing vessels.
    - If transit is allowed, fishing gear should be stowed and transit must be continuous (no loitering/stopping). Stowage requirements must be clearly defined.
    - Regulated gear areas are difficult to enforce, because still require an enforcement unit to verify that fishing vessel is using legal gear in the closed area.

CLOSED SEASONS

Definition: Fishing during specific times of the year is prohibited

Advantages:

- Large vessel fisheries are easy to monitor since vessels are in port or in other fisheries.
- Gear intensive fisheries (pots, etc.) are noticeable if a vessel gears up for a trip.
- The presence of species in a closed season should be detected if it shows up in the market if retention is not allowed anywhere.

Disadvantages:

- Small vessel fisheries are more difficult to monitor. Smaller quantities are easier to hide in the market.
- Fisheries with multiple gear types for the same species are especially difficult to enforce if only one gear type has a closed season.

Recommendations:

- See Closed Areas: ensure closures are clearly defined; limit exemptions to the closed season, and dates/times should be defined to the minute.
- Regulations should fully describe what activity is allowed to occur before, during, and after the closure. For example: all gear must be hauled in prior to the closure, gear may not be set prior to the opening. For short duration fisheries, prohibit all fishing with any gear type 72 hours before and after the fishery.
- Monitoring the fishing vessels with VMS during closed seasons can greatly aid enforcement.

GEAR/VESSEL RESTRICTIONS

Definition: Specific gear types or gear modifications are prohibited. "Gear" is meant to include not only the primary methods and tools to harvest the resource, but also includes the vessels, horsepower and other such variables. Certain regulatory gear may be required to minimize catch of non-target species and/or protect certain marine species (i.e., pelagic vs non-pelagic trawls or seabird avoidance gear).

Advantages:

- Gear is easy to inspect dockside and in most cases, readily visible at sea.

Disadvantages:

- Restrictions on gear employment (i.e. set/trawl depth) are more difficult to enforce. For example, a limitation on amount of fixed gear/hooks is difficult to regulate/enforce.

- Normally gear needs to be inspected at-sea to ensure gear is in compliance while engaged in the act of fishing. This becomes resource intensive as it may require multiple checks at sea and is intrusive, as it will require the gear to be inspected while at sea, possibly impacting the vessel's fishing operations and fostering ill feelings towards enforcement officers.

Recommendations:

- If use is prohibited, then allowing the gear on board should be prohibited.

- Gear restrictions should be standardized across state and federal boundaries.

- Federal and state enforcement officers should develop and use standard procedures, equipment and techniques.

ITQs/IFQs

Definition: Individual Quotas Programs. These delineate a specified amount of particular fish species to be allocated to an individual, a particular vessel, a processor, or a community.

Advantages:

- IQs are often praised for their safety benefits. By allowing a fishermen a set quota to be caught over a long period of time the fishermen is able to choose when to fish rather than being forced -to fish during bad weather based on arbitrarily determined time periods (derby fisheries).

- Once an IQ is met, enforcement can treat additional fish above the quota as prohibited species.

Disadvantages:

- Manpower intensive. Spreads out fishing effort. Instead of specific fishing seasons to monitor, a fishery may last nearly year round, and possibly require more assets for the extended season.

- Individual quota holders have the incentive to underreport their landings throughout the fishing season.

Recommendations:

- Effectiveness depends on monitoring landings.

- Electronic reporting provides real time debiting of an IQ account. That is beneficial to enforcement, to the fisherman, and to the RAM Division. Electronic reporting has also proven to decrease errors in reporting.

- VMS should be required in IQ fisheries. This allows NMFS and CG enforcement to ensure vessels are fishing where they are authorized, and it also allows NMFS and CG to deploy their people, vessels, and aircraft to where fishing and offload activity is taking place.

- If at-sea quota debiting is allowed, the use of certified scales, observers, and video monitoring should be considered to ensure accuracy.

RECORDKEEPING AND REPORTING

Definition: A requirement to keep records of specified information on board the vessel. As technology permits, the data from records could be transmitted to managers for decision-making depending on the fishery and the requirement for catch or effort information.

Advantages:

- At-sea boarding can verify the presence and use of logbooks and other records and dockside monitoring of offloads can verify accuracy of catch data.

Disadvantages:

- Full and accurate count of catch onboard is difficult at sea for unprocessed fish. (Due to species mixing, loading, icing, safety of boarding party in accessing fish hold at sea, etc.).

Recommendations:

- Regulations need to identify the time requirements for completing reports and entering logbook data (per set, daily, end of trip). By specifically describing the time requirement, the type of enforcement required (at-sea, dockside) can be better determined.

