Agenda Item C.1.a
Supplemental CDFG Report
April 2007

California Department of Fish and Game (CDFG) Request for June Agenda Item on Permitting the Groundfish Open Access (OA) Fishery

Background

Conversion of the current open access groundfish fishery to a limited entry management system has been a Council priority since development of the groundfish Strategic Plan, adopted in 2000. While a federal limited entry groundfish program was established in 1994, it did not include all vessels that landed groundfish. Participation in the open access portion of the fishery was left unlimited to ensure that vessels active in state-managed fisheries and/or landing groundfish incidentally, would continue to have access to that resource. Since 1994, any vessel without a federal limited entry permit has been allowed to directly target and land groundfish under OA fishery regulations and limits.

The fleet quickly became overcapitalized, and a control date for the open access fishery was set as November 5, 1999 to put fishermen on notice that the Council was considering permitting the open access fleet. In November 2003, the Council agenda included "Open Access Limitation Discussion and Planning;" however, as with many management issues needing Council attention, work on this issue has been repeatedly delayed due to other high priority issues.

In September 2006, the discussion of the OA fishery again surfaced as the Council dealt with extremely low overfished species Optimum Yields and the challenge of crafting meaningful fishing seasons. The Council reviewed the original control date for the OA fishery and determined that it was "stale" because significant time had elapsed since adopting that date. The Council therefore adopted a new control date of September 13, 2006. NMFS announced the new control date in the *Federal Register* on November 1, 2006 (71 FR 64216.)

California has the greatest number of vessels participating in the OA fishery and accounts for approximately 61% of coastwide OA participation. Oregon also has an OA fleet and contributes approximately 31% of vessels making OA landings , while WA vessels contribute the remainder. The OA fishery is characterized by variability in the number of participating vessels and by variability in which particular vessels participate from year to year. This variability contributes to difficulty in accurately estimating bycatch of overfished species for inseason management and results in additional difficulties in predicting effort for developing management measures. The CDFG is concerned that continued allowance of an unrestricted open access fishery may interfere with bycatch reduction goals and continue to add instability to the groundfish fishery.

Planning

To facilitate the consideration of permitting the groundfish open access fishery, the CDFG worked with the National Marine Fisheries Service to develop a draft timeline and approach to "closing" the OA fishery. The CDFG intends to provide an informational report to the Council in June, characterizing historical and current open access fishery landings. In addition, we intend to identify issues that will need to be considered as we move forward in the discussion.

The scope of the OA permitting discussion should include a range from simply establishing a moratorium permit to establishing qualifying criteria that significantly reduce effort in the fishery. The potential timelines and responsibilities necessary to develop and adopt a license limitation program for open access groundfish fisheries are displayed below. The Council will need to discuss how to integrate an OA permitting timeline with the timeline for the 2009-2010 specifications and management measures. For implementation during the 2009/2010 management cycle, the following abbreviated timeline is provided for purposes of future Council agenda planning:

Step	Dates
Initial Overview and Council Direction for Development of Alternatives	June 2007
Identification of Alternatives and CDFG/NMFS Document Development	June – September 2007
Council meeting: adopt preliminary range of alternatives and preliminary preferred alternative (optional) for public review	November 2007
Council meeting: final adoption of preferred alternative	April 2008
Implementation phase and initial permit issuance	April 2008 thru April 2009
Permits required	May 2009

Agenda Item C.1
Situation Summary
April 2007

FUTURE COUNCIL MEETING AGENDA PLANNING

The primary purpose of this agenda item is to provide initial information to Council Members early in the Council meeting to facilitate planning for future Council meeting agendas.

The Executive Director will review initial drafts of the three-meeting outlook and the June Council meeting agenda, and respond to any questions the Council may have regarding these initial planning documents. This agenda item is essentially informational in nature; however, after hearing any reports and comments from advisory bodies or the public, the Council may wish to provide guidance to the staff for use in preparing for Agenda Item C.7 at which time final consideration of the three-meeting outlook and draft June agenda are scheduled.

Council Tasks:

1. **Receive information on potential agenda topics for the next three Council meetings.**
2. **Receive information on an initial draft agenda for the June 2007 Council meeting.**
3. **Provide guidance on the development of materials for Agenda Item C.7 (June agenda and three-meeting outlook).**

Reference Materials:

1. Agenda Item C.1.a, Supplemental Attachment 1: Preliminary Draft Three-Meeting Outlook for the Pacific Council.
2. Agenda Item C.1.a, Supplemental Attachment 2: Preliminary Draft June Council Meeting Agenda, June 10-15, 2007 in Foster City, California.
3. Agenda Item C.1.c, Public Comment.

Agenda Order:

a. Agenda Item Overview — Don McIsaac
b. Reports and Comments of Advisory Bodies
c. Public Comment
d. Council Discussion of Future Council Meeting Agenda Topics

PFMC
03/20/07

FISHING VESSEL OWNERS' ASSOCIATION
INCOPORATED

ROOM 232, WEST WALL BUILDING • 4005 20TH AVE. W.
SEATTLE, WASHINGTON 98199-1290
PHONE (206) 284-4720 • FAX (206) 283-3341

SINCE 1914

March 15, 2007

Mr. Donald K. Hansen, Chairman
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, Oregon 97220-1384

Agenda item, (C), Future Council Meeting Agenda Planning:

Chairman Donald K. Hansen,

As you know the Sablefish Tiered program is an IFQ program and as such has an excessive ownership and use provision, which was recommended by the P.F.M.C. and implemented by the NMFS. Currently the excessive ownership cap is 3 tiered sablefish permits and the use limit per vessel is also capped at three sablefish permits. These caps are not a problem for our members. However a problem has developed in how the terms "control and use" are counted for purposes of determining the three permit limit by the NMFS.

In 2006 the NMFS finished the implementation of various aspects of the tier sablefish program. In order to establish verification of ownership and control each permit holder sent ownership information pertaining to the permit or permits owned to NMFS plus ownership information of the fishing vessel on which a permit would be fished. Vessel owners submitted the appropriated partnership, corporate and sole proprietor information. In counting ownership and control of permits NMFS counts a permit against a person regardless of percent owned. If a person has a partnership of 50% each person is credited with one full permit. This accounting has not resulted in any problems that we are aware of, and this is what we expected based on the action of the council.

The problem we have encountered is that a permit is also counted against the use and ownership caps if a person has any ownership in any

vessel that might be fishing a tiered permit. If you happen to be an owner in more than one vessel is where we have experienced a problem. I have attached the March Groundfish Advisory Panel, GAP, minutes, which addresses this issue. The minutes contain an actual circumstance and two proposed solutions. Without some relief people are being required to sell off their permits or being told they can not fish the permits on their vessels.

In another situation a person could have ownership in two vessels and own no tiered permits. If one vessel fished three permits belonging to the crew and the other vessel fished one permit belonging to a crew the vessel owner would be in violation of the excessive control and use provision by one permit. If the council believes that ownership in a vessel is a reasonable tool to use for determining excessive limits we request that those with minority interest in a vessel have some relief.

I have talked to several of our vessel owners where they have some ownership interest in a second vessel and in all cases this problem could be resolved, for them, if minority ownership in an additional vessel of 20 percent or less was not counted for purposes of ownership and control. It has been suggested that this issue could be taken up under the biennial spec process and be more efficiently addressed than if it was a stand alone regulatory action. We, therefore request that the Council add this issue to be analyzed during the next biennial spec process. The GAP unanimously requested this issue be considered by the council at the March meeting.

Sincerely,

Robert D. Alverson, manager
Fishing Vessel Owners Association

Agenda Item D.6.b
Supplemental GAP Report
March 2007

GROUNDFISH ADVISORY SUBPANEL REPORT ON COUNCIL THREE-MEETING OUTLOOK AND APRIL 2007 COUNCIL MEETING AGENDA

The Groundfish Advisory Subpanel (GAP) requests that the Council agenda the following issue for the GAP discussion for the April Council meeting:

Fishery - Sablefish Tiered fishery.

Issue - The definition and interpretation of ownership and control for purposes of determining excessive ownership of sablefish tiers.

Current Problem: The problem arises when a person has invested in more than one fishing vessel. The limit of 3 permits per person and vessel use limit of 3 are not a problem.

Example of the problem: There is a vessel owner and his partner who each own 50% of a vessel. In addition to this, one of the partners owns 20% interest in a second vessel with his brothers. Both vessels fish the maximum of three tiers. However, the vessel owner only personally owns 50% of one permit, which is fished on the first vessel, of which he owns 50%. Because ownership and control includes his name on the Coast Guard ownership certificate papers of both vessels as well as whom NMFS has named on the tiered permit, this particular vessel owner owns and controls 6 permits. He is being charged with ownership and control of 3 permits on his brothers' vessel, none of which he has ownership in. He is also being charged with the three permits being fished on his vessel which he has 50% ownership.

Anyone who has ownership in more than one vessel, regardless of the ownership percentages can find themselves in this situation. NMFS has included vessel ownership as part of the control definition because they contend the vessel will get some financial benefit for the fish being fished on the vessel and therefore has some control over the permit. The GAP does not believe this to be the case and is not part of the intent of ownership and control of a permit. The control is with the person who actually owns the fishing permit not the owners of the vessel.

Solution 1: Drop the ownership of a vessel from the definition of ownership and control of a sablefish tier.

Solution 2: Ownership of less than 50% of a vessel will not count toward ownership and control of a sablefish tier.

This discussion will likely provide some insight on how excessive use and ownership caps might be enforced and considered for the trawl individual transferable quota program.

PFMC
03/08/07

Preliminary Three Meeting Outlook for the Pacific Council

(Contingent Items are Shaded and Counted in Time Estimate)

June Foster City, CA 6/10-6/15/07 Estimated Percent of Standard Floor Time = 104%	1.04	**September** Undetermined (9/9-9/14/07) Estimated Percent of Standard Floor Time = 103%	1.03	**November** San Diego, CA (11/4-11/9/07) Estimated Percent of Standard Floor Time = 126%	1.26
Administrative		**Administrative**		**Administrative**	
Closed Session; Open Session Call to Order; Min.	1.7	Closed Session; Open Session Call to Order; Min.	1.7	Closed Session; Open Session Call to Order; Min.	1.5
Legislative Committee Report	0.5	Legislative Committee Report	0.5	Legislative Committee Report	0.5
Fiscal Matters	0.5	Fiscal Matters	0.5	Fiscal Matters	0.5
Interim Appt. to Advisory Bodies & Final COP for RFMO Proc.	0.8	Interim Appointments to Advisory Bodies	0.3	Interim Appointments to Advisory Bodies	0.25
MSA Reauthorization Implementation	1.5	MSA Reauthorization Implementation	1.5	MSA Reauthorization Implementation	1.5
3 Mtg Outlook, Drft Sept Agenda, Workload (2 sessions)	0.8	3 Mtg Outlook, Drft Nov Agenda, Workload (2 sessions)	0.8	3 Mtg Outlook, Drft Mar Agenda, Workload (2 sessions)	0.75
Public Comment on Non-Agenda Items	0.5	Public Comment on Non-Agenda Items	0.5	Public Comment on Non-Agenda Items	0.5
RecFIN Sampling Update	1				
Coastal Pelagic Species		**Coastal Pelagic Species**		**Coastal Pelagic Species**	
NMFS Rpt	0.5			NMFS Rpt	0.5
Pac. Mackerel Stk Assmnt & HG for 2007-2008: Adopt Final	1			Pac. Sardine Stk Assessment & HG for 2008: Adopt Final	1
Enforcement Issues		**Enforcement Issues**		**Enforcement Issues**	
		State Activity Rpt	0.75		
Groundfish		**Groundfish**		**Groundfish**	
NMFS Report	0.5	NMFS Report	1	NMFS Report	1
2007 Inseason Mgmt (2 Sessions)	3	2007 Inseason Management (2 Sessions)	3	2007 Inseason Management (2 Sessions)	3
Trawl IQ: Further Refinement of Alts.	4			Trawl IQ: Adopt Alts. to Analyze for DEIS	6
Intersector Allocation EIS: Adopt Alts. for Analysis	2.5			Intersector Allocation: Adopt Preferred Alt (Prelim DEIS)	3
Stock Assessments for 2009-10: Adopt Updates & Full for Skate & Sablefish	2	New Stock Assessments: Adopt All for 2009-2010	3	New Stock Assessments: Mop up, if Necessary	2
Open Access Limitation: Direct Dev of Alternatives	3	Open Access Limitation: Refine Proposed Alts	3	Open Access Limitation: Adopt Prelim Alts for Pub Rev	4
Biennial Mgmt Spx (2009-2010): Prelim Sched & Process	0.8	Biennial Mgmt Spx (2009-2010): Final Sched & Process	0.75	Mgmt Spx for 2009-10: Adopt New RB Analyses, Prelim Range of ABCs & OYs, & Range of Mgmt Measures	5
EFPs for 2008: Preliminary Rev & comment	1			EFPs for 2008: Final Recommendations	1.5
Shore-based Whiting Monitoring Program: Adopt Final	2.5			Off-Year Sci. Improvements: Prioritize & Plan for 2008	1.25
FMP A-15 (AFA): Adopt Alts for Analysis & Public Rev (DEA)	4	FMP A-15 (AFA): Final Council Action	4		
Habitat Issues		**Habitat Issues**		**Habitat Issues**	
Habitat Committee Report	0.8	Habitat Committee Report	0.75	Habitat Committee Report	0.75
Highly Migratory Species		**Highly Migratory Species**		**Highly Migratory Species**	
		NMFS Rpt	0.5	NMFS Rpt	0.5

Agenda Item C.1.a
Supplemental Attachment 1
April 2007

Preliminary Three Meeting Outlook for the Pacific Council

(Contingent Items are Shaded and Counted in Time Estimate)

June Foster City, CA 6/10-6/15/07 Estimated Percent of Standard Floor Time = 104%	1.04	**September** Undetermined (9/9-9/14/07) Estimated Percent of Standard Floor Time = 103%	1.03	**November** San Diego, CA (11/4-11/9/07) Estimated Percent of Standard Floor Time = 126%	1.26
(note: final adoption of COP for RFMO in Admin Agenda)		New EFPs for 2008: Adopt for Pub Rev	2	New EFPs for 2008: Adopt Final Recommendations	2
		Albacore Fishing Effort Characterization	1.5		
		Final SAFE Rpt: Adopt	0.5		
		Yellowfin Overfishing: Adopt Alts. for Pub Rev	1.5	Yellowfin Overfishing: Final Action	1
Marine Protected Areas		**Marine Protected Areas**		**Marine Protected Areas**	
Pacific Halibut		**Pacific Halibut**		**Pacific Halibut**	
		Changes to 2008 CSP & Regs: Adopt for Pub Rev	1	Changes to 2008 CSP & Regs: Adopt Final	0.75
		Halibut Bycatch Est for IPHC: review	0.75		
		Halibut Abundance Estimation for 2008	0.75		
Salmon		**Salmon**		**Salmon**	
Mitchell Act EIS: Comments within Comment Period	0.5			Preseason Salmon Mgmt Sched for 2008: Appove	0.5
		2007 Methodology Review: Select Final Rev Priorities	1.25	2007 Methodology Review: Adopt Final Changes	1
		Prelim. KRFC Escapement Shortfall Report: Review	1		
Information Reports		**Information Reports**		**Information Reports**	
Salmon Fishery Update		Salmon Fishery Update			
HMS Draft SAFE Rpt					
New GF Stock Assessments for SSC Rev		New Stock Assessments for SSC Rev			
CPS Safe Rpt					
Special Sessions		**Special Sessions**		**Special Sessions**	
		Joint Session Monday for New Stock Ass. Rev			
				1 hr =3%	

PROPOSED COUNCIL MEETING AGENDA, JUNE 10-15, 2007, FOSTER CITY, CALIFORNIA

	Sun, Jun 10	Mon, June 11	Tues, June 12	Wed, Jun 13	Thurs, June 14	Fri, June 15
Day-Time Council Floor Matters		**CLOSED SESSION** 2:30 pm **CALL TO ORDER** 3:30 pm (15 min) **ADMINISTRATIVE** B.1 Future Agenda Planning (15 min) B.2 Final COP for RFMO Proc. (30 min) **OPEN PUBLIC COMMENT** D.1 Comments on Non-Agenda Items (30 min)	**SALMON** E.1 Comments on Mitchell Act EIS (30 min) **HABITAT** F.1 Current Issues (45 min) **GROUNDFISH** G.1 NMFS Report (30 min) G.2 Biennial Mgmt Spx Process 2009-10 (45 min) G.3 Final Amend. 10 (2 hr 30 min) G.4 Open Access Limitation Prelim Alts (3 hr)	**ADMINISTRATION** B.3 RecFIN Sampling Update (1hr) **COASTAL PELAGIC SPECIES** H.1 NMFS Rpt (30 min) H.2 Pacific Mackerel Stock Assmnt. & HG 2007-2008 (1 hr) **GROUNDFISH** G.5 Preliminary Review of EFPs for 2008 (1 hr) G.6 Stock Assessments (Updates, plus Skate, & Sablefish) (2 hr) G.7 Inseason Adjustments (2 hr)	**GROUNDFISH** G.8 Intersector Allocation EIS (2.5 hr) G.9 Trawl IQ EIS (4 hr) **ADMINISTRATIVE** B.4 MSA Reauthorization Implementation (1.5 hr)	**GROUNDFISH** G.10 Final Inseason Adjustments (1 hr) G.11 Amendment 15 (AFA)—Adopt Alts for Pub Rev (4 hr) **ADMINISTRATIVE** B.5 Legislative Matters (30 min) B.6 Fiscal Matters (30 min) B.7 Interim Appointments (30 min) B.8 Minutes (15 min) B.9 3-Meeting Outlook, Sept Agenda (30 min)
		2 hr 30 min	**8 hr**	**7 hr 30 min**	**8 hr**	**7 hr 15 min**
Committees	1:00 pm GAP 1:00 pm GMT	8:00 am GAP 8:00 am GMT 8:00 am SSC 8:30 am BC 9:00 am HC 9:30 am LC 1:00 pm Chr B 4:30 pm EC	8:00 am EC 8:00 am GAP 8:00 am GMT 8:00 am SSC	8:00 am EC 8:00 am GAP 8:00 am GMT	8:00 am EC 8:00 am GAP 8:00 am GMT	8:00 am EC

There are no Council-sponsored evening sessions scheduled at this time.

Agenda Item C.1.b
Supplemental NMFS Report
April 2007

UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southwest Region
501 West Ocean Boulevard, Suite 4200
Long Beach, California 90802- 4213

MAR 30 2007

151423SWR2007PR00137

Dr. Donald McIsaac
Executive Director
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, Oregon 97200-1384

Dear Dr. ~~McIsaac~~ Don:

I am writing to make you aware of the recent publication of the 2007 List of Fisheries (LOF) (72 FR 14466, March 28, 2007). As you know, NOAA's National Marine Fisheries Service (NMFS) is required under the Marine Mammal Protection Act to publish an annual LOF categorizing all federal and state fisheries based upon levels of interactions with marine mammals. A complete list of all Pacific fisheries and their categories can be found in Table 1 of the 2007 LOF.

The process for publication of the 2008 LOF is already underway. The Southwest Regional Office and all of NMFS's regional offices are reviewing the current LOF and developing recommendations that will be incorporated into the proposed 2008 LOF, to be published in July 2007. The final 2008 LOF is scheduled to be published in November 2007.

I welcome the Council's involvement in this process through review of the current LOF and encourage submission of recommendations for the 2008 LOF. The Council may want to include review of the LOF as an agenda item at the June 2007 meeting to ensure that any recommendations can be incorporated into the proposed 2008 LOF by the close of the public comment period on September 1, 2007.

Please contact Elizabeth Petras of my staff at (562) 980-3238 if we can be of further assistance.

Sincerely yours,

Rod

Rodney R. McInnis
Regional Administrator

MAGNUSON-STEVENS ACT REAUTHORIZATION IMPLEMENTATION

At its March 2007 meeting, the Council reviewed the Magnuson-Stevens Act (MSA) as amended by the *Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006*. Implementation of the provisions in the new MSA will involve considerable coordination between the National Marine Fisheries Service and the eight regional councils. The Council directed Council staff to continue working to meet timelines for implementing the new provisions and scheduled three specific items for Council action at the April 2007 Council meeting: (1) the process for establishing annual catch limits (ACLs) and accountability measures (AM); (2) consideration of proposals for a new environmental review process for fishery management actions; and (3) implementation of Western Central Pacific Fisheries Commission provisions.

The reauthorized MSA requires that fishery management plans (FMPs) "*establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability*." Council FMPs are currently being reviewed for consistency with this recommendation. Council staff has provided information to the National Oceanic and Atmospheric Administration (NOAA) regarding exiting mechanisms for ACLs and AMs (Agenda Item C.2.a, Attachment 1) and has drafted a staff white paper on groundfish harvest issues associated with individual fishing quotas, intersector allocation, and rebuilding requirements (Agenda Item C.2.a, Attachment 2). If current Council ACLs and AMs are determined by NOAA to be insufficient, Council FMPs may be required to be amended by 2010 for overfished species and 2011 for all other species. NOAA is currently soliciting input on the development of alternative guidelines for ACLs and AMs and has published a Notice of Intent (NOI) to prepare an Environmental Impact Statement (EIS) (Agenda Item C.2.b, Attachment 1). The public comment deadline for the NOI has been extended to April 17, 2007. The resulting guidelines are intended to be added to the proposed revision to National Standard 1 Guidelines.

The reauthorized MSA requires the development of revised procedures on environmental review and analysis of fishery management decisions within one year. The Council Coordination Committee (CCC) has submitted a draft proposal intended to integrate applicable environmental analytical procedures of the National Environmental Policy Act (NEPA) with the procedures for preparation or amendment of FMPs (Agenda Item C.2.a, Attachment 3). The goal is to align timelines more closely with FMP processes and reduce paperwork while providing clear and concise analyses for decision makers and maintaining effective public involvement.

The reauthorized MSA also requires that NMFS promulgate new Experimental Fishing Permit (EFP) regulations that "create an expedited, uniform, and regionally-based process to promote issuance, where practicable, of experimental fishing permits. NMFS is considering "experimental fishing permits" to be synonymous with "exempted fishing permits," for which national regulations were established in May 1996. Since the March 2007 Council meeting, NMFS has solicited Council comments on EFP provisions in the MSA and the current EFP application and issuance process on the West Coast.

NMFS is holding scoping sessions around the nation, including Council deliberations and public testimony under this agenda item. To facilitate discussion, NOAA has drafted a scoping session handout on ACLs and AMs (Agenda Item C.2.b, Attachment 2), has distributed a request for comments on new environmental review requirements (Agenda Item C.2.b, Attachment 3), and has circulated a timeline for meeting the new MSA provisions for EFP regulations (Agenda Item C.2.b, Attachment 4). These documents and a presentation on ACLs and AMs are posted on a NMFS website on implementation of provisions of the MSA reauthorization (www.nmfs.noaa.gov/msa2007/).

Finally, the Council requested input from its Highly Migratory Species (HMS) advisory bodies regarding implementation of the Western and Central Pacific Fisheries Convention (WCPFC) (Agenda Item C.2.a, Attachment 4). Specifically the Council is interested in recommendations on coordination with Pacific Regional Fishery Management Councils and in determining appropriate Council and West Coast representation. To facilitate focused public comment and Council decision-making, the Council will take this matter up under Agenda Item J.5 where the Council is scheduled to review the Council Operating Procedure covering HMS recommendations to Regional Fishery Management Organizations.

The Council is scheduled to hear a NMFS presentation on ACLs and AMs, review and discuss NMFS and Council staff documents on new MSA provisions, consider the testimony of its advisory bodies and the public, and direct planning on the next steps in implementation. Additionally, the Council may approve formal comments on NMFS plans to prepare an EIS on ACL and AM guidelines, the CCC proposal for environmental review procedures, and revisions to EFP regulations.

Council Task:

1) Direct Planning and Action on New MSA Requirements, 2) Approve formal comments on ACL and AM guidelines, 3) Approve formal comments on environmental review procedures, 4) Approve formal comments on new EFP regulations, and 5) Plan to discuss U.S. representation to the WCPFC under Agenda Item J.5.

Reference Materials:

1. Agenda Item C.2.a, Attachment 1, February 8, 2007 memorandum from Mr. Risenhoover regarding Council input to NOAA regarding existing ACLs and AMs.
2. Agenda Item C.2.a, Attachment 2, Council Staff White Paper*: Managing Yield in a Groundfish Management Regime of Individual Fishing Quotas, Intersector Allocations, and Stringent Rebuilding Requirements.*
3. Agenda Item C.2.a, Attachment 3, CCC Draft Proposed for MSA/NEPA Compliance.
4. Agenda Item C.2.a, Attachment 4: WCPFC Excerpt from the *Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006.*
5. Agenda Item C.2.b, Attachment 1, February 14, 2007 Federal Register Notice of Intent to prepare and EIS to analyze alternative guidelines for ACLs and AMs.
6. Agenda Item C.2.b, Attachment 2, NMFS Scoping Session Handout: *ACLs and AMs: Requirements of the 2006 Amendments to the MSA.*
7. Agenda Item C.2.b, Attachment 3, NMFS Request for Comments: *Magnuson-Stevens Fishery Conservation and Management Reauthorization Act, Environmental Review Procedures*.
8. Agenda Item C.2.b, Attachment 4, NMFS Timeline for EFP Regulations

Agenda Order:

a. Agenda Item Overview — Mike Burner
b. NMFS Comments
c. Reports and Comments of Advisory Bodies
d. Public Comment
e. **Council Action:** Direct Planning and Action on New Requirements as Needed for Timely Implementation

PFMC
03/19/07

Pacific Fishery Management Council

7700 NE Ambassador Place, Suite 101, Portland, OR 97220-1384
Phone 503-820-2280 | Toll free 866-806-7204 | Fax 503-820-2299 | www.pcouncil.org

February 28, 2007

Mr. Alan Risenhoover
Deputy Director, Office of Sustainable Fisheries
National Marine Fisheries Service
1315 East-West Highway
Silver Spring, MD 20910

RE: Magnuson-Stevens Fishery Conservation and Management Act Implementation

Dear Alan:

Please note the following in response to your February 5, 2007 memorandum requesting information as a follow-up of the January 10-11, 2007 meeting of Regional Fishery Management Council Chairs and Executive Directors.

1. Meeting the New Annual Catch Level Requirements

In general, the Pacific Council currently prevents overfishing by various precautionary mechanisms in initial harvest level setting, specific to individual fishery management plans (FMPs), bolstered by in-season management for some species. The good Pacific Council track record on overfishing events speaks to the adequacy of these mechanisms. Accountability for overages when they do occur is typically via adjustments in management measures (seasons, trip limits, closed areas, etc.) to reduce fishing power below that of the year of overage to the extent that another overage would not occur. See the attached narratives for the Pacific Council's FMPs for salmon (Attachment 1), highly migratory species (Attachment 2) groundfish (Attachment 3), and coastal pelagic species (Attachment 4). Should your staff have further questions on these attachments, please have them contact Chuck Tracy (salmon), Kit Dahl (highly migratory species), John DeVore (groundfish), or Mike Burner (coastal pelagic species) at the Council office.

2. Stipends for SSC and AP and other Committee Members

The attached spread sheet (Attachment 5) details the information requested in your memo. We interpreted "employed by a federal government or State marine fisheries agency" as full time employment, not partial or contracted employment. We note that if a stipend was granted at half the pay rate of Council Members, the estimated annual cost for the Pacific Council would be just over $380,000.

3. Management Plan Schedule

We do not have routine reviews of any of our FMPs scheduled prior to 2010. However, we are tracking currently scheduled amendments for the groundfish (5) and highly migratory species (1) FMPs, for specific purposes other than annual catch limit amendments.

4. Training Requirements

Please see attached emails (Attachments 6 and 7) received in response to your request. Additionally, we received comment that the adequacy of National Marine Fisheries Service funding of Council activities be included as a topic.

5. 2007 Training and Orientation for New Council Members

The weeks of October 22 and October 15 are offered as suggestions for 2007 orientation and training efforts.

Sincerely,

Donald McIsaac, PhD.

cc: Mr. Don Hansen
Mr. Dave Ortmann
Dr. John Coon
Mr. Mike Burner
Dr. Kit Dahl
Mr. John DeVore
Mr. Jim Seger
Mr. Chuck Tracy
Mr. Daniel Furlong
Mr. Paul Howard
Mr. Robert Mahood
Mr. Chris Oliver
Mr. Miguel Rolon
Ms. Kitty Simonds
Mr. Wayne Swingle

Salmon Fishery Management Plan

Annual Catch Limit

Mechanisms and Measures

Mechanisms

Council area salmon seasons are set using the total allowable ocean harvest determined by conservation and allocation objectives in the fishery management plan (FMP). Conservation objectives have been established for over 40 salmon stocks originating in Council area production regions; unfortunately, estimating the stock composition in the landed catch can not be done visually; therefore, models are frequently used to estimate stock composition in mixed stock salmon fisheries and to constrain fisheries to acceptable impact levels for critical stocks.

For each management area or subarea, the Council has the option of managing the commercial and recreational fisheries for either coho or Chinook using the following methods: (1) fixed quotas and seasons; (2) adjustable quotas and seasons; and (3) seasons only. The Council may also use harvest guidelines within quotas or seasons to trigger inseason management actions which were established in the preseason regulatory process.

The total allowable harvest is based on the expected impacts to the constraining stock(s) associated with projected harvest of all stocks in the time/area management strata. Regulation models are used to estimate impacts for key stocks in Council managed fisheries. The Chinook and Coho Fishery Regulation Assessment Models (FRAM) are multi stock models, while the Klamath Ocean Harvest Model (KOHM) is a single stock model. The Coho FRAM covers the entire Council management area, and includes representations for all key stocks. All coho fisheries in this area are quota managed based on the Coho FRAM projections. The Chinook FRAM covers the area from Cape Falcon, Oregon to the U.S./Canada border and includes representations for Chinook stocks from the Columbia River north. All Chinook fisheries in this area are quota managed based on the Chinook FRAM projections. The KOHM covers the area from Cape Falcon, Oregon to Point Sur, California, but only estimates impacts on Klamath River fall Chinook. Because the KOHM is a single stock model, estimates of total catch are sufficiently accurate only in areas where Klamath River fall Chinook make up a large fraction of the total abundance. Therefore, quota management is generally only used in the Klamath Management Zone (KMZ), between Humbug Mt. Oregon and Horse Mt. California, or to limit catch in data poor management strata.

Quotas provide very precise management targets and work best when accurate estimates of stock abundance and distribution are available, or when needed to ensure protection of depressed stocks from potential overfishing. Quotas are not guaranteed harvests, but rather the maximum allowable harvest which assures meeting the conservation objective of the species or stock of concern. While time and area restrictions are not as precise as quotas, they allow flexibility for effort and harvest to vary in response to abundance and distribution.

Measures

Managers require certain information about the fisheries during the season to control the harvest to meet established quotas and goals. If conditions differ substantially from those expected, it may be necessary to modify the fishing seasons, quotas, or other management measures. The following information is used for inseason management:

a. harvest of each species by each fishery in each fishing area by day and by cumulative total;
b. number of commercial troll day boats and trip boats fishing;
c. estimated average daily catch for both day and trip boats;
d. distribution and movement of fishing effort;
e. average daily catch and effort for recreational fishery;
f. estimates of expected troll fishing effort for the remainder of the season;
g. information on the contribution of various fish stocks, determined from recovered coded-wire tags, scales, or other means.

Inseason management requires updating information on the fisheries daily. Thus, data will be collected by sampling the landings, radio reports, and telephone interviews.

In general, data necessary for inseason management will be gathered by one or more of the following methods. Data on the current harvests by commercial and treaty Indian Ocean fishermen will be obtained by telephoning selected (key) fish buyers, by sampling the commercial landings on a daily basis, and from radio reports. Data on the current effort of, and harvests by, the recreational fisheries will be obtained by telephoning selected charter boat and boat rental operators and by sampling landings at selected ports. Analyses of fish scales, recovered fish tags, and other methods will provide information on the composition of the stocks being harvested.

The Salmon FMP specifies the following procedures for taking inseason actions:

1. Prior to taking any inseason action, the Regional Director will consult with the Chairman of the Council and the appropriate State Directors.
2. As the actions are taken by the Secretary, the Regional Director will compile, in aggregate form, all data and other information relevant to the action being taken and shall make them available for public review during normal office hours at the Northwest Regional Office, National Marine Fisheries Service, 7600 Sand Point Way NE, Seattle, Washington 98115.
3. Inseason management actions will become effective by announcement in designated information sources (rather than by filing with the Office of the Federal Register [OFR]). Notice of inseason actions will still be filed with the OFR as quickly as possible.

   The following information sources will provide actual notice of inseason management actions to the public: (1) the U.S. Coast Guard "Notice to Mariners" broadcast (announced over Channel 16 VHF-FM and 2182 KHZ); (2) state and federal telephone hotline numbers specified in the annual regulations and (3) filing with the *Federal Register*. Identification of the sources will be incorporated into the preseason regulations with a requirement that interested persons periodically monitor one or more source. In addition, all the normal channels of informing the public of regulatory changes used by the state agencies will be used.

4. If the Secretary determines, for a good cause, that a notice must be issued without affording a prior opportunity for public comment, public comments on the notice will be received by the Secretary for a period of 15 days after the effective date of the notice.

Accountability is assured during the annual preparation of the Stock Assessment and Fishery Evaluation document and the preseason planning documents for upcoming seasons. Quota overages in the previous season are noted and the cause identified. Total allowable catch overages are fairly rare in Council area salmon fisheries, although exceeding individual stock impact expectations occur more frequently. For constraining stocks the target impact level is expected to be exceeded 50% of the time, assuming an unbiased model. However, if the model appears to have a consistent bias, or if results fall outside the observed range, a review is conducted and necessary adjustments are made. Adjustments are usually associated with input data for the models, such as the years included in parameter estimates.

Highly Migratory Species Management Plan Annual Catch Limit Mechanisms and Measures

Mechanisms to specify annual catch limits in the highly migratory species (HMS) fishery management plan (FMP), implementing regulations or annual specifications to prevent overfishing. Measures to ensure accountability such as but not limited to control rules or default measures.