- Standard logbook format for all federal fisheries.

- Use of electronic reports can simplify data collection that can be used by enforcement. Electronic reports can be used as a way to provide enforcement near real-time data before or during a boarding. Electronic reporting has also proven to greatly reduce reporting errors.

PERMITS

Definition: Document which indicates allowable gear type, fishing areas, and/or species which are allowed to be retained.

Advantages:

- Easy to track and identify.
- Revocation or suspension of permit is an effective penalty provision
- Easy method for enforcement to determine lawful operations.

Disadvantages:

- Permits are largely used by enforcement to identify allowed fishing activity, but the bureaucracy for amending them, or when a permit is turned in and then re-issued, creates a system where mistakes can be made and fishermen may not have the patience to wait for accurate permits to be processed before going fishing.

Recommendations:

- For most circumstances original, not copies, must be carried on board the vessel at all times.
- Permit transfers must follow strict guidelines and should require adequate notification to enforcement agencies.
- Standardize permit format across fishery management plans where possible.

SIZE RESTRICTIONS

Definition: Possession or fish below or above a specified size is prohibited.

Advantages:

- Violations are easy to document and prosecute

Disadvantages:

- Effectiveness is limited by the amount of processing done at sea.
- Effectiveness is proportional to the effort expended in dockside checks and at-sea boardings. Has potential to be manpower intensive.
- High-grading (fishing after trip limit is met and keep a high-grade (in most cases - larger) fish and discard a lesser grade fish) can occur.

Recommendations:

- Prohibit processing/filleting at sea. Measurements should include head and tail intact.
- Standard measurement procedures, equipment and technique by state and federal agencies.
- Maintain same regulations across state and federal boundaries.

WOOD

Ms. Stephanie Madsen
Chair, NPFMC
605 W. 4th Avenue
Anchorage, AK 99501-2252

April 7, 2005

RE: D-3 Staff Tasking and trailing EFH actions

Dear Ms. Madsen:

Thank you for the opportunity to provide comment on the Council's consideration under staff tasking of any trailing action on EFH for the Bering Sea. As you know, the Bering Sea portion of the Council's final EFH motion in February included an "assessment of gear modification" for protection of Bering Sea EFH. The undersigned Bering Sea flatfish and cod fishing companies believe that Bering Sea EFH is distinctly different from that of the Aleutian Islands and the Gulf of Alaska due to the Bering Sea's sand and mud substrates at relatively shallow depths. For this reason, gear modifications to reduce the percentage of bottom trawl footropes or sweeps that contact the seafloor seems to be a potentially beneficial approach. As you may recall, members of industry worked with the EFH Committee to incorporate alternatives to reduce bottom contact through the placement of discs on the trawl sweeps during the recently completed EFH EIS process. While the EFH model scores (Appendix B) indicated that there is great potential for such a gear modification to reduce the area affected by the flatfish fisheries, the analysts concluded that little was known in terms of the efficacy of the proposed gear modifications. Essentially, no studies of whether such modifications actually reduce the area affected by the trawl have ever been conducted. So any assessment of the potential benefits of gear modification for flatfish and cod trawls will necessitate collecting new information.

In order to help generate the necessary information, we want to work with the Council and NMFS to evaluate modifications to bottom trawls used in the Bering Sea. To this end, we have had several meetings with Dr. Rose of the AFSC' RACE Division to see what can be done to start to collect the necessary information about the effects of these gear modifications. This has led to a study plan at this point where Dr. Rose intends to conduct some research this summer or fall on a flatfish vessel. The goal is to test some of these alternative ground gear designs to evaluate effects of gear modifications on target species catch rates as well as eventual measurement of the change in the portion of the gear that contacts the substrate.

We are very pleased by NMFS' willingness to conduct cooperative research on this matter and even more encouraged by the prospect of having information on the potential benefits of bottom trawl gear modifications over the next year or two. While we understand the Council's desire to finish its consideration of EFH protection measures in an expeditious manner, we also hope that the Council and NMFS can accommodate the timing of the availability of this information on bottom trawl gear modifications because this area seems to be the most potentially effective and practicable approach for the Bering Sea. Thanks in advance for your consideration of these comments.

Sincerely,

Bill Orr	Tim Meintz	Susan Robinson	Keith Bruton	Dave Wood	Dave Olney
Iquique US	Cascade Fishing	Fishermen's Finest	O'Hara Corp.	US Seafoods	Arctic Sole Seafoods