The default control role in the HMS FMP is to set optimum yield (OY) (or an OY proxy) equal to maximum sustainable yield (MSY) (or proxy) for species not considered vulnerable. For vulnerable species the OY (or proxy) is set to 75% of MSY (or proxy). Vulnerability of species can stem from many reasons, and any species that has been depleted to 50% below B_{MSY} (for the logistic production model, to 25% of unfished level B_0) that is incapable of recovering back to that B_{MSY} level within 10 years (with fishing removed) is to be considered vulnerable in this FMP. The productivities (potential per capita rates of population increase *r*) of such species would have to be 5% or less per year, assuming recovery time is determined by a linear compensatory increase in *r* with population decline (logistic model). Only the sharks among the Management Unit Species (MUS), including common thresher, are likely to have such low rates and long recovery times, and they are therefore considered vulnerable by this criterion. Vulnerable OYs are also appropriate for other fish species for other reasons of stock health concern.

The Council may adopt or modify any harvest guidelines, quotas or other management measures annually based on information provided in the Stock Assessment and Fishery Evaluation (SAFE) Report. The Regional Administrator will implement through rulemaking any necessary and appropriate harvest guidelines or other management measures based on the SAFE Report recommendations from the Council and the requirements contained in the FMP. (see 50 CFR 660.709)

Initial harvest guidelines established in the FMP apply to the shortfin mako shark and thresher shark. A harvest guideline if surpassed calls for review of the stock/population and its fishery. The purpose is to alert the Council to the possibility that catches under its jurisdiction are at or near a particular target level.

Most HMS are widely distributed and harvest by West Coast-based vessels represents only a small fraction of total fishing mortality out of the overall range of the species, and any unilateral action, such as a reduction in the US West Coast harvest or effort, would not have significant biological effect on the stock. However, in some cases unilateral action may be warranted. Otherwise the Council may make recommendations for action to the appropriate Regional Fishery Management Organization through National Marine Fisheries Service and the Department of State.

Mechanisms Used to Meet Annual Groundfish Catch Limits on the West Coast

The Pacific Fishery Management Council (Council) uses a variety of mechanisms to meet annual catch limits (ACLs) (all sources of fishing-related mortality are counted against ACLs) for groundfish that are intended to prevent overfishing. These mechanisms include precautionary reductions to acceptable biological catch (ABC); precautionary management measures such as depth-based closed areas or Groundfish Conservation Areas (GCAs), precautionary trip limits, bag limits, seasons, and gear configurations; established harvest guidelines and bycatch caps; and periodic inseason adjustments to management measures.

The precautionary reductions to ABCs are made in cases where (1) stocks are quantitatively assessed with biomasses estimated to be below that which supports maximum sustainable yield (MSY), (2) stocks are not quantitatively assessed, but appear to have a declining biomass trend based on catch or catch per effort trends, (3) stocks have data-poor assessments, and (4) stocks are quantitatively assessed with biomasses estimated to be at or above that which supports MSY, but co-occur with overfished stocks. Annual catch limits are managed to prevent overfishing by updating projections of total catch through the year using landings and discard mortality estimates and adjusting management measures accordingly. Fixed bycatch caps and harvest guidelines are also specified by fishing sector with automatic regulatory actions, such as fishing closures and GCA adjustments when they are attained inseason. All of these mechanisms have worked in concert to prevent overfishing, except in rare circumstances of unexpected effort shifts of a magnitude significant enough to prevent timely fishery adjustments. While there are no forcing mechanisms in the fishery management plan or federal regulations that automatically adjust harvest specifications or management measures following an instance of overfishing, Council practice has been to specify more precautionary management measures the following season to prevent those rare management miscues.

Coastal Pelagic Species (CPS) Fishery Management Plan (FMP)

Mechanisms the Pacific Council uses to prevent overfishing of CPS:

The Annual Catch Limit (ACL) for Actively Managed species (Pacific sardine, and Pacific mackerel):

- The maximum ACL is calculated using species specific Maximum Sustained Yield (MSY) Harvest Control Rules. The Harvest Control Rules are applied to biomass estimates resulting from annual stock assessment updates reviewed and approved by the Scientific and Statistical Committee. Every three years, full assessments are completed and reviewed by both the SSC and a Stock Assessment Review Panel before harvest recommendations go before the Pacific Council.
- Within an ACL the Pacific Council implements a harvest guideline or quota that may be at or below the recommended ACL. Landings are monitored throughout the fishing season and directed harvest is prohibited if landings are projected to meet or exceed harvest specifications before the end of the season. At such time, predetermined incidental harvest provisions are implemented to ensure incidental landings in other CPS fisheries do not result in overfishing of the species of concern.

The Annual Catch Limit for Monitored species (northern anchovy, jack mackerel, and market squid):

- Northern anchovy and jack mackerel landings are relatively low and ACL is determined by a default MSY Harvest Control sets ACL for the entire stock (U.S., Mexico, Canada, and international fisheries) equal to 25% of the best estimate of the MSY catch level. AS with actively managed species, inseason landings are closely monitored.
- The market squid fishery operates on an annual landings cap. The MSY Control Rule for market squid is based on evaluating (throughout a fishing season) levels of egg escapement associated with the exploited population. The estimates of egg escapement are evaluated in the context of a "threshold" that represents a minimum level that is considered necessary to allow the population to maintain its level of abundance into the future (i.e., allow for "sustainable" reproduction year after year). The fishing mortality (F_{MSY}) that results in a threshold level of egg escapement of at least 30% will be used initially as a proxy for MSY. However, it is important to note that the level of egg escapement will be reviewed on an intermittent basis as new information becomes available concerning the dynamics of the stock and fishery, to ensure that the proposed threshold meets its objective as a long-term, sustainable biological reference point for this marine resource. The market squid fishery operates within the constraints of currently adopted regulations as dictated by the California Department of Fish and Game (e.g., annual landings cap, weekend closures, closed areas) and NMFS, as long as egg escapement is equal to, or greater than, the threshold value. In the event that egg escapement is determined to be below the 30% threshold for two successive years, then a point-of-concern would be triggered under the FMP's management framework and the Council could consider moving market squid from Monitored to Active management status.

Mechanisms the Pacific Council uses to Ensure Accountability:

Pacific Council CPS Harvest Control Rule

The general form of the MSY control rule utilized for West Coast CPS fisheries was designed to continuously reduce the exploitation rate as biomass declines. The general formula used is:

$$H = (BIOMASS-CUTOFF) \times FRACTION$$

H is the harvest target level, CUTOFF is the lowest level of estimated biomass at which directed harvest is allowed and FRACTION is the fraction of the biomass above CUTOFF that can be taken by the fishery. BIOMASS is generally the estimated biomass of fish age 1+ at the beginning the season. The purpose of CUTOFF is to protect the stock when biomass is low. The purpose of FRACTION is to specify how much of the stock is available to the fishery when BIOMASS exceeds CUTOFF. It may be useful to define any of the parameters in this general MSY control rule so that they depend on environmental conditions or stock biomass, as is currently done with Pacific sardine. In such cases, the MSY control rule depends explicitly on the condition of the stock or environment.

The general MSY control rule for CPS is useful for CPS that are important as forage and for protecting stocks from overfishing or from becoming overfished. If the CUTOFF is greater than zero, then the harvest rate (H/BIOMASS) declines as biomass declines. By the time BIOMASS falls as low as CUTOFF, the harvest rate is reduced to zero. The CUTOFF provides a buffer of spawning stock that is protected from fishing and available for use in rebuilding if a stock becomes overfished. The combination of a spawning biomass buffer equal to CUTOFF and reduced harvest rates at low biomass levels means that a rebuilding program for overfished stocks may be defined implicitly. Moreover, the harvest rate never increases above FRACTION. If FRACTION is approximately equal to F_{MSY}, then the MSY control rule harvest rate will not exceed F_{MSY}. In addition to the CUTOFF and FRACTION parameters, a maximum harvest level parameter (MAXCAT) is established for Pacific sardine and is used to guard against extremely high catch levels due to errors in estimating biomass to reduce year to year variation in catch levels, and to avoid overcapitalization during short periods of high biomass and high harvest. MAXCAT also prevents the catch from exceeding MSY at high stock levels and spreads the catch from strong year classes over a wider range of fishing seasons.

Additional Pacific Council Accountability Measures in the CPS FMP

Overfishing occurs in the CPS fishery whenever catch exceeds acceptable biological catch (ABC) and overfishing is approached whenever projections indicate that fishing mortality or exploitation rates will exceed the ABC level within two years. The definition of an overfished stock is an explicit part of the MSY control rule for CPS stocks. Under the CPS FMP the Pacific Council must take action to eliminate overfishing when it occurs and to avoid overfishing as exploitation rates approach overfishing levels. Per the MSY Harvest Control Rules, ACL would automatically reduce as biomass declines but the Pacific Council may take additional action if overfishing levels are approached by setting the ACL below the harvest levels allowed under the MSY Harvest Control Rules to ensure overfishing levels are avoided.

PACIFIC FISHERY MANAGEMENT COUNCIL

Committee Name	Number of members who meet stipend criteria (A)	Number of meetings / year (B)	Average length of meeting (in days) (C)	Total number of work days (=A*B*C)
Ad Hoc CPS Tribal Allocation Committee	2	1	1	2
Ad Hoc Full Retention Committee	1	0	0	0
*Ad Hoc Groundfish EFH Review Committee	12	3	2	72
Ad Hoc Groundfish EFH EIS Oversight Committee	2	1	3	6
Ad Hoc Groundfish Habitat Technical Review Committee	6	0	0	0
Ad Hoc Multi-year Management Committee	0	0	0	0
Ad Hoc Groundfish Strategic Plan Implementation Oversight Committee	2	0	0	0
Ad Hoc Groundfish Strategic Plan Implementation Oversight Committee Open Access Conversion Subcommittee	7	1	2	14
Ad Hoc Groundfish Trawl Individual Quota Committee	15	3	2	90
Ad Hoc Highly Migratory Species Management Committee	1	0	0	0
Ad Hoc Marine Protected Area Committee	6	0	0	0
Ad Hoc Observer Implementation Committee	2	0	0	0
Ad Hoc Salmon Amendment Committee	8	7	1	56
Ad Hoc Shore-based Whiting Amendment Workgroup	3	0	0	0
Ad Hoc Trawl Individual Quota Analytical Team	0	0	0	0
Ad Hoc Trawl Individual Quota Enforcement Group	0	0	0	0
Ad Hoc Trawl Individual Quota Independent Experts Panel	5	1	2	10
Ad Hoc Vessel Monitoring System Committee	7	0	0	0
*Ad Hoc Committee To Be Named	12	3	2	72

Attachment 5
February 28, 2007 Letter
McIsaac to Risenhoover

PACIFIC FISHERY MANAGEMENT COUNCIL

Committee Name	Number of members who meet stipend criteria (A)	Number of meetings / year (B)	Average length of meeting (in days) (C)	Total number of work days (=A*B*C)
*Ad Hoc Committee To Be Named	12	3	2	72
Coastal Pelagic Species Advisory Subpanel	10	3	2	60
Groundfish Advisory Subpanel	20	5	5	500
Groundfish Allocation Committee	9	2	2	36
Groundfish Management Team	1	9	4	36
Habitat Committee	8	5	1	40
Highly Migratory Species Advisory Subpanel	12	3	2	72
Model Evaluation Workgroup	3	2	1	6
Salmon Advisory Subpanel	15	5	4	300
Salmon Technical Team	1	7	4	28
Scientific and Statistical Committee	5	5	2	50
TOTAL				1522
McIsaac/CCED AB Chart.xls				

Attachment 6
February 28, 2007 Letter
McIsaac to Risenhoover

From Rod Moore <seafood@attglobal.net>
Sent Tuesday, February 20, 2007 3:47 pm
To 'Carolyn Porter' <Carolyn.Porter@noaa.gov>
Subject RE: Council Member Training and Orientation

Carolyn - I've been at two of the training sessions, once as a participant and once as a presenter. On the whole, I think NMFS - or more accurately, their contractor - has done a very good job in trying to bring a diverse group of people up to speed over the course of a couple of days.

Since MSFCMA is changing and management is becoming even more science-driven, I agree with the commenters that emphasis should be placed on understanding stock assessments and how they relate to management. You need to understand how you arrived at the bottom line before you start trying to adjust it.

I disagree with giving Robert's Rules a high priority. Copies of Robert's are available in any bookstore; this isn't something that needs to be taught in a national class.

Similarly, I would not emphasize specific regional issues (NWHI for example); I would, however, suggest that some discussion be given over to the interaction of the Councils with National Marine Sanctuaries. Every Council but the North Pacific has at least one Sanctuary in its waters; people need to understand how they interact.

Please feel free to pass these comments on to Alan.

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Rod Moore
West Coast Seafood Processors Association
1618 SW 1st Ave., Suite 318
Portland, OR 97201
503-227-5076

Attachment 7
February 28, 2007 Letter
McIsaac to Risenhoover

From SwordsTuna@aol.com
Sent Tuesday, February 20, 2007 1:09 pm
To Carolyn.Porter@noaa.gov
Subject Re: Council Member Training and Orientation

The orientation list covers almost everything. But, one item that may need attention is socioeconomic needs and affects to management, even though National Standard 1 always takes precidnece. There is some confusion on fairness of resource management
where in particular to sharinf the resource among the groups.

Kathy Fosmark

Managing Yields in a Groundfish Management Regime of Individual Fishing Quotas, Intersector Allocations, and Stringent Rebuilding Requirements

Potential Mechanisms Designed to Avoid Overharvest and Optimize Sector Fishing Opportunities

An Issue Paper Developed by Council Staff for the Pacific Fishery Management Council's Consideration in April 2007

(NOTE: suggested analyses and key questions for consideration are noted in this document in *bold italics*)

Introduction

The Pacific Fishery Management Council (Council) is considering a trawl individual quota (TIQ) program for rationalizing the limited entry trawl groundfish fishery. Concurrently, the Council is considering an allocation of the available harvest of managed groundfish stocks and stock complexes to each of four different non-tribal sectors of the West Coast groundfish fishery: limited entry trawl, limited entry fixed gear, directed open access (i.e., vessels commercially targeting groundfish without a federal permit), and recreational[1]. This intersector allocation process supports development of a TIQ program, where trawlers will need a set allocation of species to manage their fishery using individual transferable quotas and/or fishing cooperatives, as well as other Council objectives such as bycatch reduction and a more stable management regime.

The reauthorized Magnuson Stevens Act includes a new provision to end overfishing once it is detected. Overfishing is defined in federal regulations as a realized harvest rate in excess of that which produces maximum sustainable yield (MSY). In terms of absolute harvest of West Coast groundfish stocks, this would equate to a total catch in excess of the acceptable biological catch (ABC). In the Pacific Council process, precautionary management measures and frequent inseason adjustments to ongoing fisheries are used to stay within specified ABCs and OYs. While occurrences of overfishing groundfish stocks on the West Coast have been rare using this process, there have been recent instances of overfishing. Significant uncertainty in current catch monitoring systems has led to unanticipated occurrences of overharvest (i.e., harvest in excess of sector catch limits and/or sector catch projections) in recent years in both commercial and recreational fisheries. These reasons and the need to protect fishing sectors from premature closures due to catch overages in other sectors compel consideration of a different management framework.

Challenges to Managing Low Yields with Intersector Allocations

The Council has identified the four non-tribal groundfish fishing sectors for consideration of set allocations of groundfish species and complexes. The Council proposes set-asides of needed yields to account for the unavoidable, incidental groundfish bycatch in non-groundfish and tribal fisheries and total mortalities accrued in research activities. These set-asides would be deducted from the allowable harvest before intersector allocations are made. There is a high likelihood

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[1] Tribal allocations may be pursued in a separate government-to-government process and treated as a yield set-aside in the analyses in the intersector allocation EIS.

that very low yields of the most constraining groundfish stocks will be available to groundfish fishing sectors once this management regime is implemented. Implicit in this process is that each sector would be responsible for maximizing their fishing opportunities while not overharvesting their allocated quotas of groundfish. Each sector has unique challenges to overcome that depend on the sector's ability to avoid constraining species and the relative uncertainty of their catch monitoring systems.

Limited Entry Trawl Management Challenges

Current fishing opportunities for the limited entry non-whiting trawl sector are most constrained on the shelf by the bycatch of canary, bocaccio (south of 40°10' N latitude), and widow rockfish; and on the slope north of 38° N latitude by darkblotched rockfish and Pacific ocean perch. Gear restrictions, depth-based rockfish conservation area (RCA) and essential fish habitat area closures, and trip limits are used to target healthy species while minimizing bycatch. At-sea observers track discards in this fishery with about 25% of the trips sampled under the West Coast Groundfish Observer Program (WCGOP).

The whiting-directed trawl sectors are most constrained by canary, darkblotched, and widow rockfish. Fixed allocations of whiting and hard bycatch caps for the three most constraining rockfish species are used to target whiting while minimizing bycatch. Attainment of the hard bycatch caps during the primary whiting season triggers closure of the non-tribal sectors even if sector whiting allocations have not been caught. Unlike the non-whiting trawl fleet, whiting vessels are exempt from RCA restrictions, but are subject to specific Chinook salmon conservation area closures adjacent to the mouths of the Klamath and Columbia rivers. Further depth-based area closures are implemented inseason if Chinook salmon bycatch approaches critical levels as determined in a consultation process pursuant to the Endangered Species Act. The at-sea fleets (catcher vessels delivering to motherships, and catcher-processor vessels) have 100% at-sea observation requirements. Whiting vessels delivering to shoreside plants are required to fully retain and deliver all their catch. Electronic monitoring is contemplated for the shore-based whiting sector to ensure maximum retention of catches.

Due to catch monitoring uncertainty and other facets of the current management regime, none of the trawl fleets are without risk of exceeding their harvest guidelines and/or allocations. The whiting fleets, which receive almost real time reports of their total catch, are at risk of attaining the bycatch cap for an overfished species before achieving their annual whiting quotas. The non-whiting trawl fleet is at greater risk of exceeding their allocations due top greater variance of catch estimates since only about a quarter of the fleet is sampled at any one time under the WCGOP. There is also a lag of about two months for receiving landings information from fish tickets, and an even longer lag for receiving trawl logbooks; both streams of data are needed to reconcile observer data and provide final trawl catch estimates.

While the limited entry trawl fleets are observed at-sea more frequently than any other West Coast fishing sector, fishing opportunities are still compromised by random "disaster" tows, i.e., significantly large catches of a constraining species. Disaster tows are unpredictable and rare events. ***[Determine frequency and magnitude of disaster tows in the various trawl sectors from the WCGOP]***. Depth-based management is currently the most effective strategy for reducing bycatch. Seasonally variable trip limits and selective trawl gear configurations also contribute to bycatch reduction. In spite of these measures, the fleets are still hampered by overcapacity and uncertain fishing prospects due to unpredictable disaster tows. Therefore, to achieve mandated economic and conservation objectives, the Council is considering rationalizing

the limited entry trawl sector using individual transferable quotas and/or a cooperative system, enabling vessels to combine quotas, risks, and profits.

Under the contemplated trawl rationalization system, quota pounds would be allocated and could be transferred between vessels. Vessels could no longer fish once their allocation of quota pounds for a target or bycatch species is exhausted. More quota pounds would need to be purchased to cover any deficits before that vessel could again go fishing. This mechanism should reduce bycatch given a strong economic incentive for fishermen to more carefully and selectively prosecute their fishery. However, the risk of sector catch overages (i.e., catches exceeding the sector's annual allocation of a given species) would not be entirely eliminated since a single disaster tow of a more constraining species (e.g., canary rockfish) could easily be large enough to exceed the sector's allocation and adversely affect further fishing opportunities for that sector and possibly other sectors as well. (The worst case scenario is a disaster tow or series of tows that are sufficiently large to risk exceeding the species' OY or ABC and prematurely closing the IFQ fishery). Furthermore, the availability of quota to cover catch overages may be scarce. It is also possible that the demand for quota pounds of the most constraining stocks may drive the price of this quota up to a point where it is not economically feasible to continue fishing. These inherent risks are not fully mitigated with a TIQ management system.

Limited Entry Fixed Gear Management Challenges

Current fishing opportunities for the limited entry fixed gear sector are most constrained on the shelf by canary and yelloweye coastwide, bocaccio south of 40°10' N latitude, and cowcod south of 34°27' N latitude. Depth-based RCA closures and seasonally varying trip limits are used to target healthy species while minimizing bycatch. At-sea observers track discards in this fishery, although the fleet is observed at less than a 25% rate under the WCGOP. ***[Determine the current WCGOP sample rate].***

The primary target groundfish species for the limited entry fixed gear sector are nearshore species, which are managed using limited entry state permits in California and Oregon (there are no nearshore commercial fisheries allowed in Washington waters), sablefish, and slope rockfish. Fixed gears are particularly effective at targeting rockfish in high relief, rocky habitats. The management measures most often used to manage harvest in this sector are trip limits and specification of the non-trawl RCA. There is very little information to justify seasonally varying the boundary lines of the non-trawl RCA due to the lack of a logbook program and other area/season-specific catch information. Therefore, the non-trawl RCA has been static since its inception and its configuration is likely to remain unchanged given the very low harvest rates allowed for canary and yelloweye rockfish in their respective rebuilding plans. This fact also limits further fishing opportunities for this sector. Any liberalization of management measures in the latitudes and depths these species are distributed increases the risk of exceeding harvest guidelines and quotas allocated to this sector.

Open Access Management Challenges

Current fishing opportunities for the directed open access sector are most constrained on the shelf by canary and yelloweye coastwide, bocaccio south of 40°10' N latitude, and cowcod south of 34°27' N latitude. Depth-based RCA closures and seasonally varying trip limits are used to target healthy species while minimizing bycatch. At-sea observers track discards in this fishery, although the fleet is observed at a very low rate under the WCGOP, especially south of 40°10' N latitude. ***[Determine the current WCGOP sample rate north and south of 40°10' N latitude].***

Like the limited entry fixed gear sector, the primary target groundfish species for the directed open access sector are nearshore species, sablefish, and slope rockfish, and the same types of management measures are used for this sector. However, trip limits for the directed open access sector are typically much less than those for the limited entry fixed gear sector. Beginning sometime in 2007, any open access vessel landing groundfish species on the West Coast will be required to carry a vessel monitoring system (VMS) to ensure compliance with the RCA closure.

The directed open access sector is at great risk of exceeding specified harvest guidelines and quotas primarily due to the lack of effort controls and the paucity of at-sea observations of discards in the sector. Effort is currently controlled by varying the trip limits and, most frequently, the daily or weekly limits in the daily-trip-limit (DTL) sablefish fishery. This strategy is, at best, an inexact instrument for controlling open access effort. The Council is currently contemplating a limited entry scheme for the directed open access fishery, whereby any vessel catching and retaining groundfish in federal waters would be required to have a federal permit. This process is at too early a stage to predict fleet size, qualification criteria for a federal permit, or any of the effects of implementing a limited entry system for this sector.

Recreational Management Challenges

Current fishing opportunities for recreational groundfish fisheries are most constrained by canary and yelloweye rockfish coastwide, bocaccio south of 40°10' N latitude, and cowcod south of 34°27' N latitude. Seasons, bag and size limits, and depth-based closures are used to manage recreational groundfish catch. Retention of cowcod, canary, and yelloweye rockfish is prohibited coastwide to prevent targeting. A small bocaccio bag limit is specified in California to reduce discards and accommodate unavoidable bycatch. State and federal harvest guidelines are set for many of the harvestable stocks. Federal harvest guidelines are also specified for canary and yelloweye rockfish to control the amount of discard mortality allowed for the sector. Automatic management actions, such as season and/or depth-based closures, are invoked when it is projected that these federal harvest guidelines will be prematurely attained.

Recreational catch monitoring is based on stratified, random creel surveys in each state and the resulting mortality estimates for the sector are highly variable. Discard estimates are particularly uncertain since they are primarily based on angler interviews, with unobserved estimates of the magnitude and species composition of discards. There is an at-sea observer and mandatory logbook program for Commercial Passenger Fishing Vessels (CPFVs or charterboats) in California; total mortality estimates for this fleet are therefore more precise. The precision of overall recreational catch projections is compromised by this uncertainty and the highly variable nature of effort. Angler effort is hard to predict sine it is influenced by the relative abundance of various target species, weather, and competing fishing and non-fishing activities. These factors contribute to a high risk of recreational fisheries exceeding harvest guidelines and quotas. ***[Determine recreational groundfish sample rates by state and mode. Variance of catch estimates- landings and discards- by state and mode?]***

Tribal Management Challenges

There are four tribes that fish groundfish (Makah, Quileute, Hoh, and Quinault), all located in Washington. Current fishing opportunities are most constrained by canary and yelloweye rockfish. Of the four tribes, only the Makah Tribe fishes with trawl gear. Therefore, the Makah tribal fishing opportunities could also be constrained by darkblotched rockfish and Pacific ocean perch. The Makah Tribe requires full retention of groundfish and has an at-sea observation program to monitor compliance and provide area-specific bycatch information to the rest of the fleet. The Makah observer program targets a sample rate of 15% of all trips on a monthly and annual basis.

While tribal fishing activities are not subject to RCA restrictions, they are restricted to their usual and accustomed fishing areas, which are limited to discrete areas off the central and northern Washington coast. Two of the most constraining stocks on the West Coast, canary and yelloweye rockfish, are most abundant off the northern Washington coast within the usual and accustomed fishing areas of the Makah, Quileute, and Hoh tribes. Conducting tribal fisheries in areas where the most constraining stocks occur poses a significant risk of exceeding tribal sector allocations for those species.

Potential Mechanisms Designed to Avoid Overharvest and Optimize Sector Fishing Opportunities

There are a variety of mechanisms currently used by the Council to avoid overharvest and optimize fishing opportunities, such as buffers, bycatch caps, and sideboards. Other mechanisms, such as multiyear OYs and carryover provisions, are not currently used by the Council to achieve these objectives, but are posed for Council consideration to meet the challenges of managing harvest under a system of fixed sector allocations and trawl individual quotas.

Buffers

Buffers are residual yields at the beginning of a season not anticipated to be caught by any directed fishery. The Council often specifies management measures that are not expected to catch the entire OY of a given species. Any left over yield is reserved as a buffer to be used by any sector or dedicated to a given sector if catch is higher than anticipated. Buffers are particularly useful for managing total catch in a sector when catch accountability is highly uncertain. In theory, the higher the catch uncertainty of a given stock, the larger the buffer should be. As catch data is collected inseason, reducing annual catch uncertainty over the course of a season, fishing opportunities may be enhanced by reducing the buffer to allow higher mortality that is still within a specified annual catch limit or OY. This management strategy tends to break down when catch uncertainty is very high and time runs out in the season before management measures can be adjusted to achieve but not exceed OYs. Therefore, the risks and benefits of buffer management need to be constantly weighed to achieve mandated conservation and economic objectives.

Bycatch Caps

Bycatch caps are yield set-asides of species specified for a sector that, when attained, would trigger closure of a fishery. Bycatch caps are currently used on the West Coast to manage groundfish bycatch in whiting-directed trawl fisheries and, in most cases, approved exempted fishing permit (EFP) activities. The non-tribal whiting sectors are currently managed with bycatch caps for canary, darkblotched, and widow rockfish. When these caps are projected to be attained, the non-tribal whiting fishery automatically closes even if whiting quotas have not yet been attained. Bycatch caps specified for approved EFPs are used to close fishing activities by a participating vessel or vessels when they are attained. (EFP bycatch caps are often specified for individual vessels and all participating vessels on a monthly and/or annual basis). Bycatch caps are allowed under the groundfish FMP, but they have not yet been used more extensively.

Bycatch caps are often very small yield set-asides that require almost real-time reporting of total catch to be effective. Therefore, management using bycatch caps is compromised when sector catch accountability is poor. In such cases, there is an increased probability of a sector's catch overage co-opting fishing opportunities for other sectors, especially when the stock's OY is low.

Sideboards

Sideboards are very much like bycatch caps, but with perhaps more flexibility. A sideboard is a catch threshold that, when attained, would trigger an automatic action to reduce or eliminate mortality of that species. Such automatic actions include adjustment of RCAs, implementation of new regulations seaward or shoreward of the RCA, and/or trip limits. For instance, if a canary rockfish sideboard was specified and attained inseason in the non-whiting trawl fishery, the automatic action could be closure of all areas shoreward of the trawl RCA. Such an action would eliminate further catch of canary rockfish while still allowing opportunities to fish on the slope for flatfish and species in the Dover sole-thornyheads-sablefish (DTS) complex. While such an action may adversely affect vessels incapable of fishing in deep water, other vessels in the fleet would retain some fishing opportunity.

Carryover Provisions and Multiyear Optimum Yields

The use of buffers, bycatch caps, and sideboards are all effective strategies for reducing bycatch, but they alone will not eliminate the risk of exceeding sector quotas and OYs for some species. If each sector is ultimately responsible for limiting its bycatch, there would be less risk of one sector's overharvest compromising fishing opportunities for other sectors. An incentive/disincentive mechanism may be needed to change fishing behaviors to more selectively harvest healthy target species, while avoiding species of concern. Such a mechanism is managing constraining stocks with carryover provisions and multiyear OYs.

Carryover provisions would allow a transfer of yield surpluses or deficits of some species at the sector level (or permit/co-op level under a TIQ program) from one year to the next. Sector accounts would be settled by the end of the prescribed multiyear OY period. Management risk of exceeding a sector bycatch limit in any one year could then be spread over a longer period. Any one sector, or trawl vessel/co-op under a TIQ program, could consider a management strategy in the first year of a multiyear OY period and, if the annual bycatch target was exceeded, could adopt more conservative management measures in following years. This reduces the risk that management miscues might pre-empt future fishing opportunities for that or other sectors, and promotes more precautionary and selective fishing practices.

Stock life history characteristics should be considered when determining an appropriate multiyear OY period. Faster growing stocks with shorter mean generation times and fewer age classes should probably be managed with shorter OY periods. The most constraining rockfish stocks on the West Coast (i.e., cowcod, canary, and yelloweye rockfish) have many age classes in their populations and might be better managed with longer OY periods. Factors such as mean generation time and recruitment variability may be important considerations in selecting a risk-averse multiyear OY period.

Another consideration in determining the length of a multiyear OY period and implementing a carryover of sector or vessel yield surpluses and deficits is how this strategy could be managed across a period when new assessments are being approved for management use. Currently, all the overfished species are assessed every other year (i.e., as frequently as possible under the biennial management regime) to understand whether progress has been made in rebuilding these species. Other stocks may also potentially be assessed during a multiyear OY period. This begs the question of whether a carryover mechanism can work when an OY changes as a result of a new assessment partway through a multiyear OY management period. One possible solution may be to carry over yield surpluses and deficits based on the proportion of the OY this surplus or deficit represents. For instance, if a sector exceeds its previous year's quota by 10% and a new assessment of that stock resulted in a change to the OY, the new quota for that sector would be reduced by the proportion of the sector's previous catch overage (i.e., 10% of the OY) applied to the new OY. ***[SSC: Are there any adverse biological stock effects managing groundfish species under such a mechanism?]***

Managing OYs over a longer period may also be more responsive to new mandates in the Magnuson-Stevens Act to end overfishing. While current Council practices have led to few incidents of overfishing in recent years, spreading overfishing risk over a longer period may reduce the frequency of overfishing. The Council and NMFS may need to pose these considerations when developing new National Standard 1 Guidelines interpreting the re-authorized Magnuson-Stevens Act. The groundfish FMP and current groundfish rebuilding plans would need to be amended to accommodate multiyear OYs.

DRAFT Proposed 'Revised Procedure' for MSA/NEPA Compliance

(February 28, 2007 draft as proposed by the subcommittee of the Council Coordination Committee (CCC))

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) was recently amended with explicit direction to the Secretary of Commerce to "revise and update agency procedures for compliance with NEPA". Moreover, the revised MSA specifically states that such procedures "shall integrate applicable environmental analytical procedures, including time frames for public input, with the procedures for preparation and dissemination of FMPS, plan amendments, and other actions taken or approved pursuant to this Act (the MSA)…", and that "the updated agency procedures promulgated in accordance with this section shall be the sole environmental impact assessment procedure for FMPs, plan amendments, regulations, or other actions taken or approved pursuant to this Act (the MSA)". The revised procedure proposed herein envisions a single environmental review procedure, and a single environmental impact assessment (EIA), that pertains to all FMPs, amendments, or regulations promulgated through the regional fishery management council (RFMC) process under MSA. The distinction between an environmental assessment (EA), and environmental impact statement (EIS) becomes moot, as does the determination of 'significance'. This is because the single environmental assessment procedure (EIA) will be the same for any actions taken under MSA, and will generally be designed consistent with the higher standards typically associated with preparation of an EIS, in order to better ensure compliance with the underlying intent of NEPA. While it is envisioned that the level of analysis will be dictated by the issue at hand and the information at hand, this approach allows for the development of some tiers, related to the significance of the action (no impact, minor impact, major impact, for example), which may be created to frame the range of alternatives and necessary level of analysis.

It is proposed that the appropriate way to achieve this revised procedure is to develop a new NOAA Administrative Order (AO) which would be specific to fisheries actions under the MSA. NOAA and possibly CEQ regulations would be amended as necessary to reflect the application of this revised procedure. This new AO will specify the procedures to be used to integrate the environmental impact assessment (EIA) of proposed fishery management actions within the existing MSA process, in a manner which meets the NEPA requirements, and thereby achieve functional equivalency relative to the NEPA statute. The MSA process will be the vehicle for promulgating all fisheries actions, but will include measures necessary for NEPA compliance, as well as requirements of all other applicable Acts and Executive Orders, all incorporated into a single document. This Order would not affect any other existing regulations, Orders, or Acts, including the existing AO216-6, as it pertains to other NOAA line offices, which are promulgated under authorities other than the MSA.

Philosophy of proposal:

1. All actions approved or taken pursuant to the Magnuson-Stevens Fishery Conservation and Management Act (MSA) must comply with the National Environmental Policy Act (42 USC 4321-4347).

2. MSA actions, under this approach, need not necessarily comply with *existing* CEQ regulations (40 CFR 1500-1508), which govern the procedural provisions of the Act (NEPA). However, *new CEQ regulations may need to be developed* to reflect the new AO.

3. NOAA's environmental review procedures for implementing NEPA (NAO 216-6) must be replaced or rewritten with new procedures specifically for MSA actions, in the form of a new Administrative Order, but which include key CEQ regulatory provisions.

4. The single analytical process will be based on development of an environmental impact assessment (EIA), rather than make any distinction between an EA or EIS (and there is no need to determine whether 'significant' effects on the quality of the human environment will occur). The higher standard of the EIS model will be the default, though range of alternative and level of analysis would depend on the issue at hand and the information at hand. Some definition of tiers (no impact, minor impact, major impact, for example) may be included to frame the analytical requirements.

5. The Secretary cannot comply with timelines specified in the MSA, if the NEPA process commences only upon receiving the Council's proposed plan. Therefore, to implement the provisions of PL109-479, that the NEPA and MSA timeframes be consistent, the Council FMP development process (MSA) needs to be the primary vehicle for identifying alternatives and conducting the requisite analyses. The EIA (NEPA document) will be incorporated within the overall MSA analytical document.

Solution

- Develop a single environmental impact assessment (EIA) procedure to be used for all MSA actions.
    - Categorical exclusions for actions that have no environmental impact may still be utilized.
- Proposed Procedure will replace the CEQ regulations and NAO 216-6 as procedure for complying with NEPA for MSA actions.
    - Procedure will capture the substance of the CEQ regulations regarding analytical content and opportunities for public review and input.
    - Procedure will modify NAO 216-6 procedure to replace CEQ/NOAA's public involvement and notice requirements with the MSA public involvement procedure.
- Procedure and sample analytical format **attached**.
- Proposed new administrative order will specify the detailed new procedures.

Changes to CEQ regulations:

- Amend CEQ regulations as necessary to state that 40 CFR Parts 1500-1508 will not apply to actions approved or taken pursuant to the MSA (or revise with regulations which mirror the new procedures).
- For MSA actions, the newly developed, integrated procedure defined here will be the functional equivalent of the provisions of NEPA as implemented by CEQ regulations.
- Issue revised CEQ regulations consistent with provisions in the new AO.

Changes to NAO 216-6:

- Amend NAO 216-6 to state that administrative order does not apply to actions approved or taken pursuant to the MSA.
- Issue new administrative order and/or procedural regulations, as appropriate, specifying procedure for satisfying NEPA compliance for MSA actions (as contained in the new AO).
- RFMCs should be identified as partners in preparing the EIA to satisfy NEPA procedures.
- Remove references to fishery actions from NAO 216-6.

Changes to the Operational Guidelines for the Fishery Management Process

- Revise to incorporate process as described.

Practical effects of proposed process

- The Council shall complete a scoping process to identify the range of reasonable alternatives to accomplish the Council's management objective and to identify the issues which should be examined to evaluate the merits of those alternatives. In completing the scoping process, the Council shall solicit public comment.

- After completing the scoping process, the Council shall identify a reasonable range of reasonable alternatives to accomplish the Council's objectives. The Council shall explain its reasons for selecting those alternatives and for rejecting any other alternatives which may have been identified in the scoping process.

- After selecting the range of reasonable alternatives, the Council shall evaluate the ecological, social, economic, health, aesthetic and cultural effects of each alternative on the affected environment. The Council shall also evaluate the cumulative impact on the environment of each such alternative. In developing the required analyses, the Council shall solicit public comment regarding the effects of each alternative.

- After completing the evaluation provided for above, the Council shall review the analysis and may select a preferred alternative, or combination of alternatives, to accomplish the Council's objective. The Council shall explain the purpose of, and need for, the action and the reasons for selecting the alternative adopted by the Council. The Council shall solicit public comment on the analysis and the alternatives, including the preferred alternative if identified.

- After considering the analysis and public comments, the Council shall select a preferred alternative for recommendation to the Secretary for approval pursuant to the MSA. The submittal package to the Secretary shall include the necessary environmental analyses (EIA) required pursuant to 40 C.F.R. Part 1500 (*or the necessary revised* regulations).

- The Secretary shall review the FMP and NEPA documents (EIA) to determine if the requirements of MSA and NEPA have been satisfied. If not, the Secretary shall disapprove the FMP or FMP amendment. Practically, the EIA and other analyses would be evaluated concurrently and jointly throughout the development process by both the Council and appropriate NMFS personnel, to ensure that MSA, NEPA, and other requirements have been satisfied.

New process

Steps in MSA-NEPA analytical process		MINIMUM timeline to be specified in procedure
RFMC initiates analysis	- develops purpose and need - develops alternatives	1st RFMC meeting (may take several meetings to refine problem statement and alternatives depending on complexity and controversy of analysis)
Public input	- scoping commences with RFMC/NMFS action to initiate analysis - public notice of proposed analysis in RFMC agenda, and in RFMC newsletter/ website - public comment invited as written letters to RFMC or oral testimony at RFMC meeting	
Initial Review Draft	- RFMC/NMFS prepare draft analysis that addresses MSA, NEPA and other analytical requirements (see outline) - may be distributed at or before RFMC meeting, depending on size and complexity of analysis; RFMCs/NMFS should try to circulate document 14 days before start of meeting (mailing, website)	before/at 2nd RFMC meeting
RFMC reviews IR draft, approves for public review	- RFMC will consider scoping comments (on the purpose and need and the alternatives) and comments on the draft document - RFMC will approve draft for public review (perhaps following staff alterations to the document)	2nd RFMC meeting (may also take multiple meetings and iterations of draft before document is ready to be released for public review)
Public Review Draft distributed *(functional equivalent of CEQ Draft EIS)*	- mailed to RFMC, any affected agencies, or interested persons who have requested document - public notice of availability announced in RFMC agenda (published in FR); posted on RFMC website	distribution to occur a minimum of 23 days before first day of meeting at which final action is scheduled
Public comment	- public comment accepted as written letters to RFMC or oral testimony at RFMC meeting	minimum 23 days (RFMC/NMFS may specify a longer comment period or an end date for accepting written letters)
RFMC Final Action	- RFMC will consider public comments - RFMC will respond appropriately to issues raised in public comment - RFMC decision on recommended action	3rd RFMC meeting (RFMC may request further analysis in response to public comment before they are ready to take final action)
Secretarial Review Draft *(functional equivalent of CEQ Final EIS)*	- Document will include RFMC/NMFS response to written public comment on the public review draft - NMFS will follow existing procedure to check document for legal compliance (NEPA and other laws)	after 3rd RFMC meeting
Transmission to SoC/HQ	- RFMC transmits Secretarial Review Draft to Secretary - ?NMFS files document w/ EPA as Final EIS	begins 90 day approval timeline
SoC decision on amendment	- SoC concurrently signs Record of Decision	within 90 days of transmission

Sample Format for Analytical Document Supporting Fishery Action Under MSA

Title page *(equates to CEQ 'cover sheet')*

- Identify title of analysis; responsible agencies; contact person with contact information; designation of draft, public review draft, etc; one paragraph abstract; date by which comments must be received

Table of Contents
Table of Figures and Tables (as appropriate)
List of Acronyms and Abbreviations (as appropriate)

Summary

- Identify objectives or purpose of action *(equates to CEQ 'issues to be resolved')*
- Identify alternatives and brief comparison of impacts under the alternatives (summary table often works well) *(equates to CEQ 'major conclusions')*
- In Secretarial Review Draft, describe RFMC's recommended action, identify how factors were balanced among alternatives to enter that into the decision, identify environmentally preferable alternative, and state whether all practicable means to avoid or minimize environmental harm from recommended alternative have been adopted, or why not
- In Secretarial Review Draft, include areas of controversy including those raised by the public

Problem statement *(equates to CEQ 'need for action')*
Purpose or objectives of action

Alternatives for proposed action

- explore range of reasonable alternatives
- include a no action alternative (defined as status quo)
- identify the preferred action if possible
- if appropriate discuss why alternatives may have been eliminated from detailed study (this discussion may instead be appropriate in an appendix)

NEPA effects analysis (as appropriate)

- environmental consequences of the alternatives (including direct, indirect, and cumulative effects, and describing any adverse environmental effects which cannot be avoided should the proposal be implemented)
- discuss affected environment as necessary to understand environmental consequences

EO 12866, Regulatory Impact Review analysis (as appropriate)

- description of the affected fishery
- economic analysis of the expected effects of each alternative relative to the baseline

Analysis of consistency of action with MSA, National Standards

Regulatory Flexibility Act analysis (as appropriate)

- description and estimate of the number of small entities affected by the proposed action
- estimate of the economic impacts on small entities

EO 12898, Environmental Justice analysis (as appropriate)

- assess whether there are disproportionately high and adverse human health or environmental effects on a minority population, low-income population, or Indian tribe from the proposed action

List of preparers, list of agencies/persons consulted
List of those to whom analysis is distributed (for the Public Review Draft)
References, Index (as appropriate)

Appendices (as appropriate)

NEPA Compliance in Implementation of Fishery Actions Under MSA

NEPA Process – Environmental Impact Statement				Proposed MSA EIA approach
	NEPA Statute	**CEQ Regulations**	**NOAA NEPA procedures (216-6)**	
Notice of Intent	--	1501.7	5.02d (p.15)	
		- agency shall publish NOI in FR	- agency shall publish NOI in FR	- No NOI. Differs from CEQ regulations.
			- NOI shall include proposed action and alts, logistics of scoping process, contact info for RPM	
			- NOI initiates formal scoping process - written and verbal comments must be accepted during identified comment period - 30 day min formal comment period from date of NOI	- no 'formal' comment period. Scoping commences at time when Council initiates an analysis and determines draft alternatives - written comments will be considered by RFMC at any time; opportunity for oral comments during RFMC meetings - at minimum, public has 23 days to comment as analysis will be announced on agenda, which is published in FR
			- publish retraction if EIS does not go ahead	- RFMC newsletter announces if analysis does not go forward
Scoping	--	1501.7	4.01w (p.9), 5.02d (p.15)	
		- agency shall invite participation	- solicit comprehensive public involvement and interagency and Indian tribal consultation	- RFMC/NMFS will solicit public comment on proposed analysis in RFMC newsletter and on website
		- agency shall eliminate from study issues that are not significant		- RFMC will consider comments and revise problem statement and alternatives accordingly
		- agency may hold scoping meetings	- scoping may be satisfied by meetings, or request for comment on documents; or discussion papers	- RFMC meetings will provide opportunity for public input

NEPA Compliance in Implementation of Fishery Actions Under MSA

NEPA Process – Environmental Impact Statement				Proposed MSA EIA approach
	NEPA Statute	**CEQ Regulations**	**NOAA NEPA procedures (216-6)**	
EIS content	102(C)	1502.10	5.04b (p.19)	
	Include: - environmental impact of proposed action - adverse environmtal impacts of proposal - alts - relationship between local short-term uses of environment and long-term productivity - irreversible/ irretrievable commitments of resources of proposal	- cover sheet - summary - TOC - purpose/need - alts - affected environment - environmental consequences (to include all elements required by statute) - list of preparers - circulation list - index	- cover sheet and TOC - purpose/need - summary - alts - affected environment - environmental impacts of proposed action and alts including cumulative impacts - circulation list and list of those consulted - index and appendices as appropriate	- include all these elements in analysis, as well as other requirements of MSA and other laws/ executive orders - *see sample document format for a fishery action analysis*
Draft EIS	--	1502.9		
		- draft statements shall satisfy to extent possible the requirements established for final statements in 102(C)		- RFMC/NMFS will prepare a Public Review Draft of the analysis that will satisfy to extent possible the requirements established for final statements in 102(C)

NEPA Compliance in Implementation of Fishery Actions Under MSA

NEPA Process – Environmental Impact Statement				Proposed MSA EIA approach
	NEPA Statute	**CEQ Regulations**	**NOAA NEPA procedures (216-6)**	
Filing and Distribu-tion of Draft/ Final EIS	102(C)	1506.9, 1502.19	5.04c (p.20)	
			- preliminary review of D/FEIS by NEPA coordinator 1 week before package is submitted so changes can be incorporated - NEPA review package (D/FEIS and transmittal memos) to NEPA coordinator for clearance signatures min. 5 days before filing with EPA	- EPA filing requirements will only apply to Secretarial Review Draft (functional equivalent of CEQ Final EIS). No NOA for Draft EIS. Differs from CEQ regulations.
	- [final] statement shall be made available to President, CEQ, and public	- file statement with EPA, who will give to CEQ (counts as President) - distribute to affected and interested parties at same time as EPA	- 5 copies to EPA by 3pm each Friday - at same time, copies of D/FEIS and transmittal letter should be sent to interested parties - EPA publishes NOA 1 week later	- Public Review Draft will be circulated to the RFMC, interested entities and persons, minimum 30 days prior to the first day of the RFMC meeting at which final action is scheduled to occur - Draft will be accessible to the public on RFMC website and available by request
Comments on Draft EIS	--	1506.10, 1503.1	5.04c.6	
		- comment period for DEIS is minimum 45 days from NOA	- date of NOA determines start of review period - public comment period on DEIS is min. 45 days	- Public Review Draft will be available for a minimum of 30 days before RFMC final action. Differs from CEQ regulations.
		- agency shall request comments of appropriate Federal, State and local agencies, Indian tribes, affected public and organizations		- RFMC/NMFS will consult with affected Federal, State and local agencies and Indian tribes (some of whom are represented on RFMC) - RFMC/NMFS will request comments from public and specifically any persons or organizations who express interest

NEPA Compliance in Implementation of Fishery Actions Under MSA

NEPA Process – Environmental Impact Statement				Proposed MSA EIA approach
	NEPA Statute	**CEQ Regulations**	**NOAA NEPA procedures (216-6)**	
Final EIS	--	1503.4	5.04c6	
		- all comments or summaries thereof must be attached to FEIS regardless of merit	- must include all substantive comments or summaries of comments received during the public comment period of the draft EIS	- RFMC/NMFS will include all written comments on the Public Review Draft in Secretarial Review Draft (functional equivalent of CEQ Final EIS)
		- agency must assess comments individually and collectively, and respond appropriately (5 ways)	- comments must be responded to in an appropriate manner	- RFMC will consider all comments, written and oral, on both drafts and respond appropriately
		- must state response in FEIS		- RFMC response to written comments will be included in the Secretarial Review Draft
Record of Decision	--	1505.2, 1506.10	5.04c.7	
		- agency shall prepare a concise public record of decision	- ROD will be made available through appropriate public notice (but not necessarily FR)	- RFMC will include recommendation to Secretary of Commerce on the MSA action as part of the Secretarial Review Draft
		ROD shall: - state the decision - identify all alternatives, including the environmentally preferable alternative, and how factors were balanced to enter into the decision - state whether all practicable means to avoid or minimize envtl harm from selected alt have been adopted, or why not		- RFMC will address these elements in its recommendation
		- no decision may be recorded until later of 90 days after NOA for DEIS or 30 days for NOA of FEIS	- ROD may not be recorded until min 30 days from NOA for FEIS	- NEPA analysis (EIA) will be submitted with MSA action, and ROD will be finalized along with SOC decision on MSA action

NEPA Compliance in Implementation of Fishery Actions Under MSA

NEPA Process – Environmental Impact Statement				Proposed MSA EIA approach
	NEPA Statute	**CEQ Regulations**	**NOAA NEPA procedures (216-6)**	
Termin-ation	--	--	5.01c, 5.04c.8	
			- environmental review process may be terminated at any stage - termination must be announced in the FR and explained in writing to EPA - for supplemental NEPA documents, must notify CEQ if process stops after draft SEIS but before final	- proposed MSA action, including NEPA analysis (EIA), may be terminated at any stage - RFMC newsletter announces if analysis does not go forward
Public Involvemt	**--**	1506.6	5.02b (p.13)	
		- agencies shall make diligent efforts to involve the public in preparing and implementing NEPA procedures	- RPMs must make every effort throughout process to encourage participation of affected Fed, State, local agencies, Indian tribes, and interested persons	- public involvement keystone of RFMC process – MSA requires regular, open meetings; timely public notice of time, place, and agenda of meetings; interested persons may present written or oral comments
		- agencies shall provide public notice of hearings/mtgs, documents - in cases of national concern notice to include publication in the FR	- RPM must provide public notice of NEPA hearings/mtgs, documents	- RFMC meetings/agendas noticed in FR, documents available on RFMC websites (or by request)
		- hold hearings/mtgs where appropriate - solicit appropriate info from public	- public involvement may be solicited through hearings/mtgs and through comments as appropriate	- RFMC meetings held regularly - public invited to comment on any RFMC agenda item
Agency Responsib ility	**--**	1506.5	2.02 (p.3)	
		- EIS shall be prepared directly by or by a contractor selected by the lead agency, or by a cooperating agency	- NOAA NEPA coordinator will review and provide final clearance for all NEPA envtl review documents - a designated RPM will carry out specific proposed actions in the NEPA process	- procedure should reflect that RFMCs are partners in preparing NEPA analyses and complying with NEPA procedures

NEPA Compliance in Implementation of Fishery Actions Under MSA

NEPA Process – Environmental Impact Statement				Proposed MSA EIA approach
	NEPA Statute	**CEQ Regulations**	**NOAA NEPA procedures (216-6)**	
Categorical Exclusion	--	1508.4	5.05, 6.03d.4	
		- category of actions which do not individually or cumulatively have a significant effect on the human environment and which therefore require neither an EA nor an EIS	- actions that individually and cumulatively do not have the potential to pose significant effects to the quality of the human environment - examples given	- same as NOAA procedure
Emergency Actions	--	1506.11	5.06	
		- when emergency circumstances require an agency to take action with significant environmental impact without observing these regulations, the agency should consult with CEQ	- if timelines associated with EIS limit attaining the objectives of the emergency action, the NEPA Coordinator may consult with CEQ about alternative arrangements for NEPA compliance	- same as NOAA procedure

Excerpt from the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (H.R. 5496)

TITLE V—IMPLEMENTATION OF WESTERN AND CENTRAL PACIFIC FISHERIES CONVENTION

SEC. 501. SHORT TITLE.

This title may be cited as the "Western and Central Pacific Fisheries Convention Implementation Act".

SEC. 502. DEFINITIONS.

In this title:

(1) 1982 CONVENTION.—The term "1982 Convention" means the United Nations Convention on the Law of the Sea of 10 December 1982.

(2) AGREEMENT.—The term "Agreement" means the Agreement for the Implementation of the Provisions of the United Nations Convention on the Law of the Sea of 10 December 1982 relating to the Conservation and Management of Straddling Fish Stocks and Highly Migratory Fish Stocks.

(3) COMMISSION.—The term "Commission" means the Commission for the Conservation and Management of Highly Migratory Fish Stocks in the Western and Central Pacific Ocean established in accordance with this Convention.

(4) CONVENTION AREA.—The term "convention area" means all waters of the Pacific Ocean bounded to the south and to the east by the following line:

From the south coast of Australia due south along the 141th meridian of east longitude to its intersection with the 55th parallel of south latitude; thence due east along the 55th parallel of south latitude to its intersection with the 150th meridian of east longitude; thence due south along the 150th meridian of east longitude to its intersection with the 60th parallel of south latitude; thence due east along the 60th parallel of south latitude to its intersection with the 130th meridian of west longitude; thence due north along the 130th meridian of west longitude to its intersection with the 4th parallel of south latitude; thence due west along the 4th parallel of south latitude to its intersection with the 150th meridian of west longitude; thence due north along the 150th meridian of west longitude.

(5) EXCLUSIVE ECONOMIC ZONE.—The term "exclusive economic zone" means the zone established by Presidential Proclamation Numbered 5030 of March 10, 1983.

(6) FISHING.—The term "fishing" means—

(A) searching for, catching, taking, or harvesting fish;

(B) attempting to search for, catch, take, or harvest fish;

(C) engaging in any other activity which can reasonably be expected to result in the locating, catching, taking, or harvesting of fish for any purpose;

(D) placing, searching for, or recovering fish aggregating devices or associated electronic equipment such as radio beacons;

(E) any operations at sea directly in support of, or in preparation for, any activity described in subparagraphs (A) through (D), including transshipment; and

(F) use of any other vessel, vehicle, aircraft, or hovercraft, for any activity described in subparagraphs (A) through (E) except for emergencies involving the health and safety of the crew or the safety of a vessel.

(7) FISHING VESSEL.—The term "fishing vessel" means any vessel used or intended for use for the purpose of fishing, including support ships, carrier vessels, and any other vessel directly involved in such fishing operations.

(8) HIGHLY MIGRATORY FISH STOCKS.—The term "highly migratory fish stocks" means all fish stocks of the species listed in Annex 1 of the 1982 Convention, except sauries, occurring in the Convention Area, and such other species of fish as the Commission may determine.

(9) SECRETARY.—The term "Secretary" means the Secretary of Commerce.

(10) STATE.—The term "State" means each of the several States of the United States, the District of Columbia, the Commonwealth of the Northern Mariana Islands, American Samoa, Guam, and any other commonwealth, territory, or possession of the United States.

(11) TRANSHIPMENT.—The term "transshipment" means the unloading of all or any of the fish on board a fishing vessel to another fishing vessel either at sea or in port.

(12) WCPFC CONVENTION; WESTERN AND CENTRAL PACIFIC CONVENTION.—The terms "WCPFC Convention" and "Western and Central Pacific Convention" means the Convention on the Conservation and Management of the Highly Migratory Fish Stocks in the Western and Central Pacific Ocean, (including any annexes, amendments, or protocols which are in force, or have come into force, for the United States) which was adopted at Honolulu, Hawaii, on September 5, 2000, by the Multilateral High Level Conference on the Highly Migratory Fish Stocks in the Western and Central Pacific Ocean.

SEC. 503. APPOINTMENT OF UNITED STATES COMMISSIONERS.

(a) IN GENERAL.—The United States shall be represented on the Commission by 5 United States Commissioners. The President shall appoint individuals to serve on the Commission at the pleasure of the President. In making the appointments, the President shall select Commissioners from among individuals who are knowledgeable or experienced concerning highly migratory fish stocks in the Western and Central Pacific Ocean, one of whom shall be an officer or employee of the Department of Commerce, and one of whom shall be the chairman or a member of the Western Pacific Fishery Management Council and the Pacific Fishery Management Council. The Commissioners shall be entitled to adopt such rules of procedures as they find necessary and to select a chairman from among

members who are officers or employees of the United States Government.

(b) ALTERNATE COMMISSIONERS.—The Secretary of State, in consultation with the Secretary, may designate from time to time and for periods of time deemed appropriate Alternate United States Commissioners to the Commission. Any Alternate United States Commissioner may exercise at any meeting of the Commission, Council, any Panel, or the advisory committee established pursuant to subsection (d), all powers and duties of a United States Commissioner in the absence of any Commissioner appointed pursuant to subsection (a) of this section for whatever reason. The number of such Alternate United States Commissioners that may be designated for any such meeting shall be limited to the number of United States Commissioners appointed pursuant to subsection (a) of this section who will not be present at such meeting.

(c) ADMINISTRATIVE MATTERS.—

(1) EMPLOYMENT STATUS.—Individuals serving as such Commissioners, other than officers or employees of the United States Government, shall be considered to be Federal employees while performing such service, only for purposes of—

(A) injury compensation under chapter 81 of title 5, United States Code;

(B) requirements concerning ethics, conflicts of interest, and corruption as provided under title 18, United States Code; and

(C) any other criminal or civil statute or regulation governing the conduct of Federal employees.

(2) COMPENSATION.—The United States Commissioners or Alternate Commissioners, although officers of the United States while so serving, shall receive no compensation for their services as such Commissioners or Alternate Commissioners.

(3) TRAVEL EXPENSES.—

(A) The Secretary of State shall pay the necessary travel expenses of United States Commissioners and Alternate United States Commissioners in accordance with the Federal Travel Regulations and sections 5701, 5702, 5704 through 5708, and 5731 of title 5, United States Code.

(B) The Secretary may reimburse the Secretary of State for amounts expended by the Secretary of State under this subsection.

(d) ADVISORY COMMITTEES.—

(1) ESTABLISHMENT OF PERMANENT ADVISORY COMMITTEE.—

(A) MEMBERSHIP.—There is established an advisory committee which shall be composed of—

(i) not less than 15 nor more than 20 individuals appointed by the Secretary of Commerce in consultation with the United States Commissioners, who shall select such individuals from the various groups concerned with the fisheries covered by the WCPFC Convention, providing, to the maximum extent practicable, an equitable balance among such groups;

(ii) the chair of the Western Pacific Fishery Management Council's Advisory Committee or the chair's designee; and

(iii) officials of the fisheries management authorities of American Samoa, Guam, and the Northern Mariana Islands (or their designees).

(B) TERMS AND PRIVILEGES.—Each member of the advisory committee appointed under subparagraph (A) shall serve for a term of 2 years and shall be eligible for reappointment. The advisory committee shall be invited to attend all non-executive meetings of the United States Commissioners and at such meetings shall be given opportunity to examine and to be heard on all proposed programs of investigation, reports, recommendations, and regulations of the Commission.

(C) PROCEDURES.—The advisory committee established by subparagraph (A) shall determine its organization, and prescribe its practices and procedures for carrying out its functions under this chapter, the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.), and the WCPFC Convention. The advisory committee shall publish and make available to the public a statement of its organization, practices, and procedures. A majority of the members of the advisory committee shall constitute a quorum. Meetings of the advisory committee, except when in executive session, shall be open to the public, and prior notice of meetings shall be made public in a timely fashion. and the advisory committee shall not be subject to the Federal Advisory Committee Act (5 U.S.C. App.).

(D) PROVISION OF INFORMATION.—The Secretary and the Secretary of State shall furnish the advisory committee with relevant information concerning fisheries and international fishery agreements.

(2) ADMINISTRATIVE MATTERS.—

(A) SUPPORT SERVICES.—The Secretary shall provide to advisory committees in a timely manner such administrative and technical support services as are necessary for their effective functioning.

(B) COMPENSATION; STATUS; EXPENSES.—Individuals appointed to serve as a member of an advisory committee—

(i) shall serve without pay, but while away from their homes or regular places of business in the performance of services for the advisory committee shall be allowed travel expenses, including per diem in lieu of subsistence, in the same manner as persons employed intermittently in the Government service are allowed expenses under section 5703 of title 5, United States Code; and

(ii) shall be considered Federal employees while performing service as members of an advisory committee only for purposes of—

(I) injury compensation under chapter 81 of title 5, United States Code;

(II) requirements concerning ethics, conflicts-of-interest, and corruption, as provided by title 18, United States Code; and

(III) any other criminal or civil statute or regulation governing the conduct of Federal employees in their capacity as Federal employees.

(f) MEMORANDUM OF UNDERSTANDING.—For highly migratory species in the Pacific, the Secretary, in coordination with the Secretary of State, shall develop a memorandum of understanding

with the Western Pacific, Pacific, and North Pacific Fishery Management Councils, that clarifies the role of the relevant Council or Councils with respect to—

(1) participation in United States delegations to international fishery organizations in the Pacific Ocean, including government-to-government consultations;

(2) providing formal recommendations to the Secretary and the Secretary of State regarding necessary measures for both domestic and foreign vessels fishing for these species;

(3) coordinating positions with the United States delegation for presentation to the appropriate international fishery organization; and

(4) recommending those domestic fishing regulations that are consistent with the actions of the international fishery organization, for approval and implementation under the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.)

SEC. 504. AUTHORITY AND RESPONSIBILITY OF THE SECRETARY OF STATE.

The Secretary of State may—

(1) receive and transmit, on behalf of the United States, reports, requests, recommendations, proposals, decisions, and other communications of and to the Commission;

(2) in consultation with the Secretary approve, disapprove, object to, or withdraw objections to bylaws and rules, or amendments thereof, adopted by the WCPFC Commission, and, with the concurrence of the Secretary to approve or disapprove the general annual program of the WCPFC Commission with respect to conservation and management measures and other measures proposed or adopted in accordance with the WCPFC Convention; and

(3) act upon, or refer to other appropriate authority, any communication referred to in paragraph (1).

SEC. 505. RULEMAKING AUTHORITY OF THE SECRETARY OF COMMERCE.

(a) PROMULGATION OF REGULATIONS.—The Secretary, in consultation with the Secretary of State and, with respect to enforcement measures, the Secretary of the Department in which the Coast Guard is operating, is authorized to promulgate such regulations as may be necessary to carry out the United States international obligations under the WCPFC Convention and this title, including recommendations and decisions adopted by the Commission. In cases where the Secretary has discretion in the implementation of one or more measures adopted by the Commission that would govern fisheries under the authority of a Regional Fishery Management Council, the Secretary may, to the extent practicable within the implementation schedule of the WCPFC Convention and any recommendations and decisions adopted by the Commission, promulgate such regulations in accordance with the procedures established by the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.).

(b) ADDITIONS TO FISHERY REGIMES AND REGULATIONS.—The Secretary may promulgate regulations applicable to all vessels and persons subject to the jurisdiction of the United States, including United States flag vessels wherever they may be operating, on such date as the Secretary shall prescribe.

SEC. 506. ENFORCEMENT.

(a) IN GENERAL.—The Secretary may—

(1) administer and enforce this title and any regulations issued under this title, except to the extent otherwise provided for in this Act;

(2) request and utilize on a reimbursed or non-reimbursed basis the assistance, services, personnel, equipment, and facilities of other Federal departments and agencies in—

(A) the administration and enforcement of this title; and

(B) the conduct of scientific, research, and other programs under this title;

(3) conduct fishing operations and biological experiments for purposes of scientific investigation or other purposes necessary to implement the WCPFC Convention;

(4) collect, utilize, and disclose such information as may be necessary to implement the WCPFC Convention, subject to sections 552 and 552a of title 5, United States Code, and section 402(b) of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1881a(b));

(5) if recommended by the United States Commissioners or proposed by a Council with authority over the relevant fishery, assess and collect fees, not to exceed three percent of the ex-vessel value of fish harvested by vessels of the United States in fisheries managed pursuant to this title, to recover the actual costs to the United States of management and enforcement under this title, which shall be deposited as an offsetting collection in, and credited to, the account providing appropriations to carry out the functions of the Secretary under this title; and

(6) issue permits to owners and operators of United States vessels to fish in the convention area seaward of the United States Exclusive Economic Zone, under such terms and conditions as the Secretary may prescribe, and shall remain valid for a period to be determined by the Secretary.

(b) CONSISTENCY WITH OTHER LAWS.—The Secretary shall ensure the consistency, to the extent practicable, of fishery management programs administered under this Act, the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.), the Tuna Conventions Act (16 U.S.C. 951 et seq.), the South Pacific Tuna Act (16 U.S.C. 973 et seq.), section 401 of Public Law 108–219 (16 U.S.C. 1821 note) (relating to Pacific albacore tuna), and the Atlantic Tunas Convention Act (16 U.S.C. 971).

(c) ACTIONS BY THE SECRETARY.—The Secretary shall prevent any person from violating this title in the same manner, by the same means, and with the same jurisdiction, powers, and duties as though all applicable terms and provisions of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1857) were incorporated into and made a part of this title. Any person that violates any provision of this title is subject to the penalties and entitled to the privileges and immunities provided in the Magnuson-Stevens Fishery Conservation and Management Act in the same manner, by the same means, and with the same jurisdiction, power, and duties as though all applicable terms and provisions of that Act were incorporated into and made a part of this title.

(d) CONFIDENTIALITY.—

(1) IN GENERAL.—Any information submitted to the Secretary in compliance with any requirement under this Act shall be confidential and shall not be disclosed, except—

(A) to Federal employees who are responsible for administering, implementing, and enforcing this Act;

(B) to the Commission, in accordance with requirements in the Convention and decisions of the Commission, and, insofar as possible, in accordance with an agreement with the Commission that prevents public disclosure of the identity or business of any person;

(C) to State or Marine Fisheries Commission employees pursuant to an agreement with the Secretary that prevents public disclosure of the identity or business or any person;

(D) when required by court order; or

(E) when the Secretary has obtained written authorization from the person submitting such information to release such information to persons for reasons not otherwise provided for in this subsection, and such release does not violate other requirements of this Act.

(2) USE OF INFORMATION.—The Secretary shall, by regulation, prescribe such procedures as may be necessary to preserve the confidentiality of information submitted in compliance with any requirement or regulation under this Act, except that the Secretary may release or make public any such information in any aggregate or summary form that does not directly or indirectly disclose the identity or business of any person. Nothing in this subsection shall be interpreted or construed to prevent the use for conservation and management purposes by the Secretary of any information submitted in compliance with any requirement or regulation under this Act.

SEC. 507. PROHIBITED ACTS.

(a) IN GENERAL.—It is unlawful for any person—

(1) to violate any provision of this title or any regulation or permit issued pursuant to this title;

(2) to use any fishing vessel to engage in fishing after the revocation, or during the period of suspension, on an applicable permit issued pursuant to this title;

(3) to refuse to permit any officer authorized to enforce the provisions of this title to board a fishing vessel subject to such person's control for the purposes of conducting any search, investigation, or inspection in connection with the enforcement of this title or any regulation, permit, or the Convention;

(4) to forcibly assault, resist, oppose, impede, intimidate, or interfere with any such authorized officer in the conduct of any search, investigations, or inspection in connection with the enforcement of this title or any regulation, permit, or the Convention;

(5) to resist a lawful arrest for any act prohibited by this title;

(6) to ship, transport, offer for sale, sell, purchase, import, export, or have custody, control, or possession of, any fish taken or retained in violation of this title or any regulation, permit, or agreement referred to in paragraph (1) or (2);

(7) to interfere with, delay, or prevent, by any means, the apprehension or arrest of another person, knowing that

such other person has committed any chapter prohibited by this section;

(8) to knowingly and willfully submit to the Secretary false information (including false information regarding the capacity and extent to which a United States fish processor, on an annual basis, will process a portion of the optimum yield of a fishery that will be harvested by fishery vessels of the United States), regarding any matter that the Secretary is considering in the course of carrying out this title;

(9) to forcibly assault, resist, oppose, impede, intimidate, sexually harass, bribe, or interfere with any observer on a vessel under this title, or any data collector employed by the National Marine Fisheries Service or under contract to any person to carry out responsibilities under this title;

(10) to engage in fishing in violation of any regulation adopted pursuant to section 506(a) of this title;

(11) to ship, transport, purchase, sell, offer for sale, import, export, or have in custody, possession, or control any fish taken or retained in violation of such regulations;

(12) to fail to make, keep, or furnish any catch returns, statistical records, or other reports as are required by regulations adopted pursuant to this title to be made, kept, or furnished;

(13) to fail to stop a vessel upon being hailed and instructed to stop by a duly authorized official of the United States;

(14) to import, in violation of any regulation adopted pursuant to section 506(a) of this title, any fish in any form of those species subject to regulation pursuant to a recommendation, resolution, or decision of the Commission, or any tuna in any form not under regulation but under investigation by the Commission, during the period such fish have been denied entry in accordance with the provisions of section 506(a) of this title.

(b) ENTRY CERTIFICATION.—In the case of any fish described in subsection (a) offered for entry into the United States, the Secretary of Commerce shall require proof satisfactory to the Secretary that such fish is not ineligible for such entry under the terms of section 506(a) of this title.

SEC. 508. COOPERATION IN CARRYING OUT CONVENTION.

(a) FEDERAL AND STATE AGENCIES; PRIVATE INSTITUTIONS AND ORGANIZATIONS.—The Secretary may cooperate with agencies of the United States government, any public or private institutions or organizations within the United States or abroad, and, through the Secretary of State, the duly authorized officials of the government of any party to the WCPFC Convention, in carrying out responsibilities under this title.

(b) SCIENTIFIC AND OTHER PROGRAMS; FACILITIES AND PERSONNEL.—All Federal agencies are authorized, upon the request of the Secretary, to cooperate in the conduct of scientific and other programs and to furnish facilities and personnel for the purpose of assisting the Commission in carrying out its duties under the WCPFC Convention.

(c) SANCTIONED FISHING OPERATIONS AND BIOLOGICAL EXPERIMENTS.—Nothing in this title, or in the laws or regulations of any State, prevents the Secretary or the Commission from—

(1) conducting or authorizing the conduct of fishing operations and biological experiments at any time for purposes of scientific investigation; or

(2) discharging any other duties prescribed by the WCPFC Convention.

(d) STATE JURISDICTION NOT AFFECTED.—Except as provided in subsection (e) of this section, nothing in this title shall be construed to diminish or to increase the jurisdiction of any State in the territorial sea of the United States.

(e) APPLICATION OF REGULATIONS—

(1) IN GENERAL.—Regulations promulgated under section 506(a) of this title shall apply within the boundaries of any State bordering on the Convention area if the Secretary has provided notice to such State, the State does not request an agency hearing, and the Secretary determines that the State—

(A) has not, within a reasonable period of time after the promulgation of regulations pursuant to this title, enacted laws or promulgated regulations that implement the recommendations of the Commission within the boundaries of such State; or

(B) has enacted laws or promulgated regulations that implement the recommendations of the commission within the boundaries of such State that—

(i) are less restrictive that the regulations promulgated under section 506(a) of this title; or

(ii) are not effectively enforced.

(2) DETERMINATION BY SECRETARY.—The regulations promulgated pursuant to section 506(a) of this title shall apply until the Secretary determines that the State is effectively enforcing within its boundaries measures that are not less restrictive than the regulations promulgated under section 506(a) of this title.

(3) HEARING.—If a State requests a formal agency hearing, the Secretary shall not apply the regulations promulgated pursuant section 506(a) of this title within that State's boundaries unless the hearing record supports a determination under paragraph (1)(A) or (B).

(f) REVIEW OF STATE LAWS AND REGULATIONS.—To ensure that the purposes of subsection (e) are carried out, the Secretary shall undertake a continuing review of the laws and regulations of all States to which subsection (e) applies or may apply and the extent to which such laws and regulations are enforced.

SEC. 509. TERRITORIAL PARTICIPATION.

The Secretary of State shall ensure participation in the Commission and its subsidiary bodies by American Samoa, Guam, and the Northern Mariana Islands to the same extent provided to the territories of other nations.

SEC. 510. EXCLUSIVE ECONOMIC ZONE NOTIFICATION.

Masters of commercial fishing vessels of nations fishing for species under the management authority of the Western and Central Pacific Fisheries Convention that do not carry vessel monitoring systems capable of communicating with United States enforcement authorities shall, prior to, or as soon as reasonably possible after, entering and transiting the Exclusive Economic Zone seaward of Hawaii and of the Commonwealths, territories, and possessions of the United States in the Pacific Ocean area—

(1) notify the United States Coast Guard or the National Marine Fisheries Service Office of Law Enforcement in the appropriate region of the name, flag state, location, route, and destination of the vessel and of the circumstances under which it will enter United States waters;

(2) ensure that all fishing gear on board the vessel is stowed below deck or otherwise removed from the place where it is normally used for fishing and placed where it is not readily available for fishing; and

(3) where requested by an enforcement officer, proceed to a specified location so that a vessel inspection can be conducted.

SEC. 511. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary of Commerce such sums as may be necessary to carry out this title and to pay the United States' contribution to the Commission under section 5 of part III of the WCPFC Convention.

motherboards after importation. The scope of this order does not include DRAMS or memory modules that are re–imported for repair or replacement.

The DRAMS subject to this order are currently classifiable under subheadings 8542.21.8005 and 8542.21.8020 through 8542.21.8030 of the Harmonized Tariff Schedule of the United States (''HTSUS''). The memory modules containing DRAMS from the ROK, described above, are currently classifiable under subheadings 8473.30.10.40 or 8473.30.10.80 of the HTSUS. Removable memory modules placed on motherboards are classifiable under subheadings 8471.50.0085, 8517.30.5000, 8517.50.1000, 8517.50.5000, 8517.50.9000, 8517.61.0000, 8517.62.0010, 8517.62.0050, 8517.69.0000, 8517.70.0000, 8517.90.3400, 8517.90.3600, 8517.90.3800, 8517.90.4400, 8542.31.00, 8542.32.0001, 8542.32.0020, 8542.32.0021, 8542.32.0022, 8542.32.0023, 8542.33.0000, 8542.39.0000, and 8543.89.9600 of the HTSUS.

Scope Rulings

On December 29, 2004, the Department received a request from Cisco Systems, Inc. (''Cisco''), to determine whether removable memory modules placed on motherboards that are imported for repair or refurbishment are within the scope of the *CVD Order. See Notice of Countervailing Duty Order: Dynamic Random Access Memory Semiconductors from the Republic of Korea*, 68 FR 47546 (August 11, 2003) (''*CVD Order*''). The Department initiated a scope inquiry pursuant to 19 CFR 351.225(e) on February 4, 2005. On January 12, 2006, the Department issued a final scope ruling, finding that removable memory modules placed on motherboards that are imported for repair or refurbishment are not within the scope of the *CVD Order* provided that the importer certifies that it will destroy any memory modules that are removed for repair or refurbishment. *See* Memorandum from Stephen J. Claeys to David M. Spooner, regarding Final Scope Ruling, Countervailing Duty Order on DRAMs from the Republic of Korea (January 12, 2006).

Period of Review

The period for which we are measuring subsidies, *i.e.*, the period of review (''POR''), is January 1, 2004, through December 31, 2004.

Analysis of Comments Received

All issues raised in the case and rebuttal briefs by parties to this administrative review are addressed in the February 7, 2007, *Issues and Decision Memorandum for the Final Results in the Second Administrative Review of the Countervailing Duty Order on Dynamic Random Access Memory Semiconductors from the Republic of Korea (''Decision Memorandum'')* from Stephen J. Claeys, Deputy Assistant Secretary for Import Administration, to David M. Spooner, Assistant Secretary for Import Administration, which is hereby adopted by this notice. Attached to this notice as an appendix is a list of the issues which parties have raised and to which we have responded in the *Decision Memorandum*. Parties can find a complete discussion of all issues raised in this review and the corresponding recommendations in this public memorandum, which is on file in the Department's Central Records Unit, Room B–099 of the main Department building. In addition, a complete version of the *Decision Memorandum* can be accessed directly on the Internet at http://ia.ita.doc.gov/frn/index.html. The paper copy and electronic version of the *Decision Memorandum* are identical in content.

Final Results of Review

In accordance with 19 CFR 351.221(b)(5), we calculated an individual subsidy rate for the producer/exporter, Hynix. For the period January 1, 2004, through December 31, 2004, we find the *ad valorem* net subsidy rate for Hynix is 31.86 percent.

Assessment Rates

The Department will instruct CBP to liquidate shipments of DRAMS by Hynix entered or withdrawn from warehouse, for consumption from January 1, 2004, through December 31, 2004, at 31.86 percent *ad valorem* of the entered value.

Cash Deposits

The Department also intends to instruct CBP to collect cash deposits of estimated countervailing duties at 31.86 percent *ad valorem* of the entered value on all shipments of the subject merchandise from Hynix, entered, or withdrawn from warehouse, for consumption on or after the date of publication of the final results of this administrative review.

We will instruct CBP to continue to collect cash deposits for non–reviewed companies at the most recent company–specific rate applicable to the company. The Department has previously excluded Samsung Electronics Co., Ltd. from this order. *See Notice of Amended Final Affirmative Countervailing Duty Determination: Dynamic Random Access Memory Semiconductors from the Republic of Korea*, 68 FR 44290 (July 28, 2003). Thus, the ''all others'' rate shall apply to all non–reviewed companies until a review of a company assigned this rate is requested.

This notice also serves as a reminder to parties subject to administrative protective order (APO) of their responsibility concerning the disposition of proprietary information disclosed under APO in accordance with 19 CFR 351.305(a)(3). Timely written notification of return/destruction of APO materials or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and the terms of an APO is a sanctionable violation.

This administrative review and notice are issued and published in accordance with section 751(a)(1) of the Act.

Dated: February 7, 2007.

David M. Spooner,

Assistant Secretaryfor Import Administration.

Appendix I

Comments in the Issues and Decision Memorandum

Comment 1: Benefit to Hynix of the 2004 Cash Buyout Program.
Comment 2: The Department's Failure to Investigate Thoroughly the GOK's Entrustment or Direction of Hynix's Creditors in Connection with the CBO Components of the Non–Memory Asset Sale.
Comment 3: Entrustment or Direction of Hynix's Creditors in Connection with the Tranche A Acquisition Financing and CBO Components of the Non–Memory Asset Sale.
Comment 4: Whether the Department Should Have Investigated Hynix's Sale of Its LCD and Non–Memory Assets.
Comment 5: Uncreditworthy Benchmark Interest/Discount Rate.

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DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

[I.D. 020707B]

National Standard 1 Guidelines; Notice of Intent to Prepare an Environmental Impact Statement

AGENCY: National Marine Fisheries Service, National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Notice of intent (NOI) to prepare an environmental impact statement

(EIS); request for comments; notice of a public scoping meeting.

SUMMARY: NMFS announces its intent to prepare an EIS and commencement of a scoping period in accordance with the National Environmental Policy Act (NEPA) of 1969 to analyze alternatives for guidance regarding annual catch limit (ACL) and accountability measures (AM) and other overfishing provisions of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (MSRA). Such guidance would be added to the National Standard 1 (NS1) guidelines.

DATES: Written comments must be received by April 2, 2007. A public scoping meeting will be held at the NMFS Silver Spring headquarters office on March 9, 2007 (see **ADDRESSES**) from 9a.m. through 3p.m.

ADDRESSES: The scoping meeting will be held at 1315 East-West Highway; Room 4527; Silver Spring, Maryland, 20910. NMFS may hold additional scoping meetings and informal public meetings during the scoping period.

You may submit comments on issues and alternatives, by any of the following methods:

• E-mail: *annual.catch.limitDEIS@noaa.gov*. Include ''Scoping comments on annual catch limit DEIS'' in the subject line of the message.

• Fax: 301–713–1193.

• Mail: Mark Millikin; National Marine Fisheries Service, NOAA; 1315 East-West Highway; Silver Spring, Maryland 20910.

FOR FURTHER INFORMATION CONTACT: Mark Millikin, National Marine Fisheries Service, 301–713–2341.

SUPPLEMENTARY INFORMATION:

Electronic Access

This **Federal Register** document is available on the Government Printing Office's website at: *www.gpoaccess.gov/fr/index/html*.

Background

The MSRA, signed into law by President Bush on January 12, 2007, set forth new requirements related to overfishing, including new ACL and AM provisions for federally managed fisheries in the U.S. exclusive economic zone (EEZ). NMFS is initiating this action to develop guidance related to these new provisions, specifically, requirements set forth under sections 103(b)(1) and (c)(3), 104(a)(10), (b), and (c) of the MSRA. NMFS intends to revise the National Standard 1 (NS1) Guidelines, 50 CFR 600.310, through a proposed and final rule to incorporate guidance of these MSRA sections before the end of 2007. Because of potential policy implications of these MSRA provisions on Federal fishery management plans (FMPs and plans) and their stocks, NMFS has decided to issue this NOI. However, as it develops this action, NMFS will continue to re-evaluate the environmental review and analyses needed for NEPA purposes.

Public Scoping Process

To help determine the scope of issues to be addressed and to identify significant issues related to this action, NMFS is soliciting written comments on this NOI through April 2, 2007, and will hold a public scoping meeting at the NMFS Silver Spring Headquarters, Building III, Room 4527, 9a.m. through 3p.m. on March 9, 2007. After considering comments received during the scoping process, NMFS will either develop a draft environmental impact statement (DEIS) and proposed rule or an environmental assessment (EA) and proposed rule. If NMFS issues a DEIS, it will provide for a 45-day comment period concurrent with public hearings. If NMFS issues a DEIS, then it will also issue a final environmental impact statement (FEIS). Following an EIS or EA and proposed rule, NMFS will issue a final rule in the **Federal Register**.

Magnuson-Stevens Act

The Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) amended in 1996 by the Sustainable Fisheries Act, is the chief authority for fisheries management in the U.S. EEZ. The Act requires, among other things, achieving optimum yield on a continuing basis, preventing overfishing, and rebuilding overfished stocks in as short a time as possible. Section 301(a) of the Magnuson-Stevens Act contains 10 national standards (NS) with which all FMPs and their amendments and implementing regulations must be consistent. Section 301(b) requires that ''the Secretary establish advisory guidelines (which shall not have the force and effect of law), based on the national standards to assist in the development of fishery management plans.'' Conforming to the NS guidelines (50 CFR part 600, subpart D) when preparing an FMP, FMP amendment and regulations is essential to properly addressing the intentions of Congress when it established and revised the Magnuson-Stevens Act. The NS guidelines, most notably NS1, are often cited in Court cases, and judges frequently refer to them when considering the merits of an FMP or FMP amendment and its regulations.

NS1 provides that ''Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.'' 16 U.S.C. 1851(a)(1). As this action focuses on MSRA's overfishing provisions, NMFS believes that it is appropriate to incorporate guidance on those provisions in the NS1 guidelines at 50 CFR 600.310.

Ending overfishing of stocks undergoing overfishing, preventing overfishing of stocks approaching overfishing, and rebuilding overfished stocks to levels of abundance that can produce maximum sustainable yield (MSY) on a continuing basis, are essential to achieving the objectives and goals of the Magnuson-Stevens Act. Ending overfishing is paramount to more rapid and more certain rebuilding. According to the NS1 guidelines, overfishing occurs whenever the annual fishing mortality rate (F) is greater than the maximum fishing mortality threshold (MFMT), 50 CFR 600.310(d)(2)(i). Continued overfishing will depress a stock, on average, below the level that can produce MSY. While some rebuilding of stock abundance can occur if F is slightly greater than MFMT, rebuilding rates are more rapid when overfishing does not occur, and rebuilding occurs faster, the more that F is reduced below MFMT.

MSRA Section 104(a)(10): ACLs and AMs

During the comment period on this NOI, and throughout development of this action, NMFS will seek input from the Councils and the public on implementation of the new MSRA overfishing provisions. To facilitate public comment in the following sections NMFS provides its preliminary interpretation of the new provisions, followed by an explanation of statutory deadlines and other timing considerations.

Section 104(a)(10) of the MSRA amends section 303(a) of the Magnuson-Stevens Act to require that any FMP shall ''establish a mechanism for specifying annual catch limits in the plan (including a multi-year plan), implementing regulations and annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability.'' Species that have a life cycle of approximately 1 year (e.g., possibly some shrimp or squid species) are exempt from the requirements, unless the Secretary determines the species is undergoing overfishing. In addition, the ACL/AM requirements would not apply if ''otherwise provided

for under an international agreement.'' Thus, the ACL/AM requirements may be applicable for some species managed under international agreements.

Apart from the above exemptions, NMFS believes that section 104(a)(10) requires ACL/AM mechanisms for each federally-managed ''stock or stock complex'' contained in an FMP. Under the NS guidelines, ''stock or stock complex'' is used as a synonym for ''fishery,'' and is defined as ''one or more stocks of fish that can be treated as a unit for purposes of conservation and management and that are identified on the basis of geographic, scientific, technical, recreational, or economic characteristics...'' (50 CFR 600.305(c)(12)).

NMFS understands an ACL to mean a specified amount of a fish stock (e.g., measure of weight or numbers of fish) for a fishing year that is a target amount of annual total catch that takes into account projected estimates for landings and discard mortality from all user groups and sectors. Per the MSRA, the ACL must be set ''at a level such that overfishing does not occur in the fishery.'' Under the NS1 guidelines, overfishing of the stock occurs when MFMT is exceeded (50 CFR 600.310(d)(2)(i)). Thus, it is important to clarify the relationship between the ACL and the MFMT. While the MFMT is expressed as a rate of fishing, NMFS may recommend that FMPs be amended so that annual catch levels corresponding to MFMT—an overfishing level (OFL)—are specified along with ACLs in comparable units (e.g., weight or numbers of fish) to ACLs, to facilitate subsequent monitoring against the ACL. The OFL would be the maximum amount of annual catch from all sources (landings and discard mortality from all sectors) which does not result in overfishing. Once the ACL is reached, or projected to be reached, AMs established in the FMP will ensure that overfishing does not occur, or is appropriately mitigated (e.g., through payback provisions).

NMFS believes that the extent of future management success using ACLs will depend largely upon ACLs being set sufficiently below the OFL for a fish stock, i.e., the size of the buffer needed between the OFL and ACL, to reduce the chance of exceeding the OFL. The types of ACLs used for a stock may vary depending upon the quality of data available for a fish stock and the fishery management goals. The size of the buffer needed between the ACL and OFL would depend upon quality of data available including: Knowledge of the stock's life history; availability and accuracy of current fishing year landings and historical landings data; accuracy and precision of fishery independent surveys; accuracy and precision of fishery dependent data; time since last stock assessment or update; frequency of stock assessments; discard mortality; recreational catches; and the extent of knowledge of the rate and magnitude of success or failure of recent management measures in ending or preventing overfishing for a fish stock. For discussion purposes in this NOI, ''data poor stocks'' are those stocks for which stock abundance is unknown or stock status with respect to overfishing and overfished is unknown. ''Data rich'' stocks are those for which annual catch values are known, and estimates of stock abundance or its proxy are available and sufficient to make overfishing and overfished status determinations. A broad gradation of data quality, quantity, and timeliness exists for various stocks which affects the accuracy and precision of ''overfishing'' and ''overfished'' status determinations.

With regard to ''measures of accountability'' (referred to herein as accountability measures or AMs) required by MSRA section 104(a)(10), NMFS' initial interpretation is that they are part of the ACL mechanism and FMPs should contain AMs for each stock. AMs could also be used for each fishery sector. Because there are variances in: operation of fisheries, monitoring of a fishery within a fishing year, and availability of stock abundance information, it may not be feasible to set ACLs with the same level of precision for all stocks. AMs thus are intended to work with their associated ACLs to prevent overfishing of a stock from occurring. AMs could take the form of inseason management techniques that prevent the ACL from being exceeded in a given year (e.g., closures, or restrictions on retention of a stock), and/or corrective actions that will be implemented in subsequent fishing years to address overages of a stock's OFL in previous fishing years (e.g., reduction of a subsequent year's ACL), and to ensure that overfishing is ended.

MSRA Section 103(b) and (c)(3): Scientific and Statistical Committees (SSCs)

Section 103(b) of MSRA includes new provisions relating to SSCs and peer review processes. Among other things, it specifies that SSCs shall provide their Councils with ''ongoing scientific advice for fishery management decisions, including recommendations for acceptable biological catch, preventing overfishing, maximum sustainable yield, and achieving rebuilding targets, and reports on stock status and health, bycatch, habitat status, social and economic impacts on management measures, and sustainability of fishing practices.'' Section 103(b) also provides for the establishment of peer review processes. With regard to ACLs, section 103(c)(3) provides that a Council shall ''develop ACLs for each of its managed fisheries that may not exceed the fishing level recommendations of its scientific and statistical committee or the peer review process established under subsection (g).''

NMFS views these provisions as providing the SSCs or peer review processes with an important role in Council development of ACL mechanisms. NMFS would expect that SSCs or peer review processes would not only need to produce calculations of ACL and OFL, but also the probability that an ACL in combination with other factors such as retrospective patterns in stock assessments, e.g., overestimating stock abundance and underestimating actual fishing mortality rate (F), would or would not result in OFL being exceeded.

MSRA Section 104(c) revises the rebuilding provisions of section 304(e) of the Magnuson-Stevens Act to require that, when a Council is notified that a stock is overfished, the Council shall — within 2 years after such notification — submit and implement an FMP, FMP amendment, or proposed regulations to end overfishing ''immediately,'' and rebuild the overfished stock in as short a time as possible. NMFS' preliminary review is that, because an FMP, FMP amendment, or regulations need to be implemented within 2 years of notification, a Council would need to submit the relevant action sufficiently in advance of the 2-year deadline (i.e., approximately one year and six months after notification) to ensure sufficient time (six months) for NMFS, on behalf of the Secretary, to finalize and implement the action.

Statutory Deadlines and Other Timing Considerations

Per MSRA section 104(b), the ACL and AM requirements take effect in fishing year 2010, for stocks determined by the Secretary to be undergoing overfishing. Thus, NMFS believes that the Councils and NMFS would have to plan to have ACL and AM mechanisms in place for all stocks in their FMPs that can be used beginning with the 2010 fishing year, because it is unknown what stocks NMFS will have determined as undergoing overfishing just before the beginning of the 2010

fishing year. Stocks not determined to be undergoing overfishing will need ACLs and AMs by the 2011 fishing year, including stocks with unknown or undefined status regarding overfishing (i.e., the new requirement applies also to data poor stocks).

MSRA section 104(c), which revises the requirements for rebuilding overfished fisheries, takes effect 30 months after the enactment of the MSRA, i.e., effective date of July 12, 2009. Thus, any fisheries determined to be overfished by the Secretary after that date would fall under the MSRA amendments to the rebuilding provisions of section 304(e)(3), instead of the current Magnuson-Stevens Act section 304(e)(3) provisions. Pursuant to the Magnuson-Stevens Act section 304(e)(3), within one year of being notified by NMFS, that a stock is overfished, a Council needs to prepare and submit an FMP, FMP amendment, or proposed regulations to rebuild the overfished stock and end overfishing. As discussed earlier, under the MSRA amendments to section 304(e)(3), within two years of being notified by NMFS, anytime on or after July 12, 2009, that a stock is overfished, a Council needs to prepare and NMFS needs to implement an FMP, FMP amendment, or proposed regulations to rebuild the overfished stock and end overfishing immediately.

NMFS intends to complete its revisions of the NS1 guidelines pertaining to this action before the end of 2007. Upon implementation of the final rule, NMFS will review each Council's current provisions for ACLs and AMs and recommend any revisions it deems are appropriate. Some FMPs may already contain management measures that will meet the definition (or forthcoming criteria) of ACLs and AMs. If not, the FMPs will need to be amended to establish or revise ACLs and associated AMs consistent with the MSRA requirement and revised NS1 guidelines, by the relevant statutory deadlines.

NMFS previously issued an advance notice of proposed rulemaking (68 FR 7492, February 14, 2003), and a proposed rule (70 FR 36240, June 22, 2005), to revise the NS1 guidelines. NMFS did not issue a final rule because it decided to wait to see if the Magnuson-Stevens Act would be reauthorized before revising the NS1 guidelines. This action is not expected to make the full set of revisions to the NS1 guidelines as was proposed in 2005, because of the urgency to establish guidance related to new provisions in the MSRA.

Issues Under Consideration

In considering potential guidance related to MSRA's overfishing provisions, NMFS has identified the following list of issues related to ACLs, AMs, and overfishing. NMFS seeks public comment on the scope of this NOI generally and the list of issues and potential alternatives for this action set forth below.

Issues for Developing Guidance for ACLs and AMs

- The role of the SSC and other peer review processes in setting ACLs and AMs
- The relationship between ACL and OY
- Revision of existing overfishing definitions to include OFL
- Variability in data currently available for each stock (e.g., data rich, data poor, and stocks with data quality falling between data rich and data poor)
- Setting ACLs for stocks with unknown status
- Circumstances in which a numerical ACL can not be set for a stock, and in such situations, recommendations for adequate and appropriate alternatives to setting a numerical ACL (e.g., prohibitions)
- Setting ACLs for stock complexes, stock assemblages, and similar stock groupings
- Variability in the accuracy of management approaches in achieving target fishing levels
- Setting a buffer between ACL and OFL to prevent overfishing, and how to determine the size of the buffer needed
- Establishing the appropriate probability that an ACL will prevent overfishing for a stock
- Establishing recommendations for inseason management authority and methods to be used as AMs to prevent overfishing
- Limiting the extent of overfishing, should it occur
- Establishing corrective actions to ensure accountability in a subsequent year for an overage of the OFL for a stock in a previous year
- Establishing AMs for various sectors of a stock, if an ACL is subdivided for a stock, and the need to still prevent exceeding the overall OFL for the stock

Preliminary ACL and AM alternatives

- No action. Do not publish ACL and AM guidelines. Councils are statutorily required to implement ACLs and AMs, but the statute provides little specificity about the meaning of these terms. Without guidelines, Councils may develop and submit FMP amendments that the Secretary determines to be inadequate. Secretarial disapproval of an FMP amendment will require the Council to modify their amendment and resubmit it, making it unlikely that measures can be implemented by the statutory deadline of 2010, for stocks subject to overfishing and 2011, for all other stocks.
- Alternative 2. Develop ACL and AM guidelines that provide performance standards that ACLs and AMs must meet, but do not provide guidance on specific mechanisms. Performance standards may be hard to develop, or it may be hard to adequately judge the degree to which proposed mechanisms will satisfy the performance standards.
- Alternative 3. Develop ACL and AM guidelines that provide performance standards that ACLs must meet, and develop ACL and AM guidelines that provide specific guidance on one or more mechanisms to implementing ACLs and AMs that NMFS considers to meet the statutory requirement and the standards for Secretarial approval.

Special Accommodations

The public meeting to be held in NMFS Silver Spring headquarters on March 9, 2007, will be accessible to people with physical disabilities. Requests for sign language interpretation or other auxiliary aids should be directed to Mark Millikin (301–713–2341), by March 4, 2007.

Dated: February 9, 2007.

Alan D. Risenhoover,

Director, Office of Sustainable Fisheries, National Marine Fisheries Service.

[FR Doc. 07–681 Filed 2–9–07; 2:12 pm]

BILLING CODE 3510–22–S

CORPORATION FOR NATIONAL AND COMMUNITY SERVICE

Information Collection; Submission for OMB Review, Comment Request

AGENCY: Corporation for National and Community Service.

ACTION: Notice.

SUMMARY: The Corporation for National and Community Service (hereinafter the ''Corporation''), has submitted a public information collection request (ICR) entitled the Application for the President's Higher Education Community Service Honor Roll to the Office of Management and Budget (OMB) for review and approval in accordance with the Paperwork Reduction Act of 1995, Pub. L. 104–13, (44 U.S.C. Chapter 35). Copies of this ICR, with applicable supporting documentation, may be obtained by calling the Corporation for National and

Annual Catch Limits (ACLs) and Accountability Measures (AMs): Requirements of the 2006 Amendments to the Magnuson-Stevens Act (MSA)

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) was reauthorized and amended on January 12, 2007, by the Magnuson Stevens Fishery Conservation and Management Reauthorization Act (MSRA). The MSRA established **new requirements to end and prevent overfishing**, including Annual Catch Limits (ACLs) and Accountability Measures (AMs). On February 14, 2007, NOAA's National Marine Fisheries Service (NMFS) published a notice of intent to prepare an environmental impact statement (EIS) (72 FR 7016) for proposed guidance on the development and implementation of these new requirements. NMFS is currently in the public scoping process for the EIS and guidance.

The new guidance under development would assist regional fishery management councils in developing ACLs and AMs to **end and prevent overfishing in all U.S. commercial and recreational fisheries in 2010 for stocks subject to overfishing, and 2011 for all others**, as required by the MSRA. NMFS provides guidelines to facilitate consistent application of the MSA's 10 national standards among the nation's fishery managers. NMFS would incorporate new guidance of ACLs and AMs into the guidelines for National Standard 1, also known as the "overfishing standard."

Overfishing still occurs at various levels in 48 fisheries in U.S. waters, although NMFS and the Councils have made significant improvements in recent years. The highest priority in the MSRA was to strengthen the Act to ensure an end to overfishing.

To end overfishing and prevent it from occurring in the future, the new law requires that **federal fishery management plans establish mechanisms for annual catch limits and accountability measures**. The new law also adds **requirements for the role of scientific advice in this process**, specifically through the Councils' Scientific and Statistical Committees (SSCs). The new guidelines will address these provisions as they relate to development of annual catch limits.

This public scoping process provides an opportunity to discuss these and other issues related to National Standard 1, and receive public comments on developing guidance to address the new mandates. **The public comment period ends April 17, 2007**.

Upon consideration of public input that NMFS receives during this scoping period, the agency will develop its proposed guidance, and then will hold another public comment period. The agency aims to finalize its revisions to the National Standard 1 guidelines by the end of 2007.

Requirements to End & Prevent Overfishing

Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

- *National Standard 1 of the MSA*

Starting July 12, 2009, within 2 years of notification that a stock is overfished or approaching a condition of being overfished, measures must be prepared and implemented to end overfishing immediately and to rebuild

- *MSA Section 304(e)(4) requirements as amended by MSRA Section 104(c) and 104(d)*

Each Council is required to "develop annual catch limits for each of its managed fisheries that may not exceed the fishing level recommendations of its scientific and statistical committee or the peer review process established under subsection (g)"

- *MSA Section 302(h)(6) as amended by MSRA Section 103(c)(3)*

''(g) COMMITTEES AND ADVISORY PANELS.—

(1)(A) Each Council shall establish, maintain, and appoint the members of a scientific and statistical committee to assist it in the development, collection, evaluation, and peer review of such statistical, biological, economic, social, and other scientific information as is relevant to such Council's development and amendment of any fishery management plan.

(B) Each scientific and statistical committee shall provide its Council ongoing scientific advice for fishery management decisions, including recommendations for acceptable biological catch, preventing overfishing, maximum sustainable yield, and achieving rebuilding targets, and reports on stock status and health, bycatch, habitat status, social and economic impacts of management measures, and sustainability of fishing practices.

(C) Members appointed by the Councils to the scientific and statistical committees shall be Federal employees, State employees, academicians, or independent experts and shall have strong scientific or technical credentials and experience.

(E) The Secretary and each Council may establish a peer review process for that Council for scientific information used to advise the Council about the conservation and management of the fishery. The review process, which may include existing committees or panels, is deemed to satisfy the requirements of the guidelines issued pursuant to section 515 of the Treasury and General Government Appropriations Act for Fiscal year 2001 (Public Law 106–554—Appendix C; 114 Stat. 2763A–153).[…]"

- *MSA Section 302(g) as amended by MSRA Section 103(b)(1)*

Fishery management plans shall "establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability."

- *MSA Section 303(a) as amended by MSRA Section 104(a)(10)*

Shall not apply to a fishery for species that have a life cycle of approximately 1 year unless the Secretary has determined the fishery is subject to overfishing of that species

- *MSRA Section 104 (b)(2)*

Shall apply for a fishery unless otherwise provided for under an international agreement in which the U.S. participates

- *MSRA Section 104 (b)(1)*

ACLs must be implemented:

- in fishing year 2010 for fisheries determined by the Secretary to be subject to overfishing
  - *MSRA Section 104 (b)(1)(A)*
- in fishing year 2011 for all other fisheries
  - *MSRA Section 104 (b)(1)(B)*

Key Issues to Consider in Developing Guidance on ACLs & AMs

NMFS has identified the following key issues to consider in developing guidelines on annual catch limits (ACLs) and accountability measures (AMs) and welcomes public comments on these and any other issues related to NS1 during the public scoping process.

- The role of the SSC and other peer review processes in setting ACLs and AMs
- The relationship between ACL and OY
- Revision of existing overfishing definitions to include OFL
- Variability in data currently available for each stock
- Setting ACLs for stocks with little or no data
- Setting ACLs and AMs for fisheries that have a recreational component
- Circumstances in which a numerical ACL can not be set for a stock, and in such situations, recommendations for adequate and appropriate alternatives to setting a numerical ACL (e.g., prohibitions)
- Setting ACLs for stock complexes, stock assemblages, and similar stock groupings
- Variability in the accuracy of management approaches in achieving target fishing levels
- Setting a buffer between ACL and OFL to prevent overfishing, and how to determine the size of the buffer needed
- Establishing the appropriate probability that an ACL and AM measures will prevent overfishing for a stock
- Establishing recommendations for in-season management authority and methods to be used as AMs to prevent overfishing
- Limiting the extent of overfishing, should it occur
- Establishing corrective actions to ensure accountability in a subsequent year for an overage of the OFL for a stock in a previous year
- Considerations for biological relevance of an OFL overage
- Establishing AMs for various sectors, if an ACL is subdivided for a stock, and the need to still prevent exceeding the overall OFL for the stock

Comment Period Ends April 17, 2007

Please E-mail Comments to:
annual.catch.limitDEIS@noaa.gov

Visit Our Website:
http://www.nmfs.noaa.gov/msa2007/

Timeline for Developing and Implementing ACLs & AMs

Estimated Implementation Timeline	
Scoping Meetings (see website)	**March-April 2007**
DEIS: Issue NOA and 45-day comment period	**July 2007**
Proposed Rule: Issue rule and 45-day comment period	**July 2007**
FEIS: Issue NOA	**October 2007**
Final Rule	**November 2007**
Councils & NMFS amend FMPs / mgt measures	**Jan 2008 – June 2009**
Secretarial Review of FMP amendments / mgt measures	**June 2009 – Dec 2009**
ACL & AM mechanisms implemented for "overfishing" stocks	**Jan 1, 2010**
ACL & AM mechanisms implemented for all other stocks	**Jan 1, 2011**

Schedule of Scoping Meetings

Council	Date	Time	Location
South Atlantic	March 6, 2007	6:30 pm to 7:30 pm	Jekyll Island Club Hotel, Jekyll Island, GA 31527
NMFS	March 9, 2007	9:00 am	NOAA Science Center, 1301 East-West Hwy, Silver Spring, MD
Western Pacific	March 14, 2007	7:30 pm to 9:00 pm	Ala Moana Hotel, Honolulu, HI
Caribbean	March 20, 2007	6:00 pm to 7:00 pm	Ponce Hilton Hotel, Ponce, PR
Gulf of Mexico	March 27, 2007	6:30 pm to 7:30 pm	Embassy Suites Hotel, Destin, FL
North Pacific	March 28-29, 2007**	Morning session	Anchorage Hilton Hotel, Anchorage, AK
Pacific	April 3, 2007**	Afternoon session	Seattle Airport Marriott Hotel, Seattle, WA 98188
New England	April 10, 2007	1:30 pm to 3:00 pm	Mystic Hilton, Mystic, CT
Mid-Atlantic	April 17, 2007	7:00 pm to 8:30 pm	Princess Royale, 9100 Coastal Hwy, Ocean City, MD

Any changes or updates will be published in the Federal Register and posted on our website (see page 3).
**Subject to Council agenda changes during the week of the meeting.

Acronyms

ACL – annual catch limit

AM – accountability measure

B – Biomass

B_{MSY} – long-term average biomass that would be achieved if fishing at a constant fishing mortality rate equal to F_{MSY}.

DEIS – draft environmental impact statement

EA – environmental assessment

EEZ – exclusive economic zone

EIS – environmental impact statement

F – fishing mortality

FEIS – final environmental impact statement

FMP – fishery management plan

F_{MSY} – fishing mortality rate that produces the maximum sustainable yield.

MFMT – maximum fishing mortality threshold

MSA – Magnuson-Stevens Fishery Conservation and Management Act

MSRA – Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006

MSST – Minimum Stock Size Threshold ($B_{threshold}$)

MSY – maximum sustainable yield

NEPA – National Environmental Policy Act

NOA – notice of availability

NOAA – National Oceanic and Atmospheric Administration

NMFS – National Marine Fisheries Service

NOI – notice of intent

NS1 – National Standard One

OFL – overfishing level

OY – optimum yield

SSC – Scientific and Statistical Committee

TAC – total allowable catch

Magnuson-Stevens Fishery Conservation and Management Reauthorization Act Environmental Review Procedures

Request for Comments: The National Marine Fisheries Service (NOAA Fisheries) is soliciting public comment on the environmental review provisions required by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act (MSRA) (Pub. L. 109-479). Section 107 requires NOAA Fisheries to revise and update agency procedures to comply with the National Environmental Policy Act (NEPA). It further requires that NOAA Fisheries consult with the Council on Environmental Quality (CEQ) and the Regional Fishery Management Councils (Councils), and involve the public in the development of the revised procedures. The MSRA provides that the resulting procedures will be the sole environmental impact assessment procedure for fishery management actions.

The relevant part of the MSRA reads as follows

> (i) ENVIRONMENTAL REVIEW PROCESS.—
> (1) PROCEDURES.—The Secretary shall, in consultation with the Councils and the Council on Environmental Quality, revise and update agency procedures for compliance with the National Environmental Policy Act (42 U.S.C. 4231 et seq.). The procedures shall—
>
> > (A) conform to the time lines for review and approval of fishery management plans and plan amendments under this section; and
> >
> > (B) integrate applicable environmental analytical procedures, including the time frames for public input, with the procedure for the preparation and dissemination of fishery management plans, plan amendments, and other actions taken or approved pursuant to this Act in order to provide for timely, clear and concise analysis that is useful to decision makers and the public, reduce extraneous paperwork, and effectively involve the public.
>
> (2) USAGE.—The updated agency procedures promulgated in accordance with this section used by the Councils or the Secretary shall be the sole environmental impact assessment procedure for fishery management plans, amendments, regulations, or other actions taken or approved pursuant to this Act.
>
> (3) SCHEDULE FOR PROMULGATION OF FINAL PROCEDURES.—The Secretary shall—
>
> > (A) propose revised procedures within 6 months after the date of enactment of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006;
> >
> > (B) provide 90 days for public review and comments; and

(C) promulgate final procedures no later than 12 months after the date of enactment of
that Act.

(4) PUBLIC PARTICIPATION.—The Secretary is authorized and directed, in cooperation with the Council on Environmental Quality and the Councils, to involve the affected public in the development of revised procedures, including workshops or other appropriate means of public involvement.

NOAA Fisheries is required to publish proposed procedures by July 11, 2007, for a 90-day public review period, and to promulgate final procedures by January 12, 2008.

To inform the development of the new procedures, NOAA Fisheries is soliciting public comment on the following topics:

1) In the context of fishery management actions, how should NOAA Fisheries, in consultation with the Councils and CEQ, revise and update agency procedures for compliance with NEPA?

2) What opportunities exist to improve efficiencies in the NEPA process that may not have been applied in the past?

3) How should the Councils and NOAA Fisheries ensure that analysis is conducted on an appropriate scale for various types of fishery management actions? What criteria should be developed and applied to ensure that the level of analysis is commensurate with the scope of the action?

4) Should NOAA Fisheries consider eliminating the distinction between an environmental assessment (EA) and environmental impact statement (EIS), and instead, rely solely on an integrated environmental impact analysis?

5) How should a “reasonable” range of alternatives be defined for purposes of the new procedures?

6) What opportunities, if any, exist to develop a more effective scoping process? Should scoping occur at Council meetings and should Council meeting agenda notices serve as a traditional Notice of Intent to prepare an environmental analysis?

7) Should the environmental analysis for different types of fishery management actions be developed on a different scale based on the action’s duration or effect?

8) What key features of the current NOAA NEPA process or of CEQ’s regulations should be modified in the new procedures?

9) How should emergency actions be treated under the new procedures?

10) To what extent does the public feel that shorter comment periods (e.g., a minimum of 30 days) could affect your ability to participate effectively in the NEPA process?

Dates and Addresses: Comments should be directed to NEPAprocedures@noaa.gov and must be received by COB on April 20, 2007.

Links to Council Activities: The Councils may develop proposals on their own and discuss them at public meetings. For those members of the public interested in participating through the Council process, currently scheduled meetings and proposals include:

- Council meetings

Western Pacific Fishery Management Council
March 16, 9:00am, Honolulu, Hawaii

Meeting Details:
http://www.wpcouncil.org/

Agenda:
http://frwebgate3.access.gpo.gov/cgi-bin/waisgate.cgi?WAISdocID=30545730954+0+0+0&WAISaction=retrieve

Caribbean Fishery Management Council
March 20 – 21, Ponce, Puerto Rico

Meeting Details:
http://www.caribbeanfmc.com/meetings.htm

Agenda:
http://frwebgate2.access.gpo.gov/cgi-bin/waisgate.cgi?WAISdocID=302346153101+1+0+0&WAISaction=retrieve

Gulf of Mexico Fishery Management Council
March 26 - 29, Destin, FL

Meeting Details:
http://www.gulfcouncil.org/

Agenda:

http://www.gulfcouncil.org/Beta/GMFMCWeb/downloads/council%20agenda-307.pdf

North Pacific Fishery Management Council
March 28-29, Anchorage, AK

Meeting Details:
http://www.fakr.noaa.gov/npfmc/schedule.htm

Agenda:
http://www.fakr.noaa.gov/npfmc/Agendas/307Agenda.pdf

Pacific Fishery Management Council
April 2-4, Seattle, WA

Meeting Details:
http://www.pcouncil.org/events/future.html#2007

Agenda:
TBD

New England Fishery Management Council
April 10 -12, Mystic, CT

Meeting Details:
http://www.nefmc.org/calendar/index.html

Agenda:
TBD

Mid-Atlantic Fishery Management Council
April 17-19, Ocean City, MD

Meeting Details:
http://www.mafmc.org/mid-atlantic/meetings/meetings.htm

Agenda:
TBD

- Council proposal:

http://www.nmfs.noaa.gov/msa2007/docs/new_AO_summary_MSA_NEPA_process.pdf

Other Sources of Information:

- The MSRA (Enrolled version): http://www.nmfs.noaa.gov/sfa/2007reauth_notsigned.pdf

- Redline Version of MSA as amended: http://www.nmfs.noaa.gov/msa2007/MSA_Amended%20by%20Magnuson-Stevens%20Reauthorization%20Act%20(1-31-07%20draft).pdf

- CEQ's NEPA regulations: http://www.nepa.gov/nepa/regs/ceq/toc_ceq.htm

- The NEPA statute: http://www.nepa.gov/nepa/regs/nepa/nepaeqia.htm

- NOAA's NAO 216-6: http://www.corporateservices.noaa.gov/~ames/NAOs/Chap_216/naos_216_6.html

Timeline for EFP Regulations

March 13, 2007

January 12, 2007	**Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 is enacted**
February 16, 2007	Conference call with ARAs
February 28, 2007	Revised meeting notes per region's comments
March 1, 2007	Sent draft Proposed Rule out to regions for new round of comments Also sent to GC/F, Regional GCs, and Science Centers (This front loads GC/F's part of the clearance process)

---------- 120 Days: March 12, 2007 ----------

March 14, 2007	Comments due from Regions (9-10 working days)
March 16, 2007	OSF sent e-mail to Councils – What are their comments about EFP provision?
March 15-20, 2007	Revise draft Proposed Rule (4 working days)
March 21, 2007	Resend to regions for **quick** review
March 23, 2007	Comments due from regions (48 hours)
March 23, 2007	Responses due from e-mail to Councils (7 days)
March 26-30, 2007	Finalize Proposed Rule and complete package (RIR, IRFA, and CE)

---------- 90 Days: April 12, 2007 ----------

April 16, 2007	Begin formal clearance process (15-21 days) Send Proposed Rule to Councils for review (~3 weeks prior to CCC)?
April 27, 2007	Publish Proposed Rule with 30-day comment period
May 7, 2007	ARA Meeting in New Orleans
May 8-10, 2007	Presentation to Councils at the CCC Meeting in New Orleans

---------- 60 Days: May 12, 2007 ----------

May 28, 2007	Deadline for public comments
May 29-June 15	Respond to public comments and revise rule

---------- 30 Days: June 12, 2007 ----------

June 18-22, 2007	Finalize Final Rule and complete package (RIR, IRFA, and CE)
June 25, 2007	Begin formal clearance process (15-21 days)
July 12, 2007	**180-Day Deadline: Publish Final Rule**

Agenda Item C.2.b
Supplemental NMFS Report (Rick Methot)
April 2007

Public Scoping: Guidance for Annual Catch Limits (ACLs) and Accountability Measures (AMs)

Requirements of the Magnuson Stevens Fishery Conservation and Management Reauthorization Act (MSRA) of 2006 to End and Prevent Overfishing

March 2007

Requirements of the 2006 MSRA

Annual catch limits and accountability measures must be implemented:

- in fishing year 2010 for fisheries determined by the Secretary to be subject to overfishing
  - MSRA Section 104 (b)(1)(A)

- in fishing year 2011 for all other fisheries
  - MSRA Section 104 (b)(1)(B)

Annual Catch Limits (ACLs) & Accountability Measures (AMs)

- ACLs and AMs work together as a system to ensure that overfishing will not occur

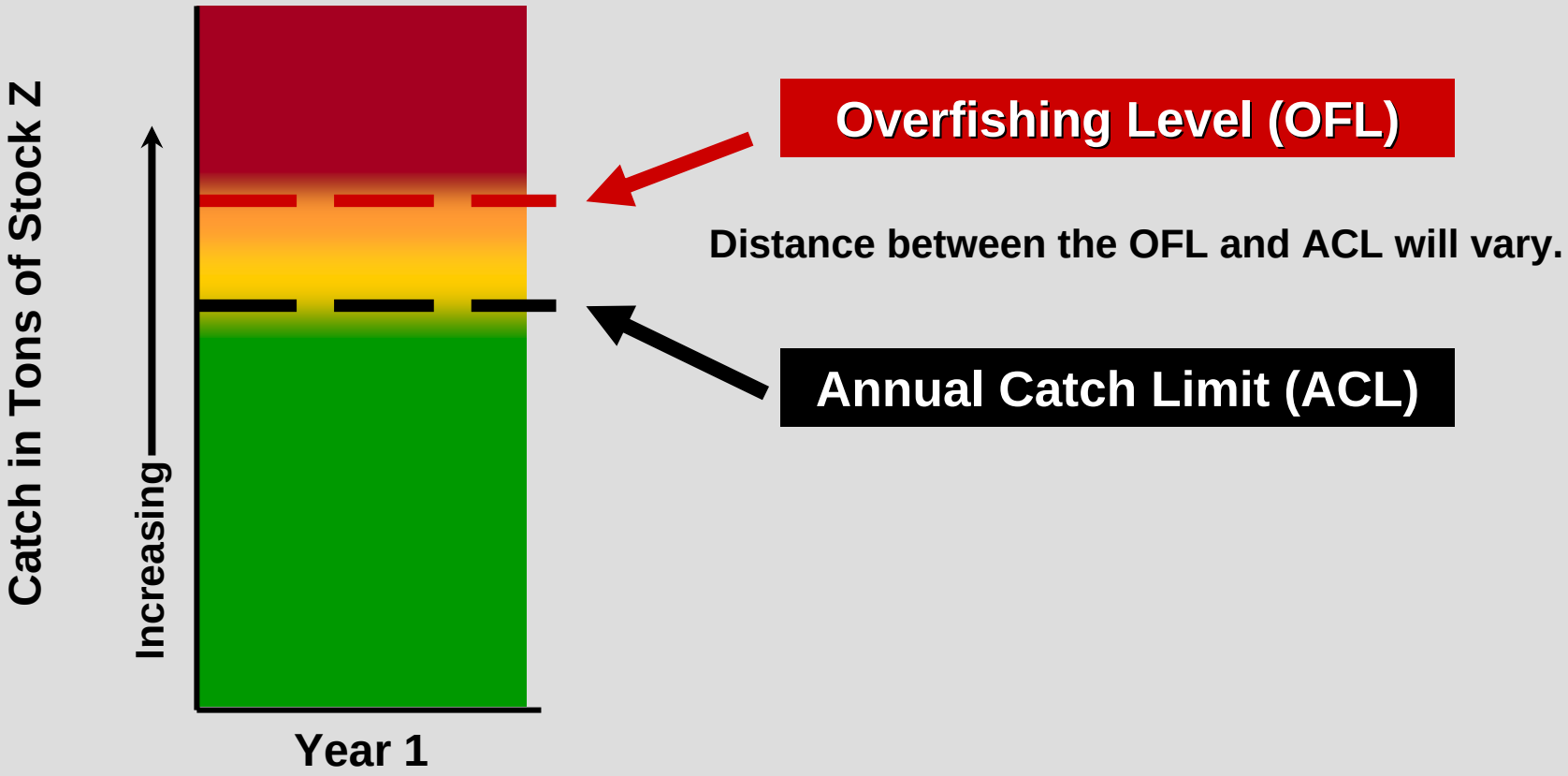
- ACLs & AMs must:
  - end overfishing on stocks subject to overfishing
  - prevent overfishing on stocks not subject to overfishing

Preliminary Interpretation

For each managed stock an:

- Overfishing Level (OFL) should be established
  - An annual numerical amount of catch that would result in overfishing if exceeded
  - Not identified in the Act but it is essential for developing accountability measures and monitoring ACL performance
- Annual Catch Limit (ACL) must be established
  - An annual numerical target catch level
  - Set below the OFL to ensure that overfishing does not occur

Relationship between ACL & OFL



Criteria for ACLs & OFLs

To accurately compare ACLs and OFLs, they need to contain the same criteria.

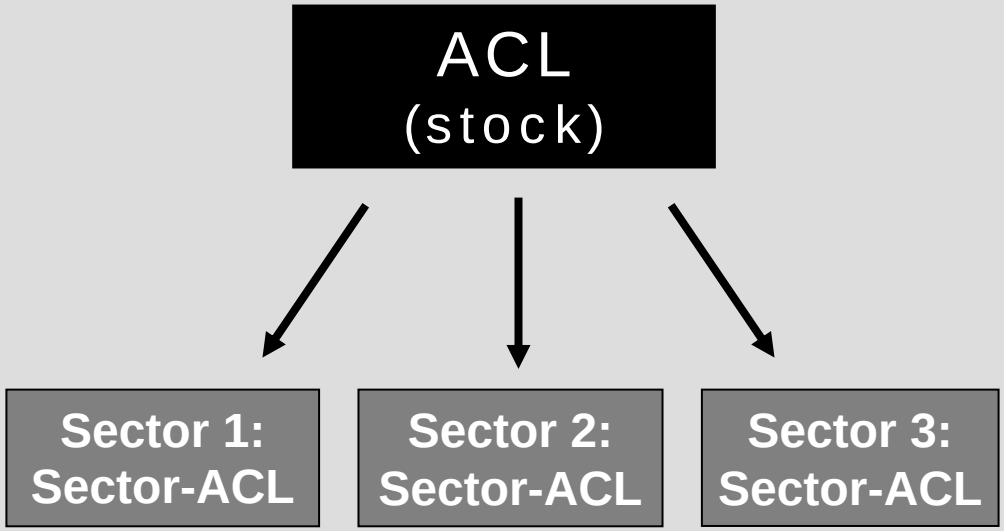
Based on our preliminary interpretation, these criteria would be needed for an ACL and OFL:

- Set for each managed fishery/stock
- Can be set for multiple year periods
- Numerical annual value set in weight or numbers of fish
- Includes all sources of fishing mortality, where possible:
  - Landings
  - Discards/Bycatch
  - All sectors and user groups

Issue: Sector Allocations

Allocation issues between sectors are of concern and can be addressed under ACLs.

- An ACL is required to be set for each managed fishery/stock
- The Councils and NMFS could:
  - Subdivide an ACL (set for each fishery/stock) into "*sector-ACLs*"
  - Develop AMs for each sector



Accountability Measures (AMs)

- Management measures established with ACLs to end and prevent overfishing
- Two basic types:
  - Preventive in-season management actions
    - e.g., in-season fishery closure if the target catch limit has been reached
  - Corrective management actions
    - e.g., overage payback in the next fishing year
- Must be established for each fishery/stock
- Could be established for each sector

Issue: Sector Allocations

Discussion

- What are the issues and concerns about:
  - allocating ACLs among sectors?
  - developing sector specific AMs?

NMFS' Preliminary Alternatives

- Alternative 1: No action

- Alternative 2: Performance standards that ACL and AM mechanisms have to meet for approval by the Secretary

- Alternative 3: Performance standards *and* specific guidelines on appropriate implementation approaches that would be acceptable to the Secretary

Alternative 1 – No Action

Considerations

- Councils still required to implement ACLs and AMs
- The Act does not provide a definition of these terms or detailed explanations for implementation

Alternative 2 – Performance Standards

Considerations

- Specified performance standards would be used by NMFS and the Councils to:
  - design ACL & AM mechanisms
  - establish criteria for Secretarial approval
  - evaluate their success after implementation
  - ensure that ACLs in all fisheries meet national performance standards

Alternative 3 – Performance Standards & Guidelines on Approaches

Considerations

- Performance standards would be developed, as under Alternative 2.
- Guidance on specific ACL and AM mechanisms would be developed.
  - e.g. establish best practices for several different tiers of stocks based on varying data quality and past management performance

Overarching Issue: Diverse Fisheries

- U.S. fisheries are biologically & ecologically diverse
  - 530 stocks and stock complexes: range from Arctic to tropical regions
- Management approaches vary
  - 46 FMPs: some use hard TACs, some use effort controls
- Data available for each stock vary

ACL and AM guidance must address diversity in the fisheries to develop effective strategies able to meet the requirements of the Act.

Creating Performance Standards

Discussion

- Given that knowledge and management of stocks is imperfect and uncertain:
  - What level of risk of overfishing would be tolerated in designing ACL & AM mechanisms?
  - What frequency and amount of overfishing would indicate that ACL and AM mechanisms are ineffective and must be revised?

Key Factors in Design and Implementation of ACLs & AMs

- Management / Regulatory Approach
  - Some approaches are more effective than others at achieving actual catch levels close to targets
- Monitoring / Catch Data Availability
- Scientific Knowledge of Stocks
- Uncertainty

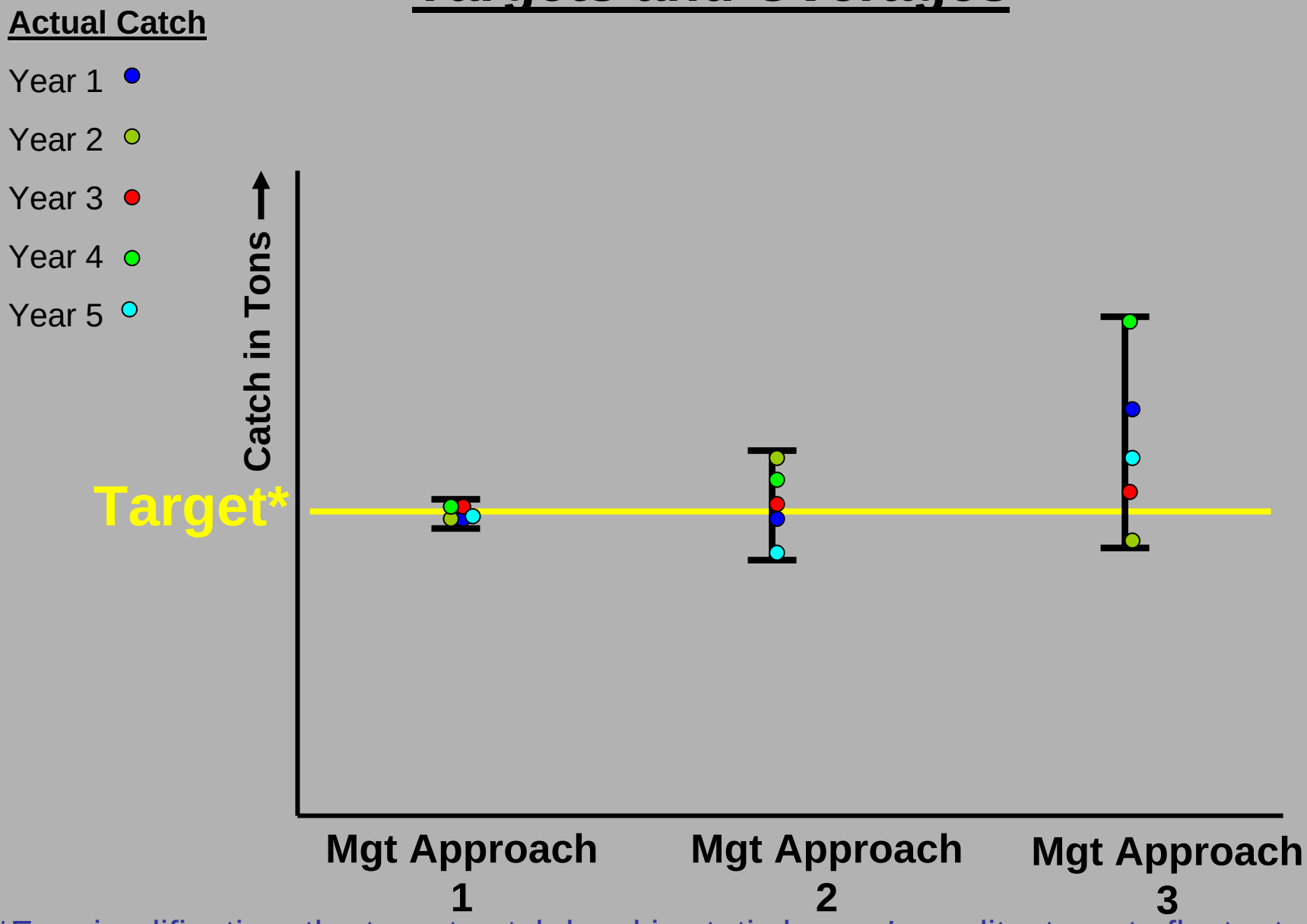
All these factors combined affect fisheries management success and the feasibility of designing ACLs and AMs.

Issue: Management Precision

Discussion

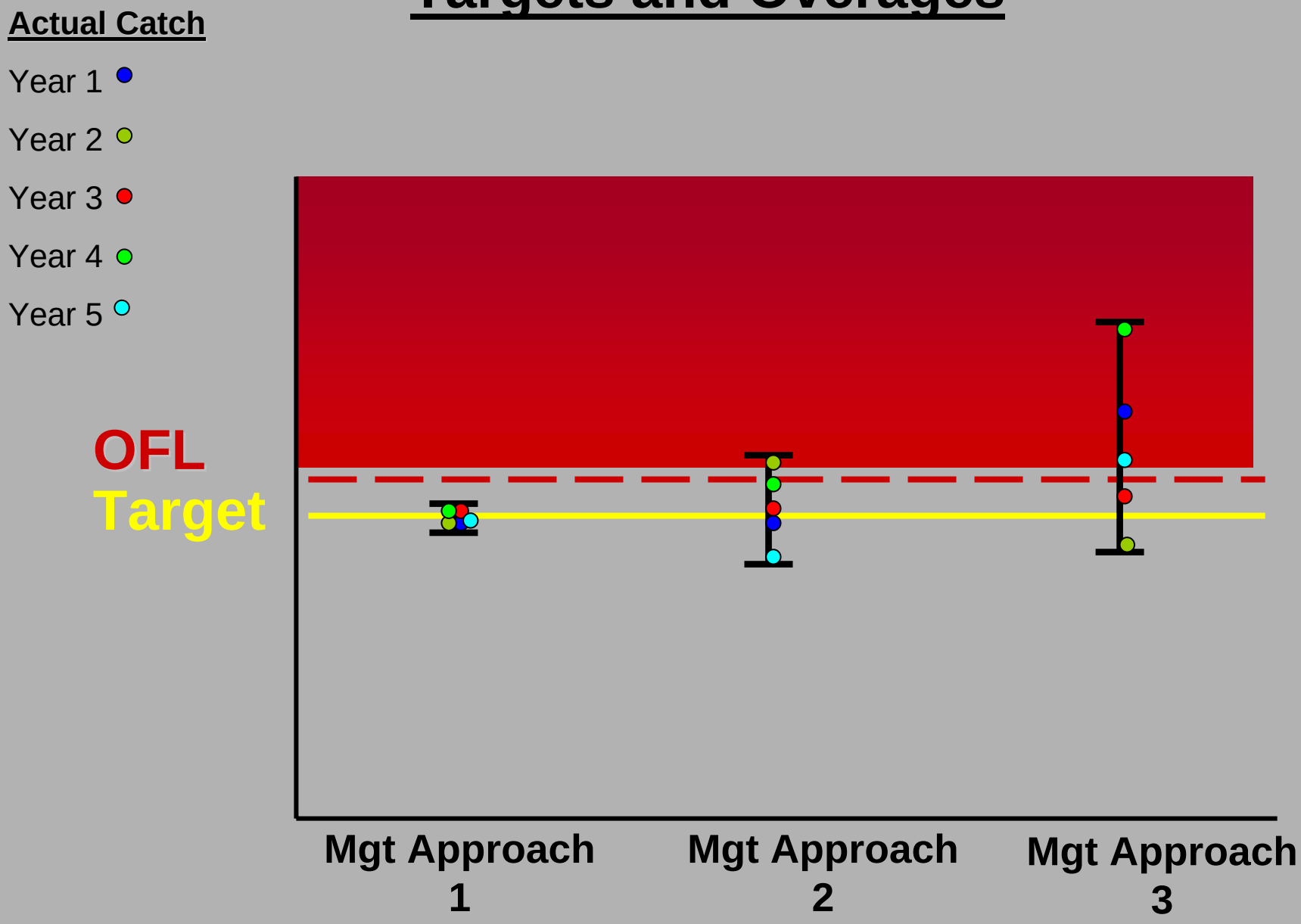
- Given variability in managing to target catch levels, where should the ACL be set in relation to the OFL?

Conceptual Illustration of Management Precision: Targets and Overages



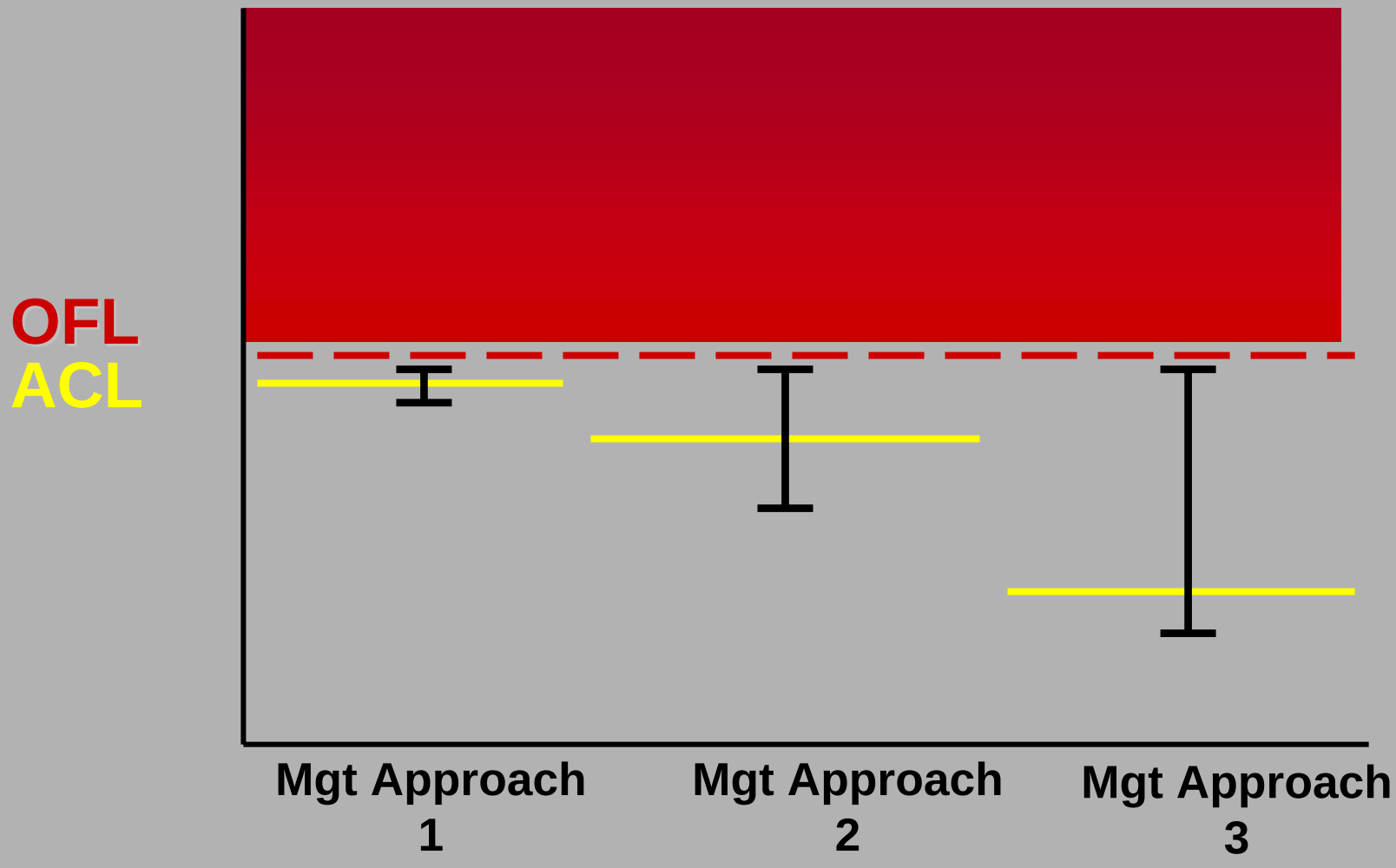
*For simplification, the target catch level is static here. In reality, targets fluctuate.

Conceptual Illustration of Management Precision: Targets and Overages



Setting Annual Catch Limits to Prevent Overfishing:

Accounting for Uncertainty and Past Performance



Issue: Scientific Knowledge of Stocks Varies

Considerations

- Quality of catch data varies
  - Completeness of catch data
    - Landings and discards data from all sectors & user groups
    - Landings data only, no discards
    - No catch data at all
  - Precision of catch data estimates
    - e.g. size of confidence intervals, statistical methods used
  - Many different data collection methods are used and each have different data quality issues
    - Commercial: logbooks, port sampling, landings reports, processor/dealer reports, observers
    - Recreational: MRFSS, other surveys

Issue: Scientific Knowledge of Stocks Varies

Considerations (continued)

- Biomass and fishing mortality estimates are not known for every stock
- Stock status varies: Known, Unknown, Undefined
  - Subject to overfishing
  - Overfished
  - Approaching overfished
- Existence of other academic research varies
- Existence of anecdotal information varies
- No information exists on the stock

Issue: Timeliness of Catch Data Varies

Considerations

- Timing of catch data availability (including analysis time):
  - in-season allows for in-season adjustments to catch
  - in time to make adjustments to next year's target catch
  - in time to make adjustments to target catch two or more years later
- No catch data at all

Issue: Data Varies

Discussion

- For stocks with little or no data, how could ACLs and AMs be developed?

- For fisheries where catch data is not timely or does not exist, what types of AMs can be developed?

Summary

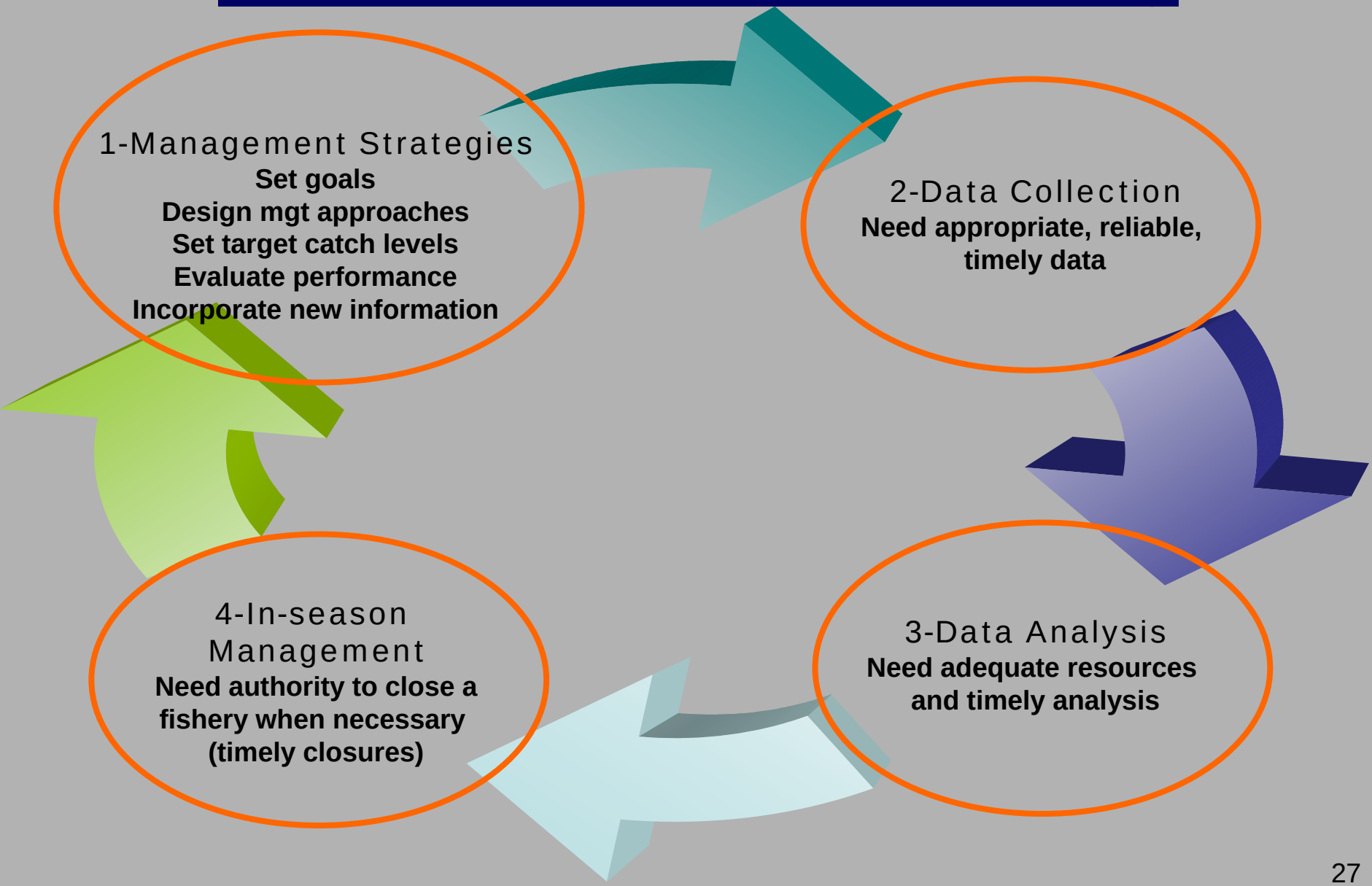
Developing ACL and AM Guidance

Development of national ACL and AM guidance must account for:

- Diversity in U.S. fisheries:
  - Biological and ecological
  - Management approaches
  - Monitoring capabilities
  - Scientific information available
- Uncertainty

All these factors work together and will affect our ability to develop, implement, and evaluate ACLs and AMs.

Considerations in Developing ACLs and AMs for Each Fishery



Estimated Implementation Timeline

Scoping Meetings (see website)	**March-April 2007**
DEIS: Issue NOA and 45-day comment period	**July 2007**
Proposed Rule: Issue rule and 45-day comment period	**July 2007**
FEIS: Issue NOA	**October 2007**
Final Rule	**November 2007**
Councils & NMFS amend FMPs / mgt measures	**Jan 2008 – June 2009**
Secretarial Review of FMP amendments / mgt measures	**June 2009 – Dec 2009**
ACL & AM mechanisms implemented for "overfishing" stocks	**2010**
ACL & AM mechanisms implemented for all other stocks	**2011**

Seeking Comments

- NMFS is seeking comments on:
  - ACLs and AMs
  - Creating national performance standards and/or guidance for ACLs and AMs that account for various characteristics of each fishery
  - Other related issues or topics
    - Do any other issues related to NS1 guidelines need to be addressed during this process?

Email Comments to:

annual.catch.limitDEIS@noaa.gov

Visit Our Website:

http://www.nmfs.noaa.gov/msa2007/

Annual Catch Limits (ACLs) and Accountability Measures (AMs): Requirements of the 2006 Amendments to the Magnuson-Stevens Act (MSA)

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) was reauthorized and amended on January 12, 2007, by the Magnuson Stevens Fishery Conservation and Management Reauthorization Act (MSRA). The MSRA established **new requirements to end and prevent overfishing**, including Annual Catch Limits (ACLs) and Accountability Measures (AMs). On February 14, 2007, NOAA's National Marine Fisheries Service (NMFS) published a notice of intent to prepare an environmental impact statement (EIS) (72 FR 7016) for proposed guidance on the development and implementation of these new requirements. NMFS is currently in the public scoping process for the EIS and guidance.

The new guidance under development would assist regional fishery management councils in developing ACLs and AMs to **end and prevent overfishing in all U.S. commercial and recreational fisheries in 2010 for stocks subject to overfishing, and 2011 for all others**, as required by the MSRA. NMFS provides guidelines to facilitate consistent application of the MSA's 10 national standards among the nation's fishery managers. NMFS would incorporate new guidance of ACLs and AMs into the guidelines for National Standard 1, also known as the "overfishing standard."

Overfishing still occurs at various levels in 48 fisheries in U.S. waters, although NMFS and the Councils have made significant improvements in recent years. The highest priority in the MSRA was to strengthen the Act to ensure an end to overfishing.

To end overfishing and prevent it from occurring in the future, the new law requires that **federal fishery management plans establish mechanisms for annual catch limits and accountability measures**. The new law also adds **requirements for the role of scientific advice in this process**, specifically through the Councils' Scientific and Statistical Committees (SSCs). The new guidelines will address these provisions as they relate to development of annual catch limits.

This public scoping process provides an opportunity to discuss these and other issues related to National Standard 1, and receive public comments on developing guidance to address the new mandates. **The public comment period ends April 17, 2007**.

Upon consideration of public input that NMFS receives during this scoping period, the agency will develop its proposed guidance, and then will hold another public comment period. The agency aims to finalize its revisions to the National Standard 1 guidelines by the end of 2007.

Requirements to End & Prevent Overfishing

Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery for the United States fishing industry.

- *National Standard 1 of the MSA*

Starting July 12, 2009, within 2 years of notification that a stock is overfished or approaching a condition of being overfished, measures must be prepared and implemented to end overfishing immediately and to rebuild

- *MSA Section 304(e)(4) requirements as amended by MSRA Section 104(c) and 104(d)*

Each Council is required to "develop annual catch limits for each of its managed fisheries that may not exceed the fishing level recommendations of its scientific and statistical committee or the peer review process established under subsection (g)"

- *MSA Section 302(h)(6) as amended by MSRA Section 103(c)(3)*

''(g) COMMITTEES AND ADVISORY PANELS.—

(1)(A) Each Council shall establish, maintain, and appoint the members of a scientific and statistical committee to assist it in the development, collection, evaluation, and peer review of such statistical, biological, economic, social, and other scientific information as is relevant to such Council's development and amendment of any fishery management plan.

(B) Each scientific and statistical committee shall provide its Council ongoing scientific advice for fishery management decisions, including recommendations for acceptable biological catch, preventing overfishing, maximum sustainable yield, and achieving rebuilding targets, and reports on stock status and health, bycatch, habitat status, social and economic impacts of management measures, and sustainability of fishing practices.

(C) Members appointed by the Councils to the scientific and statistical committees shall be Federal employees, State employees, academicians, or independent experts and shall have strong scientific or technical credentials and experience.

(E) The Secretary and each Council may establish a peer review process for that Council for scientific information used to advise the Council about the conservation and management of the fishery. The review process, which may include existing committees or panels, is deemed to satisfy the requirements of the guidelines issued pursuant to section 515 of the Treasury and General Government Appropriations Act for Fiscal year 2001 (Public Law 106–554—Appendix C; 114 Stat. 2763A–153).[…]"

- *MSA Section 302(g) as amended by MSRA Section 103(b)(1)*

Fishery management plans shall "establish a mechanism for specifying annual catch limits in the plan (including a multiyear plan), implementing regulations, or annual specifications, at a level such that overfishing does not occur in the fishery, including measures to ensure accountability."

- *MSA Section 303(a) as amended by MSRA Section 104(a)(10)*

Shall not apply to a fishery for species that have a life cycle of approximately 1 year unless the Secretary has determined the fishery is subject to overfishing of that species

- *MSRA Section 104 (b)(2)*

Shall apply for a fishery unless otherwise provided for under an international agreement in which the U.S. participates

- *MSRA Section 104 (b)(1)*

ACLs must be implemented:

- in fishing year 2010 for fisheries determined by the Secretary to be subject to overfishing
  - *MSRA Section 104 (b)(1)(A)*
- in fishing year 2011 for all other fisheries
  - *MSRA Section 104 (b)(1)(B)*

Key Issues to Consider in Developing Guidance on ACLs & AMs

NMFS has identified the following key issues to consider in developing guidelines on annual catch limits (ACLs) and accountability measures (AMs) and welcomes public comments on these and any other issues related to NS1 during the public scoping process.

- The role of the SSC and other peer review processes in setting ACLs and AMs
- The relationship between ACL and OY
- Revision of existing overfishing definitions to include OFL
- Variability in data currently available for each stock
- Setting ACLs for stocks with little or no data
- Setting ACLs and AMs for fisheries that have a recreational component
- Circumstances in which a numerical ACL can not be set for a stock, and in such situations, recommendations for adequate and appropriate alternatives to setting a numerical ACL (e.g., prohibitions)
- Setting ACLs for stock complexes, stock assemblages, and similar stock groupings
- Variability in the accuracy of management approaches in achieving target fishing levels
- Setting a buffer between ACL and OFL to prevent overfishing, and how to determine the size of the buffer needed
- Establishing the appropriate probability that an ACL and AM measures will prevent overfishing for a stock
- Establishing recommendations for in-season management authority and methods to be used as AMs to prevent overfishing
- Limiting the extent of overfishing, should it occur
- Establishing corrective actions to ensure accountability in a subsequent year for an overage of the OFL for a stock in a previous year
- Considerations for biological relevance of an OFL overage
- Establishing AMs for various sectors, if an ACL is subdivided for a stock, and the need to still prevent exceeding the overall OFL for the stock

Comment Period Ends April 17, 2007

Please E-mail Comments to:
annual.catch.limitDEIS@noaa.gov

Visit Our Website:
http://www.nmfs.noaa.gov/msa2007/

Timeline for Developing and Implementing ACLs & AMs

Estimated Implementation Timeline	
Scoping Meetings (see website)	**March-April 2007**
DEIS: Issue NOA and 45-day comment period	**July 2007**
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Councils & NMFS amend FMPs / mgt measures	**Jan 2008 – June 2009**
Secretarial Review of FMP amendments / mgt measures	**June 2009 – Dec 2009**
ACL & AM mechanisms implemented for "overfishing" stocks	**Jan 1, 2010**
ACL & AM mechanisms implemented for all other stocks	**Jan 1, 2011**

Schedule of Scoping Meetings

Council	Date	Time	Location
South Atlantic	March 6, 2007	6:30 pm to 7:30 pm	Jekyll Island Club Hotel, Jekyll Island, GA 31527
NMFS	March 9, 2007	9:00 am	NOAA Science Center, 1301 East-West Hwy, Silver Spring, MD
Western Pacific	March 14, 2007	7:30 pm to 9:00 pm	Ala Moana Hotel, Honolulu, HI
Caribbean	March 20, 2007	6:00 pm to 7:00 pm	Ponce Hilton Hotel, Ponce, PR
Gulf of Mexico	March 27, 2007	6:30 pm to 7:30 pm	Embassy Suites Hotel, Destin, FL
North Pacific	March 28-29, 2007**	Morning session	Anchorage Hilton Hotel, Anchorage, AK
Pacific	April 3, 2007**	Afternoon session	Seattle Airport Marriott Hotel, Seattle, WA 98188
New England	April 10, 2007	1:30 pm to 3:00 pm	Mystic Hilton, Mystic, CT
Mid-Atlantic	April 17, 2007	7:00 pm to 8:30 pm	Princess Royale, 9100 Coastal Hwy, Ocean City, MD

Any changes or updates will be published in the Federal Register and posted on our website (see page 3).
**Subject to Council agenda changes during the week of the meeting.

Acronyms

ACL – annual catch limit

AM – accountability measure

B – Biomass

B_{MSY} – long-term average biomass that would be achieved if fishing at a constant fishing mortality rate equal to F_{MSY}.

DEIS – draft environmental impact statement

EA – environmental assessment

EEZ – exclusive economic zone

EIS – environmental impact statement

F – fishing mortality

FEIS – final environmental impact statement

FMP – fishery management plan

F_{MSY} – fishing mortality rate that produces the maximum sustainable yield.

MFMT – maximum fishing mortality threshold

MSA – Magnuson-Stevens Fishery Conservation and Management Act

MSRA – Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006

MSST – Minimum Stock Size Threshold ($B_{threshold}$)

MSY – maximum sustainable yield

NEPA – National Environmental Policy Act

NOA – notice of availability

NOAA – National Oceanic and Atmospheric Administration

NMFS – National Marine Fisheries Service

NOI – notice of intent

NS1 – National Standard One

OFL – overfishing level

OY – optimum yield

SSC – Scientific and Statistical Committee

TAC – total allowable catch

GROUNDFISH ADVISORY SUBPANEL REPORT ON MAGNUSON-STEVENS ACT REAUTHORIZATION IMPLEMENTATION

The Groundfish Advisory Subpanel (GAP) had a thorough discussion regarding implementation of Magnuson-Stevens Fishery Conservation and Management Act issues with an emphasis on items significant to the Pacific Fishery Management Council. The GAP has specific comments on the following:

1. Role of the Scientific and Statistical Committee (SSC)
2. National Environmental Policy Act (NEPA) process
3. Annual Catch Limits and Accountability Measures
4. Mandatory buffers
5. Multi-year optimum yields (OYs) and carry-over provisions
6. Stipends

Role of the SSC

The GAP recommends that the PFMC's SSC maintain the advisory role it has fulfilled in the past. The SSC should continue to provide the Council ongoing scientific advice for fishery management decisions, including (1) recommendations for acceptable biological catch (ABC), preventing overfishing, maximum sustainable yield, achieving rebuilding targets; and (2) reports on stock status and health, bycatch, habitat status, social and economic impacts of management measures, and sustainability of fishing practices. With respect to OYs, the GAP recommends that the SSC provide an appropriate range of OY alternatives to the Council and that the Council makes the ultimate policy decisions on catch levels. The GAP also believes that an emphasis on the economic and social impacts of regulations should be pursued more aggressively by the SSC.

NEPA Process

The GAP believes that the current protocol for public involvement in the decision-making process is sufficient and provides ample opportunity for stakeholder involvement.

Annual Catch Limits and Accountability Measures

The GAP believes that annual catch limits and accountability measures are accomplished with the current OY system and that over the years the Council has utilized some form of annual catch limits with accountability measures routinely in the fishery management process. For example, OYs are currently set to prevent overfishing. Accountability measures, such as the 40-10 rule, seasons, trip limits, bag limits, rockfish conservation areas (RCAs) and other tools are routinely used to ensure catch levels do not exceed the OY.

Mandatory Buffers

The GAP does not support a mandatory buffer system. The GAP believes that buffers should be considered on a species by species basis as appropriate. The GAP recognizes that "buffers" are already incorporated in our current management through catch monitoring and that data poor stocks are generally managed in a more precautionary way utilizing buffers. For example, OYs for stocks in the precautionary zone are set below ABC. When appropriate, buffers should continue to be established through the annual specifications process.

Multi-year OYs and Carry-over Provisions

The GAP believes this approach should be analyzed and included in the tool box for use as appropriate. The GAP recognizes that there may be some unknown biological issues associated with this type of approach, but believes that these impacts should be further explored in NEPA analyses when annual specifications are decided.

The GAP is cognizant of problems with being able to access up-to-date harvest data, including, but not limited to, recreational harvest data in some areas, and how the delay in data acquisition could effect both the establishment of OYs and inseason adjustments. The GAP believes that setting a multi-year OY would provide the most flexibility for managers and harvesters, and would help avoid the types of problems that are addressed in Agenda Item C.2.a, Attachment 2 such as:

- One sector's overharvest pre-empting fishing opportunities for another sector;
- The current management system that relies on uncertain catch monitoring is more prone to overfishing; and
- The current management system thwarts fishermens' efforts to explore strategies to fish more selectively to reduce bycatch. Multi-year OYs and carryover provisions would allow individual fishermen and fishery sectors to manage risk over a longer period and to explore more sustainable fishing practices.

Stipends

Stipends for advisory panels are now authorized in the MSA. The GAP recommends the Council seek funding for this.

PFMC
04/03/07

GROUNDFISH MANAGEMENT TEAM REPORT ON MAGNUSON-STEVENS ACT REAUTHORIZATION IMPLEMENTATION

The Groundfish Management Team (GMT) reviewed the issue paper developed by Council staff regarding potential mechanisms designed to avoid overharvest and optimize sector fishing opportunities (Agenda Item C.2.a, Attachment 2). The GMT agreed that the approaches outlined in the paper warrant further analysis to evaluate their suitability for inclusion in the Council's management toolbox. The GMT focused their discussion on the issues of multiple year Optimum Yields (OYs) and carryover provisions. Sector-specific multi-year OYs and carryover provisions might, for example, facilitate individual roll-over of quota pounds in a trawl individual quota program, provide more opportunity to mitigate for "disaster" tows, as well as provide some protection against intersector pre-emption. However, such provisions might limit management flexibility in balancing the bycatch scorecard across sectors, or could result in greater harvest constraints at the conclusion of a multi-year OY, potentially resulting in fishery closures for extended periods. These benefits and costs, as well as other complexities associated with this approach, could be explored further in the 2009-2010 SPEX EIS.

Presently, acceptable biological catches (ABCs) and OYs for some species are set at an aggregated complex level (e.g., other flatfish). The current level of information does not support stock assessments for individual species within these complexes. The GMT would consider a requirement for Annual Catch Limits (ACLs) for individual species within the Groundfish Fishery Management Plan that do not have enough data to support stock assessments to be unfeasible. The GMT recommends that ACLs be set at the complex level for these species, with periodic review of the status of individual species within these complexes to determine if change is warranted. The GMT also suggests that the Council consider, possibly as part of a future harvest policy workshop, investigation of stock complex or assemblage assessments to better address groups of data-poor species. Another approach would be to use data-rich species as indicators for management for data poor species with similar life histories and habitat associations.

The GMT notes that the ABCs and OYs currently employed in groundfish management, and the associated precautionary approaches, meet the revised Magnuson-Stevens Act's ACL requirements for most groundfish species. One area where the current process might need to be revised to meet new ACL requirements would be for species that have been assessed to be above B_{40}, since OYs for those species are set equal to their ABCs. However, if complete inseason data are provided in a timely manner (e.g., in a trawl IQ program) and management can respond quickly (e.g., the whiting fishery), then it may be feasible to set the OY equal to the ABC. A de facto "buffer" already exists for species below B_{40} as a result of the Council's existing precautionary harvest adjustments. Otherwise, the GMT is pleased to note that the Pacific Council is ahead of the nationwide curve.

GMT Recommendations

- Analyze multi-year OYs for use in the TIQ program and/or intersector allocation.
- Set ACLs at the complex level until species specific information becomes available.
- Examine mechanisms to prevent overfishing in cases where OYs are set equal to ABCs.
- Forward Alternative 2 for setting ACLs and AMs to the Secretary for consideration as the preferred alternative (C.2.b, Attachment 1).

HABITAT COMMITTEE REPORT ON MAGNUSON-STEVENS ACT REAUTHORIZATION IMPLEMENTATION

The Habitat Committee heard a briefing from Council staff regarding the reauthorization of the Magnuson-Stevens Act (MSA). In regard to setting annual catch limits and accountability measures, as discussed in Agenda Item C.2.b. Attachment 2 (MSRA, Section 103(c)(3)(g)(B)), the Council not only needs to set appropriate fishing regulations for overfished stocks and to prevent overfishing, but also should identify non-fishing causes of "overfished" status (such as hydropower, climatic changes, etc.).

PFMC
04/03/07

LEGISLATIVE COMMITTEE REPORT ON THE MAGNUSON-STEVENS ACT REAUTHORIZATION IMPLEMENTATION

The Legislative Committee reviewed four general issues under this agenda item and offers the following comments.

Annual Catch Limits – The Committee discussed various methods of complying with the new requirements for Councils to establish annual catch limits for each fishery that ensure overfishing does not occur in the fishery. After looking at the history of fisheries management by the Council since the 1996 amendments to the Act, the Committee could only find one instance in which overfishing had occurred (petrale sole in 2005) and that problem was corrected as soon as it was discovered. The Committee further determined that the Council had several precautionary management systems in effect, including but not limited to the harvest control rule for groundfish, precautionary optimum yield (OY) settings for highly migratory species (HMS) and coastal pelagic species (CPS), and conservation controls for salmon. Finally, the Committee noted that the Council is proceeding with a groundfish intersector allocation and a trawl individual quota (IQ) plan, both of which would add accountability. The Committee therefore recommends that that Council document these controls to prevent overfishing, submit them to NMFS as evidence that the Pacific Fishery Management Council is already complying with the law, and urge NMFS not to enact additional regulations or guidelines that would affect the Council's successful program.

Environmental Review – After discussion with Dr. McIsaac on the work being done by the Council Coordinating Committee, the Legislative Committee recommends that the Council endorse the Coordinating Committee's proposal.

Experimental Permitting Process – The Legislative Committee notes that the Council has already adopted an extensive science-based review process for exempted fishing permits. The Committee recommends that the Council provide this process to NMFS and request that implementing regulations reflect how our process operates.

PFMC
04/03/07

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON MAGNUSON-STEVENS ACT REAUTHORIZATION IMPLEMENTATION

The Scientific and Statistical Committee (SSC) discussed issues pertaining to Magnuson-Stevens Act (MSA) reauthorization implementation as they relate to the role of the SSC in the Council process. The SSC also discussed particular issues regarding the implementation of annual catch limits (ACLs) and accountability measures (AMs).

The SSC's March 2007 report to the Council on this topic is still relevant. As such, it is attached to this report.

From the SSC's point of view, the stocks currently managed under Council FMPs that have biologically-based control rules governing harvest (e.g., the principal groundfish stocks and sardine) may already have sufficient precautionary characteristics to meet the reauthorized MSA requirements, such as ACLs, AMs and buffers. However, many Council stocks are managed through control rules that are not biologically based (e.g., minor rockfish species). While it may be desirable to manage all species with control rules, the large number of stocks involved and the data-poor nature of the assessments make this impractical for all stocks. Furthermore, salmon are generally managed for escapement, rather than using explicit catch accounting control rules. Managing for spawning biomass is generally appropriate, and is arguably closer to the management goal.

Even with substantial additional funding, it is unlikely explicit catch accounting control rules can be developed for all stocks managed under Council FMPs. The SSC suggests it may be prudent for NMFS to fully consider these factors when creating the National Standards needed to implement the reauthorized MSA.

PFMC
04/03/07

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON REVIEW AND PLANNING FOR IMPLEMENTATION OF NEW REQUIREMENTS RESULTING FROM REAUTHORIZATION OF THE MAGNUSON-STEVENS ACT

The Scientific and Statistical Committee (SSC) discussed new provisions of the 2006 Magnuson-Stevens Conservation and Management Reauthorization Act (MSRA) as they relate to the role of the SSC in the Council process. The SSC has a number of questions regarding these provisions:

Provision: "The Council shall establish annual catch limits for each managed fishery that may not exceed the fishing level recommendations of its SSC" (MSA 302(h)(6), p. 51)

> The Pacific Council has maintained a clear distinction between scientific analysis and advice and policy decisions, with the SSC taking the lead on the science. With regard to coastal pelagic and groundfish catch limits, the SSC's role has been to review the harvest control rule and the stock assessments that are fed into the control rule. The Council's role has been to establish annual catch limits, which (for groundfish) involves taking into consideration the decision table showing harvest levels associated with high, medium, and low levels of risk to the stock. While not mandated by the SSC, it has generally been Council practice not to exceed the risk-neutral level of harvest indicated by the control rule.
>
> If the "fishing level recommendations" that the SSC is expected to provide under the MSRA are intended to be numeric catch limits, this will be a major deviation from Council practice, as it will require the SSC to make policy decisions. This raises several issues: (1) Is the SSC supposed to establish catch limits strictly on the basis of biological considerations? If so, this will be tantamount to an implicit policy decision to disregard ecosystem and socioeconomic issues in setting catch limits. (2) What types of information would the SSC be required to consider in establishing catch limits? For instance, would the SSC consider results of a regulatory analysis and take input from advisory bodies and the public? If so, then what is the role of the Council with regard to setting catch limits? If not, does this leave the Council and NOAA Fisheries Service vulnerable to claims of procedural violations under the National Environmental Policy Act (NEPA) and the Magnuson Act?

Provision: "The SSC shall provide recommendations for acceptable biological catch, preventing overfishing, maximum sustainable yield and achieving rebuilding targets, and reports on stock status and health, bycatch, habitat status, socioeconomic impacts of management measures, sustainability of fishing practices (MSA 302(g), pp 49-50).

> Clarification is needed with regard to SSC responsibilities entailed by this provision. For instance, does this responsibility pertain to all species (including salmon and highly migratory species)? In terms of "preventing overfishing" and "achieving rebuilding targets", is the SSC supposed to set numeric bycatch levels associated with rebuilding? If

so, then the same issues raised above with regard to the SSC setting of catch limits would apply here as well.

Does the requirement that the SSC "provide" reports on stock and habitat status, bycatch, socioeconomic impacts of management measures and the like mean the SSC will "produce" these reports. If so, given the Council's practice of separating analysis from review, who will review the SSC's production of these reports?

The SSC also discussed pending efforts by NOAA Fisheries Service to integrate NEPA requirements with fishery regulatory requirements in such a way as to streamline the management process. Given that rationale for the biennial groundfish management and assessment cycle was the cumbersome nature of the regulatory process, would such streamlining reduce the time lag between groundfish management actions and the stock assessments on which they are based?

PFMC
03/06/07

National Environmental Trust
Testimony to National Marine Fishery Service on: *National Standard 1 Guidelines; Notice of Intent to Prepare an Environmental Impact Statement*

Pacific Fishery Management Council Meeting
Seattle, WA
April 3, 2007

Last year, Congress unanimously passed a reauthorization of the Magnuson-Stevens Act and President Bush signed the bill into law with a strong statement in support of the new requirements to end overfishing. If this sweeping law is fully implemented by the National Marine Fisheries Service and the regional councils, including the Pacific Fishery Management Council, it will enable our fish stocks to recover and ensure abundant fisheries for future generations. The National Environmental Trust worked closely with representatives from both parties, including the bipartisan Oceans Caucus in the House and Senators Stevens and Inouye in the Senate, as this bill was crafted and we will watch closely as regulations are drafted.

The National Marine Fisheries Service's Notice of Intent is a positive step by the agency to create rules that will implement the Magnuson-Stevens Act and ensure that its new conservation provisions are enforced. The National Environmental Trust requests that the National Marine Fishery Service:

1. Produce a full Environmental Impact Statement rather than an Environmental Assessment for the proposed new guidelines for National Standard 1. Unlike an Environmental Assessment, an Environmental Impact Statement requires an evaluation by a wide variety of experts of the environmental impacts of a range of fishery management alternatives to the proposed action. An Environmental Impact Statement also offers an important opportunity, not permitted by an Environmental Assessment, for the public to review the impacts of these alternatives and participate in the decision-making process by submitting comments. Fishery management is complex and challenging and past regulations have often failed as fisheries collapsed. An Environmental Impact Statement would increase the likelihood that the National Marine Fisheries Service develops the most effective guidelines to implement the standard that will work to end overfishing.

2. In order to end overfishing permanently, establish an effective scientifically reviewed mechanism for specifying annual catch limits in each fishery management plan (including multi year plans) by implementing regulations and annual specifications at a conservative level for each fish stock with a large enough buffer to account for scientific uncertainty. Each plan should include strong measures to ensure accountability. It is essential that all new fishery management plans are designed to have a high probability of success and do not exceed scientifically recommended catch levels.

3. Ensure that the reformed Scientific and Statistical Committees are independent. Their work must be peer-reviewed, their scientific recommendations are adhered to by the regional councils in setting catch levels and those catch levels are enforced in the fisheries. The Scientific and Statistical Committees should provide the regional councils with ongoing scientific advice for fishery management decisions including recommendations for preventing overfishing, acceptable biological catch, maximum sustainable yield, and achieving rebuilding targets, and reports on stock status and health, bycatch, habitat status, social and economic impacts on management measures, and sustainability of fishing practices. In summary, the Scientific and Statistical Committees must be independent bodies from the regional councils, and the regional councils must not be allowed to develop plans which allow catch levels that exceed the Scientific and Statistical Committee's recommendations. Although it's optional under the Magnuson-Stevens Act, we strongly recommend that all the Scientific and Statistical Committee members be paid.

4. Convene a new scientific workshop based on the February of 1998 National Marine Fisheries Service workshop entitled, "Providing Scientific Advice to Implement the Precautionary Approach Under the Magnuson-Stevens Fishery Conservation and Management Act". We support the findings of that 1998 scientific workshop, but we have all learned lessons since then and the law has changed. As we grapple with a very technical rulemaking process we would welcome the input of scientific experts. A new scientific workshop would be a good use of National Marine Fisheries Service time and resources, and would help ensure that we create regulations that will end overfishing.

We look forward to working with NMFS and the councils as this process moves forward. Thank you for your time and for the opportunity to comment.

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APPOINTMENTS TO ADVISORY BODIES, STANDING COMMITTEES, AND OTHER FORUMS, AND CHANGES TO COUNCIL OPERATING PROCEDURES (COP) AS NEEDED

Advisory Body Appointments

In view of her promotion and new responsibilities, the California Department of Fish and Game (CDFG), has requested that Ms. Susan Ashcraft be replaced on the Groundfish Management Team (GMT) by Ms. Joanna Grebel (Closed Session A.1.a, Attachment 1).

In view of her promotion and new responsibilities within Washington Department of Fish and Wildlife (WDFW), Ms. Michele Culver has submitted her resignation from the WDFW position on the Highly Migratory Species Management Team (HMSMT) (Closed Session A.1.a, Attachment 2). The naming of a replacement awaits the filling of Ms. Culver's previous position within WDFW and any reassignment of her former responsibilities.

The following advisory body vacancies remain:
- HMSMT – WDFW Position
- SSC – Idaho Department of Fish and Game Position
- Ad Hoc Groundfish Trawl Individual Quota Committee – Community Representative

Committee Membership and Process for Essential Fish Habitat Considerations

In September 2006, the Council established the Groundfish Essential Fish Habitat Oversight Committee (EFHOC) as an Ad Hoc Committee to be appointed by the Council Chair and to include appropriate representatives from the Groundfish Advisory Subpanel, GMT, and Scientific and Statistical Committee. To date, no action has occurred to identify the committee members or a COP guiding its function. The Council may wish to consider any final guidance to the chair and staff on committee membership and process, based on the expected need and appropriate timing, especially considering the up coming groundfish biennial regulatory process and other pertinent workload issues.

Attachment 1 contains excerpts from the current Groundfish Fishery Management Plan (FMP) which describe the process for changes to essential fish habitat (EFH) and habitat areas of particular concern (HAPC). The Council must review its EFH and HAPC identification at least once every 5 years (due no later than May 2011).

Council Action:

1. **Confirm CDFG Appointment to the GMT.**
2. **Consider guidance on EFHOC membership and Process.**

Reference Materials:

1. Agenda Item C.4.a, Attachment 1: Excerpts from Current Groundfish FMP Regarding Changes to EFH.

Agenda Order:

a. Agenda Item Overview — John Coon
b. Reports and Comments of Advisory Bodies
c. Public Comment
d. **Council Action:** Consider Changes to COP and Appoint new Advisory Body Members as Needed

PFMC
03/20/07

Excerpts from Current Groundfish FMP Regarding Changes to EFH:

. . .

7.6 Review and Revision of Essential Fish Habitat Descriptions and Identification

The Council will review the EFH description and identification, HAPC designations, and information on fishing impacts and nonfishing impacts included in this FMP at least every five years. New information may be included in the annual SAFE document or similar document and, if necessary, the FMP may be amended. The Council may schedule more frequent reviews in response to recommendation by the Secretary or for other reasons.

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6.2.4 The Habitat Conservation Framework

In order to protect EFH from the adverse effects of fishing, the Council has identified areas that are closed to bottom trawling (see sections 6.8 and 7.4). These areas are described in Federal regulations and may be modified through the full rulemaking process as described under Section 6.2 D. The Council shall establish an EFH Oversight Committee (OC). At the request of the Council, the EFH OC would review the areas currently closed to bottom trawling and recommend to the Council the elimination of existing areas or the addition of new areas, or modification of the extent and location of existing areas. In making its recommendation to the Council, the committee should consider, but is not limited to considering, the best available scientific information about:

1. The importance of habitat types to any groundfish FMU species for their spawning, breeding, feeding, or growth to maturity.

2. The presence and location of important habitat (as defined immediately above).

3. The presence and location of habitat that is vulnerable to the effects of bottom trawl fishing.

4. The presence and location of unique, rare, or threatened habitat.

5. The socioeconomic and management-related effects of closures, including changes in the location and intensity of bottom trawl fishing effort, the displacement or loss of revenue from fishing, and social and economic effects to fishing communities attributable to the location and extent of closed areas.

When making its recommendation to the Council, the committee may also include in its recommendations proposed changes in the designation of habitat areas of particular concern (HAPCs) consistent with the proposed modification of the location and extent of areas closed to

bottom trawling. For example, if a current closed area, which is also identified as a HAPC, is recommended for elimination, the committee may recommend whether or not to retain the HAPC designation. Any such recommendation with respect to a HAPC would trigger the process for the modification of HAPCs (by FMP amendment) described in Section 7.3.2. Upon receipt of a recommendation from the committee, the Council will decide whether to begin the rulemaking process described in Section 6.2 D for establishing, adjusting, or removing discretionary management measures intended to have a permanent effect.

. . .

7.3.2 Process for Modifying Existing or Designating New HAPCs

Recognizing that new scientific information could reveal other important habitat areas that should be designated HAPCs or call into question the criteria for existing HAPCs, the Council may designate a new HAPC or modify or eliminate an existing HAPC through the process described below. This process allows organizations and individuals to petition the Council at any time to consider a new designation, or modify or eliminate an existing designation, and ensures, provided they submit the required information described below, their proposal will be considered by the Council. The process includes the following elements, which may be described in more detail in Council Operating Procedures:

1. A petitioner submits a proposal to eliminate or modify an existing HAPC, or designate a new HAPC, by letter to the Chairman and Executive Director of the Council. Proposals must include a description of: (a) for a new HAPC, the location of the HAPC, defined by specified geographic characteristics such as coordinates, depth contours, or distinct biogeographic characteristics; (b) for a new HAPC, how the HAPC meets the criteria specified in regulations at 50 CFR 600.815 (a)(8), or for changes to an existing HAPC, how such a change would better meet these criteria; and (c) a preliminary assessment of potential biological and socioeconomic effects of the proposed change or new designation.

2. Council/NMFS staffs determine whether the proposal contains the mandatory components outlined in step one. If this technical review determines that the proposal is inadequate, staff return it to the petitioner for revision and resubmission. If it is determined adequate, staff forward it to the Council for full consideration over three Council meetings as described below.

3. At the first meeting, the Council establishes a timeline for consideration, including merit review by the EFH OC and the SSC.

4. At the second meeting, the EFH OC and SSC provide their merit review to the Council. Depending on the results of this review, the Council directs staff to begin developing any documentation necessary for implementation. The proposal is also be forwarded to other advisory bodies for additional review.

5. At the third meeting the Council receives advisory body reports, reviews implementing documentation, and decides whether to approve an FMP amendment for Secretarial review.

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6.2

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D. Full Rulemaking For Actions Normally Requiring at Least Two Council Meetings and Two *Federal Register* Rules (Regulatory Amendment)

These include any proposed management measure that is highly controversial or any measure that directly allocates the resource. These also include management measures that are intended to have permanent effect and are discretionary, and for which the impacts have not been previously analyzed. Full rulemakings will normally use a two-Council-meeting process, although additional meetings may be required to fully develop the Council's recommendations on a full rulemaking issue. Regulatory measures to implement an FMP amendment will be developed through the full rulemaking process. The Secretary will publish a proposed rule in the *Federal Register* with an appropriate period for public comment followed by publication of a final rule in the *Federal Register*.

Council-recommended management measures addressing a resource conservation issue must be based upon the identification of a point of concern through that decision-making framework, consistent with the specific procedures and criteria listed in Section 6.2.2.

Council-recommended management measures addressing social or economic issues must be consistent with the specific procedures and criteria described in Section 6.2.3.

Council-recommended changes to habitat protection measures must be consistent with the specific procedures and criteria described in Section 6.2.4.

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PFMC
03/20/07

COUNCIL COORDINATION COMMITTEE

Section 302(l) of the reauthorized Magnuson Stevens Act (MSA) provides for the establishment of a Council Coordination Committee (CCC) which is not subject to the Federal Advisory Committee Act rules. The CCC is to consist of the chairs, vice chairs, and executive directors of each of the eight councils, or other council members or staff, for the purpose of discussing issues of relevance to all councils, including issues related to the implementation of the MSA. This provision now allows the councils under the authority of the MSA to formally establish the coordination process that has occurred in past years through the annual Council Chairs and Executive Directors (CCED) Meeting and other less formal meetings.

In view of the upcoming chairs and directors meeting this May, it appears prudent for the councils to formally establish the CCC. To that end, NOAA Fisheries Headquarters staff recommends that all council's pass a uniform motion to establish the CCC as follows:

> There shall be established a Council Coordination Committee consisting of the chairs, vice chairs, and executive directors of each of the eight regional fishery management councils, other council members, and staff. The chairs, vice chairs, and executive directors shall be voting members. The six NOAA Fisheries Regional Administrators or their designees, other council members, and staff shall be non-voting members. The Council Coordinating Committee shall meet from time to time as appropriate to discuss issues of relevance to all councils. The Council Coordinating Committee may establish such subcommittees as it deems appropriate.

PFMC
03/27/07

Under Agenda Item E.1, National Marine Fisheries Service apprised the Council that the Secretary of Commerce will appoint membership to the Pacific Whiting Treaty Advisory Panel prior to the June meeting. Given this timing, if the Council wishes to make recommendations to NMFS on the composition of the Panel, this should be completed at the April meeting. Representation on the Joint Management Committee also includes one member of the Pacific Council, however the timing of the appointment allows the Council to make its recommendation at the June Council meeting, at the earliest.

The Pacific Whiting Act of 2006 provides the following structure to the composition of the Advisory Panel:

"(a) IN GENERAL.—

(1) APPOINTMENT.—The Secretary, in consultation with the Secretary of State, shall appoint **at least 6 but not more than 12** individuals to serve as members of the advisory panel, selected from among individuals who are—

(A) knowledgeable or experienced in the **harvesting, processing, marketing, management, conservation, or research** of the offshore whiting resource; and

(B) not employees of the United States.

(2) Terms of Office.—An individual appointed under paragraph (1) shall be appointed for a term of not exceed 4 years, but shall be eligible for reappointment. An individual appointed to fill a vacancy occurring prior to the expiration of the term of office of that individual's predecessor shall be appointed for the remainder of that term." (emphasis added)

ECOSYSTEM FISHERY MANAGEMENT PLAN

In November 2006, the Council has initiated development of an Ecosystem Fishery Management Plan (E-FMP) that will incorporate ecosystem-based fishery management principles. The plan is intended to serve as an "umbrella" plan over the four existing fishery management plans (FMPs), helping with coastwide research planning and policy guidance, and creating a framework for status reports on the health of West Coast ecosystems. The plan envisioned by the Council would not replace the existing FMPs, but would advance fishery management under these FMPs by introducing new theories, new scientific findings, and new authorities to the current Council process.

Also in November 2006, members of the Habitat Committee and the Scientific and Statistical Committee met in a joint session to further the Council assignment to review the policies and science behind existing ecosystem-based management approaches. Summary minutes of the meeting are planned for supplemental distribution in April.

To facilitate early planning and stimulate discussion, Council staff drafted a white paper regarding issues related to the development of an E-FMP (Agenda Item C.5.a, Attachment 1). This paper draws on the recommendations in a recent article by John Field and Robert Francis, *Considering ecosystem-based fisheries management in the California Current* (2006) (Agenda Item C.5.a, Attachment 2).

Topics reviewed in the Council staff white paper include:

- Development of an E-FMP should be phased in over time and based on a strategic planning document rather than being implemented a fully fleshed out program all at once. The use of a programmatic environmental impact statement is discussed as the vehicle for developing this strategic vision. The concept of "tiering" is used to subsequently evaluate in detail and implement program elements.
- Plan development under institutional resource constraints is discussed. Seeking assistance from NMFS is identified. Creating a plan development team comprising members of existing FMP management teams, in part as a cost-saving measure, is discussed.
- Staff recommends the development of an umbrella plan that complements, but does not replace, existing FMPs. However, the statutory basis of an umbrella E-FMP needs to be clarified early in the process.
- The scope of the E-FMP needs to be determined in terms of policies and principals, geographic coverage, and management unit species.
- Consistent with the evolutionary approach, staff recommends ongoing development of an ecosystem information program. This program would draw on expertise within NMFS, and possibly outside research institutions, to provide on a regular basis an ecosystem SAFE document. An important issue to be considered in concert with development of the ecosystem SAFE is the development of a policy framework covering how such information would be used in Council decision-making.

In a potentially related matter, the Council and the State of Washington provided solicited comments (Agenda Item C.5.a, Attachment 3 and Agenda Item C.5.b, Attachment 1) on the Draft Framework for a National Network of Marine Protected Areas (MPAs)(on the internet, see mpa.gov for more information). Both letters recommend close coordination between the Council and the National MPA Center as goals and objectives for area-based and ecosystem-based fishery management concepts and policies are developed.

The Council is scheduled to review the Council staff white paper as well as comments of its advisory bodies and the public and provide guidance for future development of an E-FMP.

Council Task:

Council Guidance and Direction on Future Planning.

Reference Materials:

1. Agenda Item C.5.a, Attachment 1, Council Staff White Paper: Development of an Ecosystem Fishery Management Plan.
2. Agenda Item C.5.a, Attachment 2, *Considering ecosystem-based fisheries management in the California Current*, John Field and Robert Francis (2006).
3. Agenda Item C.5.a, Attachment 3, February 13, 2007 letter from Dr. Donald McIsaac to Mr. Joseph Uravitch conveying Council comments on the Draft Framework for a National Network of MPAs.
4. Agenda Item C.5.b, Attachment 1, February 28, 2007 State of Washington letter from Mr. Jonathan Kelsey to Mr. Joseph Uravitch conveying comments on the Draft Framework for a National Network of MPAs.

Agenda Order:

a. Agenda Item Overview — Mike Burner
b. Agency and Tribal Comments
c. Reports and Comments of Advisory Bodies
d. Public Comment
e. Council Guidance and Direction on Future Planning

PFMC
03/16/07

Staff White Paper
Development of an Ecosystem Fishery Management Plan

Prepared by Pacific Council Staff

Background – Purpose of This Document

There is broad interest in the concept of an ecosystem fisheries management plan (E-FMP).[1] Furthermore, National Marine Fisheries Service's (NMFS) stated policy is to incorporate ecosystem considerations into fisheries management, and most councils have either implemented some version of an E-FMP or are in an active planning stage. Thus it is appropriate that at their November 2006 meeting the Pacific Fishery Management Council (Council or Pacific Council) moved to begin development of an E-FMP for waters off the three West Coast states, Washington, Oregon, and California. In part, the Council intends the E-FMP initiative to serve as a long term measure for developing fishing regulations to complete proposed marine protected areas within the Channel Islands National Marine Sanctuary. The new E-FMP is envisioned to be of an "umbrella" type structure, so as to allow the current four Council FMPs to continue while enabling comprehensive and coordinated fishery regulation in all EEZ ecosystems.

In order to stimulate discussion, Council staff has prepared this white paper covering procedural and substantive issues related to the development of an E-FMP. This paper draws on the recommendations in a recent article by John Field and Robert Francis, *Considering ecosystem-based fisheries management in the California Current* (2006) (Agenda Item C.5.a, Attachment 2), which is specific to the institutional environment of the Pacific Council, and more generally, the report of the Ecosystem Principals Advisory Panel (EPAP) (1999). The main points covered in the paper are:

- Development of an E-FMP should be "evolutionary, not revolutionary." This means, rather than implementing a fully fleshed out program all at once, ecosystem-based approaches to fishery management can be phased in over time, based on a strategic planning document. The use of a programmatic environmental impact statement is discussed as the vehicle for developing this strategic vision. The concept of "tiering" is used to subsequently evaluate in detail and implement program elements.

- Plan development under institutional resource constraints is discussed. Seeking assistance from NMFS is identified. Creating a plan development team comprising members of existing FMP management teams, in part as a cost-saving measure, is discussed.

- Staff recommends the development of an umbrella plan that complements, but does not replace, existing FMPs. However, the statutory basis of an umbrella E-FMP needs to be clarified early in the process.

[1] Another commonly used term is fisheries ecosystem plan (FEP). The name ecosystem FMP is chosen to emphasize its relationship to the core mission of the Pacific Fishery Management Council.

- The scope of the E-FMP needs to be determined in terms of policies and principals, geographic coverage, and management unit species.

- Consistent with the evolutionary approach, staff recommends ongoing development of an ecosystem information program. This program would draw on expertise within NMFS, and possibly outside research institutions, to provide on a regular basis an "ecosystem SAFE document." (SAFE, which stands for stock assessment / fishery evaluation, is a required product for all FMPs implemented under the Magnuson-Stevens Act.) Provision on an ecosystem SAFE could be the first program element to be implemented. An important issue to be considered in concert with development of the ecosystem SAFE is the development of a policy framework covering how such information would be used in Council decision-making.

- This paper concludes with a brief discussion of the types of management measures that might be implemented through an E-FMP, recognizing that its legal status needs to be resolved. Evaluating existing closures in a more integrated, ecosystem-based framework would seem a prerequisite for rationally considering future area-based measures in an ecosystem context. For example, when implementing fishery related closures within this framework the Council could consider State MPA initiatives and areas proposed for closure by National Marine Sanctuaries. The importance of considering the socioeconomic dimensions of ecosystem-based management is also mentioned.

Process Framework

A Strategic Approach

Field and Francis recommend "there should be an emphasis on an evolutionary, rather than revolutionary, move towards an ecosystem approach" (p. 563). They also argue that a programmatic environmental impact statement (PEIS) be the primary vehicle for implementing an E-FMP both because the National Environmental Policy Act (NEPA) offers a limited mandate that "suggests that ecosystem considerations should be evaluated" and it has intrinsic procedural benefits "as a result of legal requirements for analysis, disclosure, and transparency" (p. 555). They allude to the view of many in the Council process that NEPA merely imposes an administrative burden; and the PEIS has been a difficult concept to understand and execute within the fisheries management arena. For this reason careful thought should be given at the outset on how to approach development of a PEIS. First, for the integration of ecosystem-based fishery management to be evolutionary, the PEIS must be truly strategic; and in fact internationally this type of programmatic document is termed a "strategic environmental assessment" (SEA). Furthermore, in Council on Environmental Quality (CEQ) regulations, while there is no specific reference to a PEIS, review of policies, plans, and programs is discussed, and is strongly linked to the concept of "tiering" where "general matters are evaluated in broader environmental impacts statements (such as national program or policy statements) with subsequent narrow statements … concentrating solely on the issues specific to the statement subsequently prepared" (1508.28). Tiering can be used to move from a broad policy evaluation to an analysis of lesser scope or an analysis of a specific action at an early stage to a subsequent analysis at a latter stage. The regulations also identify the PEIS and tiering as a way to reduce paperwork by "[u]sing program, policy, or plan environmental impact statements and tiering from statements of broad scope to those of narrower scope, to eliminate repetitive discussions of the same issues" (1508.4(i)).

The foregoing suggests two key points: the PEIS should be a relatively brief strategic document establishing policies and broad program areas and should set the stage for subsequent evolutionary implementation of programs and management measures that are evaluated in tiered documents. A

combination of both tiering rationales described at 1508.28 can be considered: moving from policies and program descriptions to management measures (i.e., requirements described in Federal regulations) and "evolving" from an early, strategic and schematic stage to more detailed implementation stages. In fact, the requirements for fishery management plans contained in the Magnuson-Stevens Act (MSA) would likely impose more barriers to a streamlined strategic document. The question of whether the MSA authorizes E-FMPs therefore becomes a two-edged sword. If an E-FMP does derive authority from the MSA must its contents conform to §303? Many of these requirements seem to have limited relevance and utility for developing an E-FMP.

In streamlining the PEIS it should be recognized that much of the bulk of NEPA documents may be taken up by an exhaustive description of the "affected environment" bearing a tenuous relation to the actual analysis of effects, which is often difficult because of predictive uncertainty. Another way to streamline the PEIS/E-FMP would be to limit description (incorporating by reference from completed NEPA documents). As discussed below, the PEIS should outline a process whereby this information can, if needed, be collated and delivered to the management process. Aside from the problem of bulking up the EIS, this descriptive information can rapidly become dated. Frame working a process highlights periodic update and tailoring information to current management issues.

The following table (from Wiseman 1996) offers an instructive contrast between a project-specific environmental impact assessment and a strategic environmental assessment.

Environmental Impact Assessment	Strategic Environmental Assessment
Is reactive to a development proposal	Is proactive and informs development proposals
Assesses the effect of a proposed development on the environment	Assesses the effect of the environment on development needs and opportunities
Addresses a specific project	Addresses area, regions, or sectors of development
Has a well defined beginning and end	Is a continuing process aimed at providing information at the right time
Assesses direct impacts and benefits	Assesses cumulative impacts and identifies implications and issues for sustainable development
Focused on the mitigation of impacts	Focused on maintaining a chosen level of environmental quality
Narrow perspective and high level of detail	Wide perspective and a low level of detail to provide a vision and overall framework
Focus on project-specific impacts	Creates a framework against which impacts and benefits can be measured

An important consideration is how to structure an impact evaluation. The typical EIS focuses on discrete and if possible measurable impacts to specific environmental components (e.g., projected fishing mortality on a fish stock). The E-FMP, or at least an initial strategic planning document covered by a PEIS, would not propose management measures to be implemented. Environmental effects are likely to be diffuse, cumulative, and long term. By the same token, the evaluation should be broad-scale, not detailed, and relatively brief.

Resources for Plan Development

At the moment the Council has no funding dedicated to E-FMP development and is confronting an array of other pressing issues demanding the time of Council members, committee members, and Council and agency staff. On the other hand, there is a growing body of research and preliminary thinking (as evinced in the Field and Francis paper) given over to ecosystem-based fishery management. In addition to the broad policy commitment by NMFS, there are also institutions, such as the Pacific Fisheries Environmental Laboratory in Pacific Grove, California, that could provide input if the Council were

interested in integrating ecosystem principals into decision making. As outlined above, if a PEIS focuses on policies and program outlines, some of the development costs (e.g., staff or consultant time spent on writing, data collation, modeling, and other forms of detailed quantitative analysis) could be reduced. As Field and Francis put it "While an appropriately funded mandate to develop [E-FMPs] would be desirable from the perspective of truly developing an ecosystem perspective, this would not preclude the development of a road map toward adopting an ecosystem-based approach to management, or otherwise integrating ecosystem considerations into the current management regime to the greatest extent possible" (p. 563).

A second cost relates to meetings of any committees involved in plan development. For FMPs the practice has been to constitute a plan development team, which takes the lead on identifying principal elements of the plan (although much of the research, writing, and analysis also may be done by Council/agency staff and/or consultants). An advisory subpanel also may be convened to solicit input and review. These committees transition into the management team and advisory subpanel for the FMP once it is implemented. Field and Francis recommend formation of an ecosystems considerations technical team, which would advise the Council on the state of the environment and provide ecosystem guidance on management decisions (p. 563). If the E-FMP is to be an umbrella plan (discussed below), an alternative approach would be to constitute a plan development team by selecting one or more members from each of the existing management teams and the Habitat Committee. An advisory subpanel could be similarly constituted. This approach has the advantage of highlighting the relationship between the E-FMP and existing FMPs and may offer the possibility of some modest cost savings. Such savings could come about if these committees met during Council meetings on a day immediately following any concurrent management team meetings. (Potentially, some travel and meeting room cost savings could be realized.) A potential problem is if there are not enough members of current management teams with the expertise, interest, and commitment to developing an E-FMP. An alternative is to constitute a blended management team, composed of representatives from current management teams and the HC, and experts currently not in the process. Field and Francis's ecosystem considerations team plays an advisory rather than development role. It may be that such a team would serve the two functions concurrently, and this would support a phased, evolutionary process. Such a concurrent role would be well-served by a team with membership from current FMP teams, since these people are already versed in ongoing management issues before the Council.

Plan Development Issues

E-FMP Structure

Based on current examples there are two ways to consider the relationship between an E-FMP and existing FMPs. As Field and Francis advocate, one approach is to develop an umbrella plan that integrates ecosystem considerations across existing FMPs without supplanting them. This is the approach that has been taken in the North Pacific and makes the most sense on the West Coast. A second approach, exemplified by the Western Pacific, is to replace current FMPs with geographically-based E-FMPs. This makes sense for an insular area with multiple, widely-dispersed and discrete EEZs around islands or island groups and allows treatment of all ecosystems, habitats, and fisheries in a given area in one plan. Given the greater diversity and management complexity of Pacific Council FMPs, replacing them with a set of geographically-based FMPs would be a monumental task requiring the creation of what would be in any given context arbitrary boundaries between management areas (e.g., current management zones or measures that may cut across the most sensible delineation of ecosystem boundaries).

As alluded to above, an important consideration is whether the E-FMP would have sufficient legal basis for implementing pursuant regulations; alternatively, management measures would continue to be

implemented through current FMPs using the E-FMP as the rationale. The E-FMP would establish processes to (1) inform management decisions made within FMP frameworks and (2) in some cases allow consideration and implementation of multiple-objective measures. This suggests two general elements of the E-FMP; a third element would be to describe the scope of the E-FMP, including its relationship to current FMPs. Under this approach, in the short term at least, no regulations would be expected to result from the E-FMP; in the long term multiple-objective measures (such as a marine protected area addressing management objectives across more than one FMP) might be implemented either directly through the E-FMP or through authority of one or more FMPs based on the rationale provided in the E-FMP.

E-FMP Scope

Establishing the scope of the plan involves identifying goals and related policies, determining geographic scope, and enumerating management unit species or species complexes.

Establishing a set of goals is a common and generally useful planning exercise describing desired end states that policies and programs are intended to maintain or achieve. As its name implies, the Ecosystem Principal Advisory Panel identified general principals, goals, and policies that can serve as a starting point for such an exercise. Any principals, goals, and policies enshrined in a Pacific Council E-FMP would indicate the overall scope of the plan in terms of procedures, activities, and instruments (management measures, regulations), which may be organized into programs.

Assuming an umbrella plan, the geographic scope of the E-FMP would be pre-determined as the West Coast EEZ, which is the management area for current FMPs. (The Highly Migratory Species FMP covers vessels fishing outside the EEZ but landing fish on the West Coast and so could broaden the geographic scope of the E-FMP.) Despite this constraint it may be worthwhile as part of planning to consider how the geographic scope can be best matched with ecosystem boundaries. If no regulatory authority is implied by the E-FMP, then the geographic scope could be potentially widened; for example, delineation of the northern California Current system includes waters off Vancouver Island, Canada, while the California Current System also influences waters off of Baja California, Mexico. It also may be useful to subdivide the EEZ by internal biogeographic boundaries such as Cape Blanco, Cape Mendocino, and Point Conception. Considerations of geographic scope should be made in the context of expected policies and programs. For example, differences in the ecosystem north and south of Cape Mendocino are implicit in groundfish FMP management measures such as cumulative trip limits.

The specification of management unit species (MUS) in an FMP establishes a legal nexus to determine regulatory scope. This was evidenced by the recent effort to include krill as a special category MUS in the Coastal Pelagic Species FMP so that a harvest prohibition could be established. If the E-FMP will meet the requirements of the MSA (in order to establish regulatory authority directly from it) it must enumerate MUS. How broad to cast the net, so to speak, would be part of plan development. Including more species in the MUS would broaden the scope, as indicated by the following examples:

- Include only the MUS in current FMPs
- Include the above plus species managed by the three West Coast states
- Include the above plus forage species not already included in an FMP (e.g., other forage fish, euphausiids, copepods)
- Include the above plus biogenic habitat (e.g., corals, sponges)

As the scope is broadened the connection to any regulatory purpose under the MSA becomes more tenuous. For example, it seems unlikely that any activity that could be regulated under the MSA would

directly affect copepods. "Bycatch" of corals, on the other hand, can be regulated because they are part of essential fish habitat even if they are not an MUS under any FMP. To some degree the identification of MUS in the E-FMP may be more of symbolic value by recognizing the scope of ecosystem components that will be considered in management decision making. In keeping with the ecosystem approach, it would make sense to organize the enumeration of MUS by habitat or ecosystem. Alternatively, instead of enumerating MUS, some broader grouping of species would suffice.

Ecosystem Information Program

Field and Francis pose the question, "If fishery management councils were to embrace an ecosystem-based approach in principle, but were limited in the rate at which such an approach could be prescribed as policy, where might they start?" In response they recommend that fishery managers be provided with information about how information on how ecosystem dynamics affect and are affected by fisheries. This would provide additional context when making conventional management decisions, such as setting harvest limits. They describe two categories of information: (1) short- and long-term climate/ ocean conditions and trends, and (2) trophic interactions among fished and unfished species. (This second topic aligns with the EPAP recommendation that an E-FMP include a conceptual model of the food web.) This implies the development of a program or process to bring this information into the management arena and a related set of policies that would provide some guidance on how the information should be used. Currently the Council is strongly wedded to setting harvest limits based on single-species stock assessments. Although stock assessment scientists are increasingly integrating climate forcing into their models, it unlikely that models producing estimates of yield that are used to set harvest limits will, in the foreseeable future, include a detailed specification of both climate forcing and food web dynamics. On the other hand, there are potentially useful non-quantitative predictive outputs that could be used to expand the time horizon of management decision making. One such example is the "red light / green light" index for salmon returns based on Northern California Current ocean and ecosystem conditions as reported by Peterson, et al. (2006). Current stock assessment techniques would be used to derive an initial yield estimate and ecosystem policies would guide decision makers on how that yield estimate may be adjusted in light of non-quantitative predictions about trends and future states (either for the management period in question, or a future time that could be cumulatively affected by harvests during the management period).

The E-FMP (or strategic PEIS) would describe a program for the regular delivery of such information to the management process. A familiar model for such a process is the FMP SAFE (stock assessment / fishery evaluation) document. And in fact the North Pacific Council includes an ecosystem considerations chapter in the SAFE for their groundfish FMP (see http://www.afsc.noaa.gov/refm/docs /2006/EcoChpt.pdf). It includes both a discussion and evaluation of ecosystem model developments and reporting of a variety of trends/indices for both climate/ocean conditions and biota. The E-FMP management team would manage development of the document,[2] although as with other SAFE documents, models and data may be developed and compiled by agency staff at Science Centers or state agencies. Given current interest in ecosystem-based management, it would also be worth exploring relationships with organizations in the wider scientific community, such as PISCO (Partnership for

[2] Field and Francis advance the idea of a "regional fisheries oceanographer, whose primary responsibility would be to synthesize climate information into usable an understandable formats, orchestrate the development of a climate and ecosystem status and trends document, and act as a conduit between the climate research and the fisheries management communities" (p. 558). Given the list of duties, this sounds like a full time position, either as NMFS or Council staff. The relationship between this position and the management team (or Field's and Francis's ecosystem considerations technical team) would have to be worked out. For example, would the person in the position also function in the same relationship as Council staff currently does with respect to FMP management teams?

Interdisciplinary Study of Coastal Oceans), COMPASS (Communication Partnership for Science and the Sea) and MBARI (Monterey Bay Aquarium Research Institute), that are involved in ecosystem-related research. It might be possible to contract with these organizations for the provision of SAFE elements (although such a contract would likely be non-monetary). To the degree that this process includes a model development and evaluation component, the Council's current stock assessment review (STAR) process can serve as an example. This would have particular benefit for models or indices that provide outputs external to single species stock assessments, when such outputs are expected to inform decision making. A peer review process would give decision makers greater confidence in using such information and could also provide guidance on the best way to use it. A less crucial consideration is timing of delivery of the SAFE, given that management cycles vary under the different Pacific Council FMPs. A notional January 1 delivery date may make the most sense for use of the information through the calendar year.

Potentially the most difficult aspect of establishing such an ecosystem information program would be the development of policies related to how the information would be used. Some constituents would advocate policies that require specific actions (such as downward adjustment of harvest limits based on negative index/trend information). On the other hand, a set of policies that provide no concrete guidance on how ecosystem effects should be considered would diminish the benefit of such information. Field and Francis note that "quantitative modeling of trophic interactions has the potential to lead to changes in harvest or management strategies in the near term, and at a minimum represents a valuable contribution to a more holistic understanding of ecological connections and interactions" (p. 560). The challenge is to translate this sentiment (by extension including climate considerations) into a set of practical policies.

Multi-objective Management Measures

As discussed above, the implementation of management measures may be a later component in the "evolutionary" implementation of the E-FMP. One question is what types of management measures would actually require an E-FMP to implement; related to this is the question of the legal status of the E-FMP and whether its contents would support the promulgation of regulations. In considering ecosystem-related management measures, very broadly fishing has two effects: fishing mortality and habitat degradation due to gear contact (and the two may be interrelated for biogenic habitat). Many management measures that mitigate these two effects can be implemented through FMPs, by means of harvest management strategies and gear restrictions for example. Groundfish FMP Amendment 19, addressing essential fish habitat (EFH), offers a good example of how a range of ecosystem-related management measures (including closed areas and gear restrictions) can be implemented within the FMP framework. Thus, as already discussed, for many measures the E-FMP may only provide a strategic framework while their actual implementation would occur through existing FMPs. This approach has the added advantage that the E-FMP would not need to go through the content and procedural requirements (Secretarial Review) of the MSA. Therefore, this could be the preferred strategy in the early stages of E-FMP evolution. Later on the E-FMP could achieve the legal status necessary for promulgation of regulations. But at the outset it would be helpful to address these types of legal questions and construct a road map for how management measures meeting multiple objectives (ecosystem considerations across several FMPs) would be implemented. This would be a very appropriate subject for the PEIS.

When the Council initially called for E-FMP development one specific purpose they hoped it would achieve is establishing marine reserves within National Marine Sanctuaries under MSA authority. Although such actions may require an E-FMP to provide the legal basis for promulgation, there are other non-regulatory tasks that could be facilitated by an E-FMP. In a broader context, the EPAP recommends that an E-FMP should be the framework for developing zone-based management where "areas within an ecosystem would be reserved for prescribed uses." An initial task would be to evaluate existing area-based management measures and place them in a more holistic, ecosystem-based framework. Groundfish

EFH closed areas and Groundfish Closed Areas (GCAs) are examples of two types of closed areas implemented with different objectives but having the same practical effect. EFH closures may have some bycatch mitigation effect while GCAs protect habitat, at least in the core, permanently closed areas. Broadening this consideration to the full range of closures and management zones and developing such a framework would seem a prerequisite for rationally considering future area-based measures in an ecosystem context. For example, when implementing fishery related closures within this framework the Council could consider, State MPA initiatives and areas proposed for closure by National Marine Sanctuaries.

Management measures can also intentionally or unintentionally affect the socioeconomic characteristics of a fishery. Field and Francis also discuss the "socio-ecological perspective" that recognizes "the potential consequences to the ecosystem that may result from the activities undertaken by fisherman and sanctioned by management bodies" (p. 553-554). Field, et al. (2006) in a paper discussing an ecosystem model for the Northern California Current, mention the value of resilience, which suggests that rather than trying to manage for equilibrium, the fisheries system should be structured "to facilitate existing processes and variability, rather than attempt[ing] to control them" (p. 265). They cite a study by Hanna (1992) of Northern California Current fisheries demonstrating that diversification of fishing strategies promoted resilience. The implication is that less capital intensive (because they are less invested in one strategy) and more flexible fishing enterprises respond better to ecosystem dynamics. While not advocating a specific policy, it seems clear that another component of an E-FMP would be policies and related management measures that address such socioeconomic issues.

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Considering ecosystem-based fisheries management in the California Current

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Abstract

Recognizing that all management decisions have impacts on the ecosystem being exploited, an ecosystem-based approach to management seeks to better inform these decisions with knowledge of ecosystem structure, processes and functions. For marine fisheries in the California Current, along the West Coast of North America, such an approach must take into greater consideration the constantly changing climate-driven physical and biological interactions in the ecosystem, the trophic relationships between fished and unfished elements of the food web, the adaptation potential of life history diversity, and the role of humans as both predators and competitors. This paper reviews fisheries-based ecosystem tools, insights, and management concepts, and presents a transitional means of implementing an ecosystem-based approach to managing US fisheries in the California Current based on current scientific knowledge and interpretation of existing law.
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Keywords: Ecosystem management; Fisheries management; California Current

1. Introduction

In the California Current ecosystem, a great many fish populations and the human communities that depend upon them are in a state of crisis as a result of a combination of factors. Many long-lived and slow growing groundfish stocks have been severely depleted, and obligatory rebuilding plans suggest that some could take decades to centuries to recover to target levels. The condition of several stocks is so poor that the Pacific Fishery Management Council (PFMC) found it necessary in 2003 to close a vast majority of the continental shelf to most fishing gears as an emergency measure; such actions have been criticized at ''weak-stock management'' by virtue of the foregone yield of healthy stocks in order to protect overfished species [1]. Salmon crises have been ongoing in the Pacific Northwest for decades, driven by a complex combination of factors, although recent changes in ocean conditions have boosted salmon production in some regions to record levels. The California sardine has recovered nearly half a century after its spectacular collapse, yet could enter into a period of low productivity if ocean conditions change, as past climate patterns suggest they might. Still other fisheries, such as those for Dungeness crab and pandalid shrimp, have demonstrated considerable short- and long-term fluctuations in abundance and productivity yet appear to be sustainably managed with relatively minimal regulatory measures.

While there has been a wealth of new initiatives to protect habitat, minimize bycatch and otherwise rationalize fisheries, there is increasingly a perceived need for the development of a more proactive approach to managing fisheries resources in an ecosystem context. Although efforts to develop an ecosystem focus in

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fisheries are far from new [2,3], the drive to do so has increased in recent years as perceptions of fisheries have evolved from limitless frontiers to systems with limits and thresholds [4–6]. Most marine ecosystems, and particularly upwelling ecosystems such as the California Current, are relatively open systems characterized by fluctuations in physical conditions and productivity over multiple time scales [7–9]. Food webs in these systems tend to be structured around species that exhibit boom–bust cycles over decadal time scales [10,11], and top trophic levels of such ecosystems are often dominated by highly migratory species such as salmon, tunas, shearwaters, fur seals and baleen whales, whose dynamics may be partially or wholly driven by processes in entirely different ecosystems.

2. What is ecosystem-based management?

As Larkin [12] recognized, "ecosystem-based management means different things to different people, but the underlying concept is as old as the hills." A common theme is that such an ecosystem approach involves a more holistic view of managing resources in the context of their environment than presently exists [5,6,13–16]. For marine fisheries management, this must include taking into greater consideration the constantly changing climate-driven physical and biological interactions in the ecosystem, the trophic relationships between fished and unfished elements of the food web, the adaptation potential of life history diversity, and the role of humans as both predators and competitors. Recognizing that all management decisions have impacts on the ecosystem being exploited, an ecosystem-based approach to management seeks to better inform these decisions with knowledge of ecosystem structure, processes and functions.

Ecosystem management has had a longer history in terrestrial resource management, where two general philosophies have been developed. Callicott et al. [17] describe these as the compositionalist and functionalist views, also at times referred to as the biocentric and anthropocentric views [18]. Although they exemplify the extremes of a continuum, a comparison of the two is useful when considering the interactions between competing objectives, mandates and scientific perspectives ("ecologies") in marine resource management. In general, the compositionalist view emphasizes the application of ecological science and knowledge, viewing the world "through the lens of evolutionary ecology," towards the goal of protecting diversity and integrity over the long term. From this perspective, humans are separate from nature, and anthropogenic needs are largely secondary. This is the view developed by Grumbine [19] when he detailed goals for sustaining ecological integrity. These goals included maintaining viable populations of native species, representing (within protected areas) all native ecosystem types across their natural range of variation, maintaining evolutionary and ecological processes, managing over time periods long enough to maintain evolutionary potential, and accommodating human use within these constraints. Grumbine recognized that these goals were in striking contrast to traditional, extraction driven resource management objectives. Consequently, the compositionalist philosophy may be more acceptable for wildlife refuges, wilderness areas, and similarly managed lands that include areas of high biodiversity, endemism or unusual community assemblages.

By contrast, a strict interpretation of the functionalist perspective is of a process-oriented, thermodynamic approach, with a foundation on the energy-transfer-based view of ecological function [17]. This functionalist view is focused on obtaining as much production from landscapes as possible, in order to achieve a high production to biomass efficiency [20]. This view is clearly more consistent with the current paradigm of contemporary fisheries management, which is premised on the assumption that populations (and subsequently the ecosystems in which they exist) are healthy if they are maintained close to the levels that provide the maximum amount of surplus production, or maximum sustainable yield (MSY). As such, the functionalist perspective is dependent on the assumption of equilibrium resilience, such that ecosystems and populations are capable of restoring themselves to (or close to) past equilibrium states given the opportunity to do so [21]. The fundamental belief of this perspective is the assumption that management can control multiple interacting population trajectories with enough precision to shift populations (and implicitly, ecosystems) into a mode that is as functionally beneficial to society as possible.

Beyond these two historically terrestrial perspectives, a third general philosophy that might guide ecosystem-based fisheries management (EBFM) is the social–ecological perspective. Based on his historical analysis of fisheries development in California, McEvoy [22] presented a model of a fisheries system as a combination of three elements: the physical and biological environment (ecosystem), a group of people working (economy), and a system of social control within which the work takes place (management). A conceptual schematic of McEvoy's model is presented in Fig. 1. McEvoy's key assertion is that management must equally weigh the many social and economic relationships within the fishery and how, in turn, they both influence and are influenced by marine ecosystem processes and dynamics. In this perspective, it is the human interactions with the environment that should be of particular concern to decision makers. Thus, McEvoy's model is a classic example of a social–ecological system [23], as

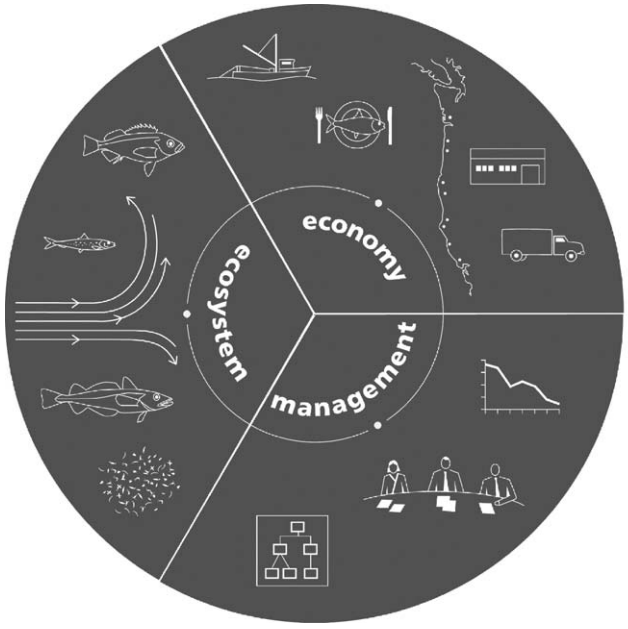

Fig. 1. Schematic of the key elements of a fisheries system; ecology (the physical and biological elements of the ecosystem), economy (fisheries and communities) and governance (the management system). Based on McEvoy [22].

representing an integrated concept of humans in nature, in which the essence of a sustainable fishery is the health of the interactions between the ecosystem, economy and management. Within the socio-ecological perspective, the role of EBFM is to provide decision makers with tools to recognize and respond to the potential consequences to the ecosystem that may result from the activities undertaken by fishermen and sanctioned by management bodies, given the recognition that there is risk of negative outcomes to both the ecosystem and the economy if poorly informed decisions are made.

3. Sustainable fisheries, ecosystem management, and the law

Ecosystem management, or ecosystem-based fishery management, means different things to different people largely as a result of the three philosophies discussed above, which simultaneously conflict with, yet complement, one another. In the discussions leading up the passage of the 1996 Sustainable Fisheries Act (SFA) amendments to the Magnuson Stevens Fishery Conservation and Management Act (MSFCMA), there was increasing recognition of the potential for an ecosystem-based approach to improve fisheries management. Although the Congress did not explicitly adopt an ecosystem-based approach,[1] the SFA did require the National Marine Fisheries Service (NMFS) to convene a panel of experts to "expand the application of ecosystem principles in fishery conservation and management activities" (16 USC 1882, §406). This panel's primary recommendation was that the eight regional Fishery Management Councils develop Fisheries Ecosystem Plans (FEPs) for the ecosystem or ecosystems under their jurisdiction [5]. The FEP would act as an "umbrella document" containing detailed information on the structure and function of the ecosystem under consideration, and increase the awareness of managers and stakeholders on the effects that their decisions have on the ecosystem. Although the current system of fisheries management plans (FMPs) would remain the basic management tool in the near term, they would be amended to ensure compatibility with the ecosystem principles, goals and policies of the FEP. Since the completion of their report, the NMFS approach has continued to center around single-species assessments, but has increasingly supported ecosystem-based research and modeling efforts. The most recent National Oceanic and Atmospheric Administration (NOAA) Strategic Plan explicitly refers to a primary agency mission to "protect, restore and manage the use of coastal and ocean resources through ecosystem-based management," however, this plan also recognizes that management in the near term will continue to be on a species and site-specific basis [24].

The extent to which existing legislation, in particular the National Environmental Policy Act (NEPA) of 1972 (42 USC 4321), may or may not be interpreted as requiring that ecosystem considerations be evaluated in making management decisions is somewhat unclear. The Act requires an environmental impact statement (EIS), on the potential impacts of proposed federal actions that might affect the environment (across a reasonable range of impacts), detailing not only adverse impacts that could not be avoided if the proposal were implemented, but also reasonable and prudent alternatives to such actions. Fishery management councils have traditionally been required to develop a programmatic EIS (PEIS) for FMPs prior to their approval (PEIS are typically required for connected or closely related actions, such as the broad-scale management of multiple fisheries components). While there is no clear regulatory requirement to revisit past PEISs, questions regarding the longevity of these documents have arisen as the lifespan of past PEISs lengthens [25,26].

Currently, the only fishery management council to revisit their programmatic EIS is the North Pacific

[1] The SFA included no mention of ecosystem considerations in the National Standards or in fishery management plan (FMP) requirements, however, some authority is inferred in the definitions section of the Act where optimum yield is defined as "the amount of fish which will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems" (16 USC. 1802, §3).

Table 1
Comparison of the focal elements of a fisheries ecosystem plan as envisioned by the Ecosystem Principals Panel (left) and the ecosystem elements considered under the NEPA programmatic review of NPFMC groundfish fishery management plans

Ecosystem Principles Advisory Panel	NPFMC Interpretation of NEPA
• Delineate and characterize ecosystems • Develop a conceptual model of the food web • Develop indices of ecosystem health	• Stability of the food web and (ecological) community structure • Seabird and marine mammal interactions
• Describe habitat needs and how they are considered in conservation and management measures	• Consider impacts on marine habitat, including benthic essential fish habitat
• Calculate total removals (including incidental mortality), and show how they relate to biomass, production, optimum yields, and trophic structure	• Sustainability of target stocks (prevent overfishing) • Bycatch (discards) and incidental catches
• Assess the ecological, human, and institutional elements of the ecosystem	• Sustainability of fisheries and communities • Alaska native participation in fishery management and traditional ways of life • Value of marine resources (both commercial and non-commercial)
• Assess how uncertainty is characterized and how buffers are included in conservation and management actions • Describe available monitoring data	• Data quality, monitoring, research and enforcement requirements

Fishery Management Council [27]. The principal objective of their Programmatic Supplemental Environmental Impact Statement (PSEIS) is to serve as the central environmental document for the groundfish fishery, and provide a "big picture" evaluation of both the impacts of fisheries and fisheries management objectives for North Pacific marine ecosystems. The PSEIS includes consideration of alternative fisheries management policies, and while all of the alternatives were designed to be compatible with other existing laws, they were also intended to bookend a reasonable range of what might be considered strictly compositionalist and functionalist harvest strategies and objectives. For example, the proposed alternatives ranged from fishing all stocks aggressively in order to maximize biological and economic yield from the resource (arguably a functionalist approach), to adopting a highly precautionary approach in which the burden of proof is shifted to resource users to demonstrate negligible impacts of fisheries to the ecosystem (arguably a compositionalist approach). The preferred alternative was the status quo: characterized as adaptive to new information and reactive to environmental issues, and based on the assumption that fishing at levels approaching, but not exceeding proxies for MSY, is compatible with ecosystem health and sustainability. The alternatives are accompanied by a suite of likely or expected impacts associated with their adoption, and there is also considerable overlap between the impacts evaluated in the PSEIS and those envisioned to be the principal elements of an FEP, as seen in Table 1.

Although past applications of the law indicate that neither NEPA nor the MSFCMA explicitly mandate an ecosystem approach, the language in both laws suggests that ecosystem considerations should be evaluated in making policy decisions within the context of the current fishery management system. As Livingston et al. [28] suggest, the original spirit of NEPA to provide an open and public process for advising decision makers is integral to any successful implementation of an ecosystem-based approach to fisheries management. Despite the fact that it has been viewed as primarily an administrative burden, NEPA remains one of the most powerful environmental laws in the nation as a result of legal requirements for analysis, disclosure, and transparency. Consequently, NEPA offers a means to scientifically evaluate the cumulative impacts of fisheries on marine ecosystems (Table 1).

It seems clear that the legislative authority exists to change the fundamental nature of how fisheries resources are managed, with the goal of sustaining both the resources and the interactions between the resources and the resource users. Given the opportunity, if fishery management councils were to embrace an ecosystem-based approach in principle, but were limited in the rate at which such an approach could be prescribed as policy, where might they start? For fisheries in the California Current, managed by the PFMC, we suggest that three elements would be key, these being:

- Increasing exposure to the management and user communities of short- and long-term climate and ocean status, trends and scenarios for the California Current.

- Consideration of trophic interactions among fished and unfished species and associated impacts on ecosystem structure and dynamics.
- The increasing application of new management approaches, including spatial management measures to protect life history characteristics and biodiversity.

Ideally these elements would complement, rather than replace, existing management efforts relative to single-species conservation objectives. While they admittedly add to the plethora of ongoing activities and developments currently being undertaken by the NMFS and the Council, they should rightly be considered critical elements of any future success at meeting NOAA and NMFS' current objectives. The following sections elaborate on these recommendations, followed by a potential blueprint for implementing ecosystem-based management on both short and long time scales.

3.1. Climate considerations

The effects of climate on the biota of the California Current ecosystem have been recognized for some time. Hubbs [29] believed so strongly in the correlation between water temperature and fish distributions that he felt "justified in drawing inferences, from the known data on fish distribution, regarding ocean temperatures of the past." In particular, Hubbs had already drawn distinctions between eras that seemed to be associated with the establishment of warm-water populations over long time periods, which may be associated with Pacific Decadal Oscillation (PDO) scale variability [30,31], and the occasional warm years that brought irregular tropical or subtropical fish much further north along the coast in response to interannual (El Niño) warm events [11,32,33]. Over decadal time scales, climate-driven changes in ocean conditions have long been attributed to both long-term variability in reproductive success and survival in sardine, anchovy and other coastal species that, in turn, appear to be responsible for some of the most spectacular boom and bust fisheries seen in the world's oceans [34–36]. Interestingly, there may be trophic interactions associated with these presumably climate-driven shifts as well, as MacCall [11] noted that peak abundances of predators such as mackerel and bonito seemed to follow their prey, anchovies and sardines, such that two given species never seemed to be abundant at the same time (Fig. 2). A similar sequence seems to occur in the Kuroshio Current off of Japan [37], as well as in large-scale currents off Peru and Chile [38]. This might suggest a trophic response to climate-induced changes in coastal pelagic species productivity on a basin scale.

In recognition of the role of climate in driving this productivity, the California sardine fishery is currently managed under an innovative harvest control rule based on the 3-year running average of the Scripps Pier sea surface temperature. The harvest rule allows for high harvest rates during favorable environmental conditions, and lower rates during periods of low productivity (harvest rates also reach zero when the biomass is at low levels regardless of climate conditions). Although there is no clear mechanism or process defining the strong relationship between SST and sardine productivity [39,40], this example demonstrates that provisional linkages and correlations can be successfully applied to generate management models within the bounds of the existing fisheries management regime. As such, the control rule is consistent with the implementation guidelines for the SFA, which include allowances for shifting biological reference points where evidence exists that the productivity of stocks has changed. Perhaps more importantly, this demonstrates that management is both willing and able to implement regulatory measures that recognize the impacts of climate on population productivity.

Pacific hake are also characterized by climate-induced variability in both production and distribution. Adults migrate from their winter spawning grounds off southern California to their summer feeding grounds off the Pacific Northwest coast, where they are the targets of the largest (by volume) fishery on the US West Coast. A much greater proportion of the hake biomass extends north of the US/Canada border during warm years than cold years, a distributional shift that has historically complicated management of this shared resource between the US and Canada [41–43]. These dramatic distributional shifts are matched by equally spectacular changes in abundance when recruitment conditions are good. In the early 1980s, two strong recruitment events (in 1980 and 1984) caused the stock biomass to nearly triple, from approximately 2 to 6 million metric tons (Fig. 3), and accounted for roughly 60% of the over 3 million tons of hake landed between 1983 and 1997 [based on 44]. Although an oceanographic mechanism explaining the success of these year classes (and the relative failures of others) has proven elusive [45,46], it is clear that such tremendous shifts in distribution and abundance have major impacts on the rest of the ecosystem. Pacific hake have been implicated as predators of juvenile salmon [47], inflict substantial predation pressure on commercially important pandalid shrimp and are voracious predators of krill, herring and other forage fish that are the primary prey of salmon, rockfish and other groundfish species [48–50].

Climate and oceanographic information is increasingly available in highly detailed, descriptive and meaningful forms to researchers and managers alike [51–53], including an annual review of the physical and biological state of the California Current ecosystem itself [54,55]. Biological indicators of productivity include time series of zooplankton abundance [9,56],

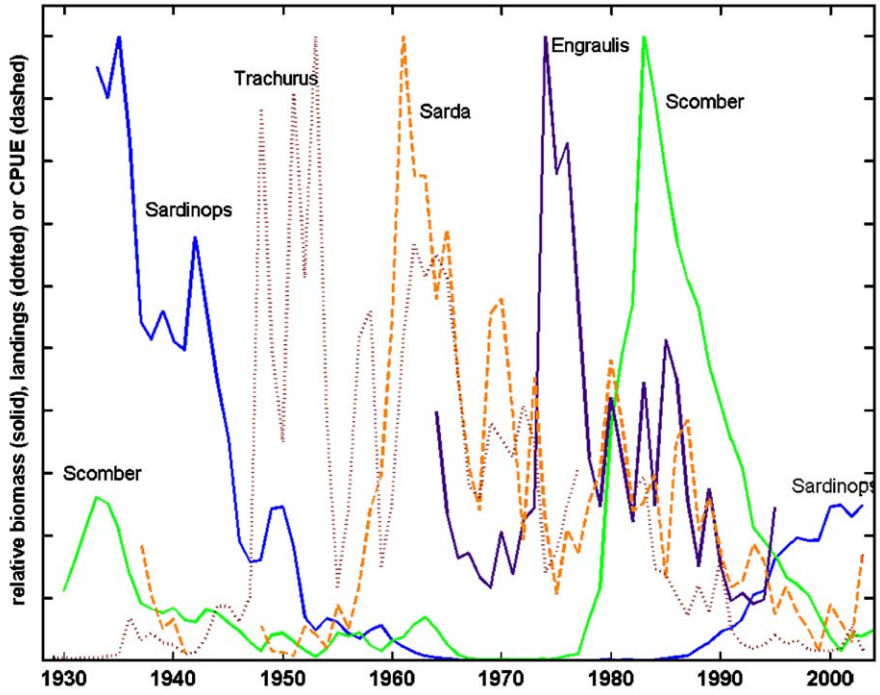

Fig. 2. Sequential nature of the relative abundance of coastal pelagic species in the California Current ecosystem, based on stock assessments (solid lines) and indices of relative abundance or landings (dotted lines). Species shown are Pacific mackerel (*Scomber japonicus*), Pacific sardine (*Sardinops sagax*), jack mackerel (*Trachurus symetricus*), bonito (*Sarda chiliensis*) and northern anchovy (*Engraulis mordax*). Updated from MacCall [11].

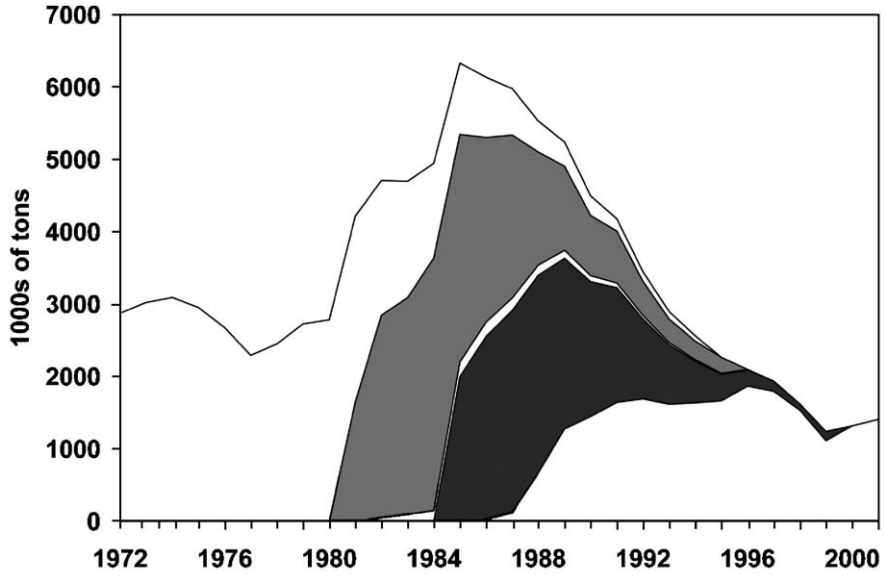

Fig. 3. Relative contributions of the 1980 (light gray) and 1984 (dark gray) year classes to the total estimated biomass of Pacific hake (*Merluccius productus*) population in the California Current System. Data from Helser et al. [44].

estimates of rockfish year class strength [57], and models of salmon survival based on physical and biological ocean indices [56,58]. A study group organized by North Pacific Marine Science Organization (PICES) in response to a formal request by the US government recently concluded that the time is long overdue for the formal inclusion of climate and ecosystem information into the management consciousness and decision-making framework [36]. The PICES group recommended four key actions for incorporating climate considerations into fishery management activities, which included acceptance of the regime concept for marine ecosystems,

the development and maintenance of improved observation and monitoring efforts, the continued application of climate indices and research linking climate indices to predictable components of the climate system, and the evaluation of future regime scenarios in stock assessments to assess the vulnerabilities of fisheries and ecosystems under different management strategies and climate conditions [36].

As these elements of climate considerations are developed, a transitional approach to incorporating climate considerations into management would be to periodically brief the PFMC and the Council community with reports on climate and ocean observations, forecasts and scenarios for the California Current. This could include designating a regional fisheries oceanographer, whose primary responsibility would be to synthesize climate information into usable and understandable formats, orchestrate the development of a climate and ecosystem status and trends document, and act as a conduit between the climate research and the fisheries management communities. A blueprint for defining the role of regional fisheries oceanographers could be taken from the existing framework for the role of state climatologists, whose obligations include summarizing and disseminating weather and climate information to user communities, demonstrating the value of climate information, performing impact assessments, and conducting climate research and projections.[2] Currently, the users of such climate information include a wide array of business leaders and local government workers, including those involved with water management, agriculture, forestry, public utilities, and emergency response, for which short-term (seasonal to annual) forecasts have the potential to reduce or increase revenues by billions of dollars [59,60].

Given widespread recognition of the broad and large-scale impacts of climate on fish and fisheries, it seems rational that the consideration of climate information by the Council community could significantly improve the context in which management decisions are made. For example, an improved understanding of the relationship between salmon success and climate might suggest that greater precaution be taken under the expectation of an El Niño event, or a particular phase of the PDO. A regional fisheries oceanographer would also provide a channel for transmitting climate information and forecasts both to and from fishermen and fisheries-dependent communities, an important role given that a majority of California fishermen believe that climate is the most important factor in determining the productivity of many fish and shellfish populations [61]. Similarly, Dalton [62] found substantial direct impacts of climate on fishing effort, ex-vessel prices and future expectations of production and availability in Monterey Bay fisheries. This work showed that regulations that allowed fishermen to allocate their effort freely in response to climate and price variability would maximize the value of future climate information, and emphasized the importance of improving the understanding of complex physical, biological and economic feedbacks between fisheries and the ecosystem. Consideration of how managers might facilitate the response of resource users, without increasing the jeopardy of resources, would be one way to operationalize McEvoy's [22] key target for sustainability, as the long-term health of the interaction between nature, the economy and the legal system. Given the precedent set by the adoption of the sardine harvest policy, the increasing understanding of processes and mechanisms that drive variability in this ecosystem, and recognition of the importance of regime-scale variability on resource productivity, it seems clear that there is a growing need for the PFMC and other councils to more formally consider climate factors in management.

3.2. Ecosystem models and trophic considerations

As emphasized in the previous section, energetic and highly variable oceanographic processes shape the physical environment and drive production throughout the California Current food web over a range of time scales. Additionally, over the past 200 years, massive removals of whales, pinnipeds, salmon, coastal pelagics, groundfish, invertebrates and hake have taken place throughout the California Current (Fig. 4), often driving many populations to extremely low levels of abundance. It would be difficult to presume that such removals have not fundamentally disturbed energy pathways, and altered the basic structure and function of the ecological community. We now know that many of the living resources in the California Current are not capable of providing a steady and predictable surplus to humans year after year, and removals have often severely exceeded the productive capacity of many stocks. Yet, populations of whales, pinnipeds, sardines and other species have often made dramatic recoveries from past overexploitation, often under strong management constraints, providing us with opportunities to better appreciate the resilience of stocks, species and communities in this dynamic ecosystem.

Where trophic interactions among exploited species are documented or suspected, ecosystem modeling can provide a template to evaluate both the magnitude and consequences of removals of either predators or prey in the system of interest [63,64]. For instance, Walters et al. [65] have used ecosystem models to demonstrate that widespread application of contemporary (MSY proxy) single-species management approaches could lead to

[2]The role and affiliations of State climatologists are described by the American Association of State Climatologists (AASC) website (http://lwf.ncdc.noaa.gov/oa/climate/aasc.html#ABOUT).

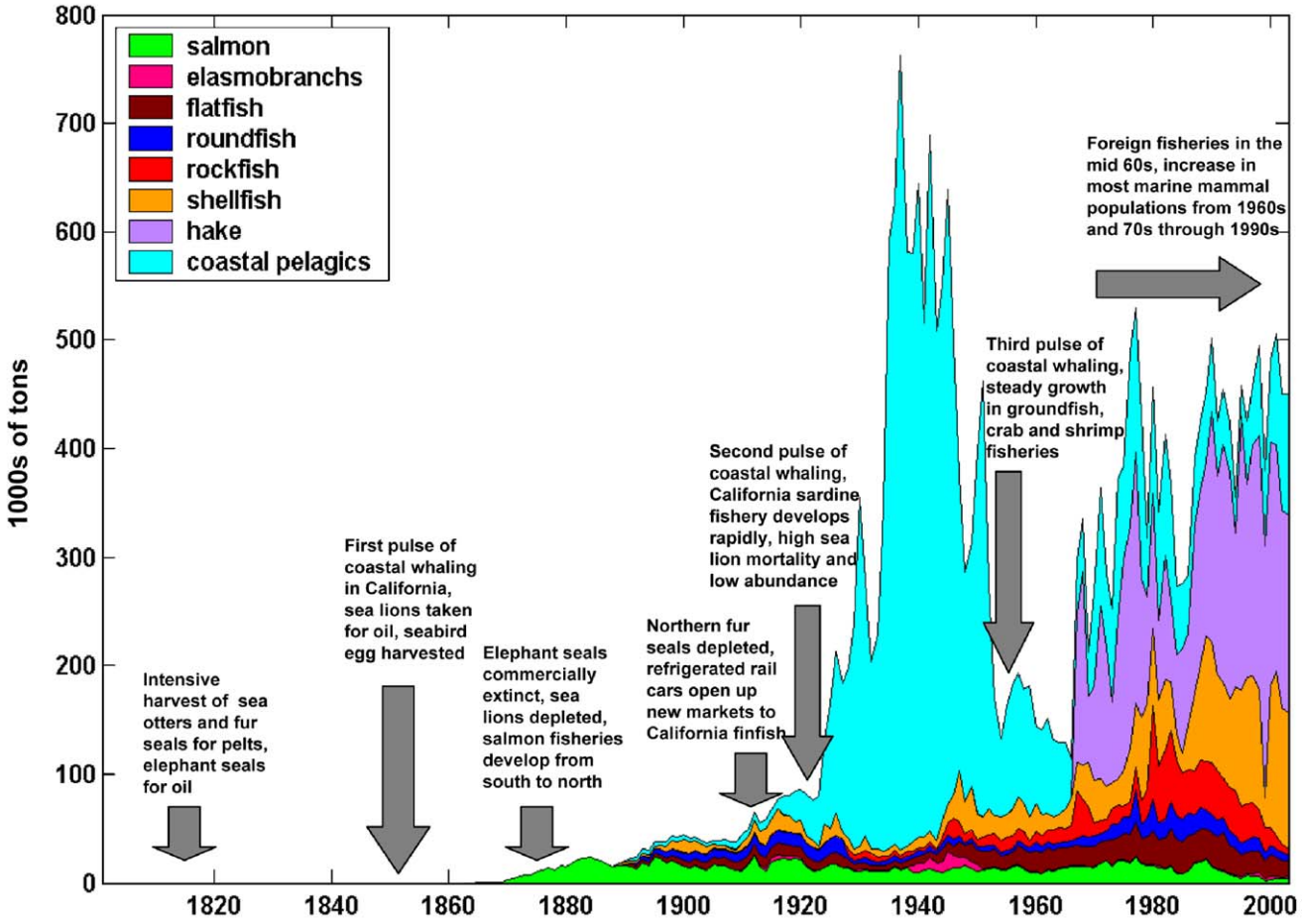

Fig. 4. Major removals, developments and fisheries catches throughout the US portion of the California Current Ecosystem over the past 2 centuries.

dramatic impacts on ecosystem structure, particularly where such approaches are applied to forage species. Their results add considerable weight to the perceived need to consider forage species as resources whose value is derived from their role as prey to commercially and recreationally important stocks. Petitions made to the PFMC to manage krill (euphausiids) as a forage species, and place either a temporary or permanent ban on krill harvests in recognition of their importance as a key prey item, would thus be consistent with an ecosystem perspective towards fisheries management in the California Current.[3] The significance of euphausiids as one of the most important vehicles for the movement of energy through this ecosystem is reflected in Fig. 5, which illustrates the key role that euphausiids play as forage for commercially important species such as hake, rockfish and salmon. Table 2 provides a summary of the more significant species or taxon in the aggregated functional groups shown in Fig. 5, as well as the scientific names of species commonly referred to throughout the text.

In another example, a model of the Newfoundland-Labrador ecosystem suggested that although overfishing drove massive declines in cod abundance, cod recovery was likely hindered by the increase in natural mortality rates associated with a nearly constant per capita consumption of cod by an increasing population of harp seals [66]. Although this model did not replicate all of the trends estimated by single-species models, it did suggest that the decline in cod and several other heavily fished species might have also resulted in the increase of shrimp and other large crustaceans, an outcome supported by empirical studies [67]. While these results alone may not provide sufficiently rigorous evidence to guide policy, they are informative for policy makers, especially where consistent with more empirical evidence of ecosystem changes. Other modeling efforts have also met with some success at replicating the behavior of key commercial fish populations over long time periods

[3]Correspondence between the Southwest Fisheries Regional Center, the Southwest Fisheries Science Center and the PFMC in 2004 and 2005 has resulted in a commitment to incorporate krill into the Coastal Pelagic Species Fisheries Management Plan, and to consider alternatives for krill management that would include a moratorium on directed fisheries for krill (http://www.pcouncil.org/bb/2005/0305/ag_g2.pdf).

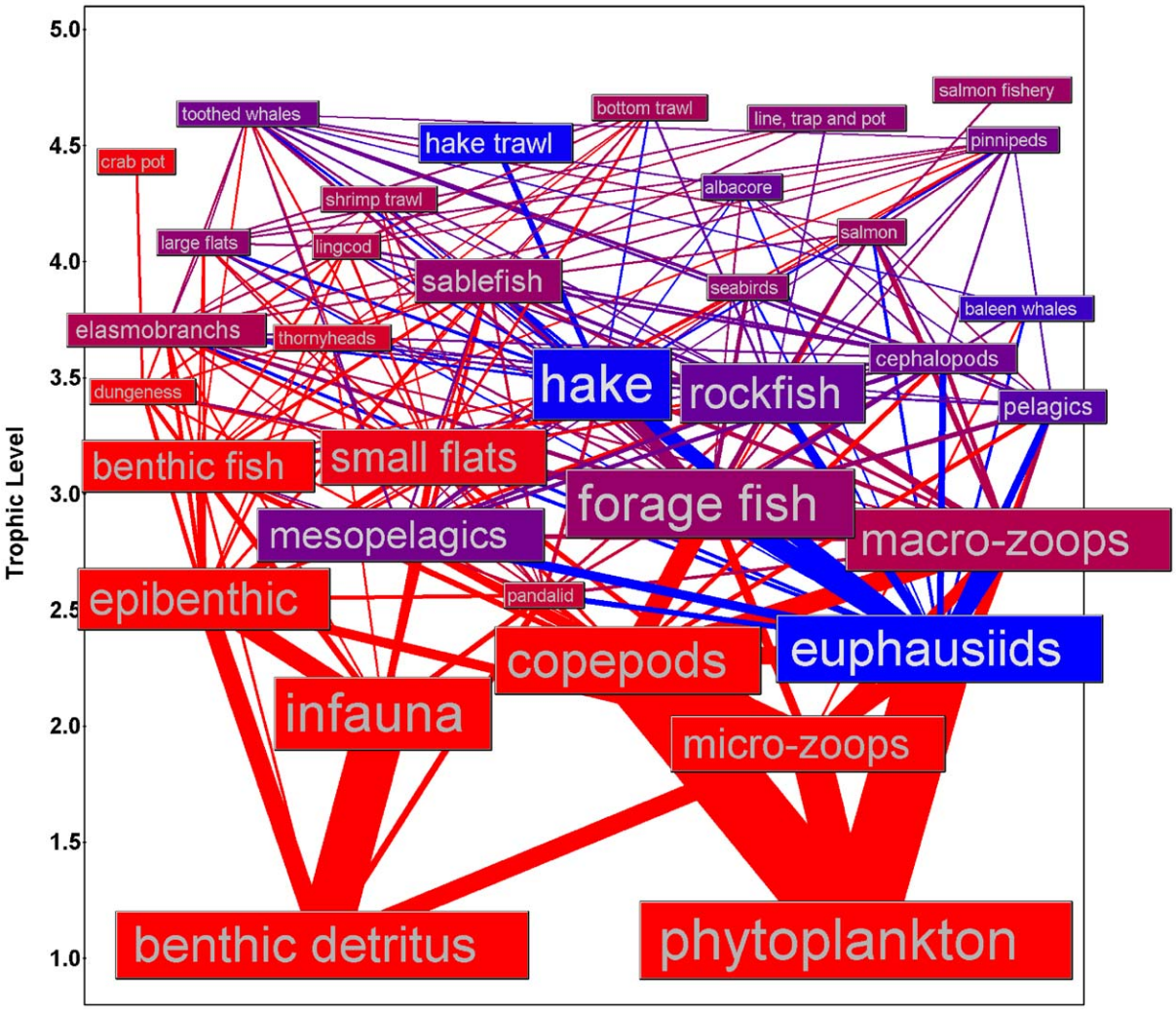

Fig. 5. Dispersal of energy from euphausiids with respect to other energy sources in the Northern California Current. The estimated trophic level is along the *y*-axis, and colors representing the alternative energy pathways such that energy derived from euphausiid production is blue and energy from other sources is red. The size of the boxes and the width of the bars connecting various boxes are scaled to the log of the standing biomass and biomass flow, respectively.

using fishing pressure and climate as forcing factors of ecosystem dynamics, including the Central North Pacific, Eastern Tropical Pacific, and Northern California Current ecosystems [68–70]. For the Northern California Current, observed trends for most groundfish can be fairly well replicated with a multi-species model, suggesting fairly weak trophic interactions among adult life history stages of most fishes relative to the impacts of fishing [70]. Stronger interactions were observed in forage species such as shrimp, salmon, and small flatfish, where there is greater population turnover and high predation, coupled with substantial changes in many of their key predators over the period modeled. Perhaps most importantly, model performance improved when climate was introduced as a driving force, given the a priori assumption that climate forcing is a critical factor in determining productivity and dynamics in this ecosystem.

In all of these examples, quantitative modeling of trophic interactions has the potential to lead to changes in harvest or management strategies in the near term, and at a minimum represents a valuable contribution to a more holistic understanding of ecological connections and interactions. Conveying to decision makers the significance of ecological processes may be just as important as monitoring and conducting process-oriented research into the causes and consequences of the same. Many criticisms of ecosystem modeling approaches are based less on the model structure, than on the misuse and misunderstanding of the model limitations [64,71,72], a characteristic shared with single-species models [73]. The far more important feature of ecosystem models is that if based on reasonable knowledge, and presented with an appropriate degree of skepticism, such models can serve as a stimulus for initiating dialogues with regard to both past population

Table 2
Summary of the more significant species or taxon in aggregated functional groups, and scientific names of commonly referred to species from the text and figures

Phytoplankton	Functional group of all photosynthetic primary producers, diatoms generally dominate
Infauna	Functional group of polychaetes, bivalves, small crustaceans, and some echinoderms
Epibenthic	Functional group including benthic crustaceans (decapods, isopods, amphipods), echinoderms (holothuroids, asteroids, ophiuroids), gastropods and other organisms
Micro-zoop	Functional group of small heterotrophic zooplankton, primarily protozoans such as gymnodiniods, dinoflagellates, ciliates, and nanoflagellates
Copepods	All developmental stages of species in the subclass Copepoda
Euphausiids	All developmental stages of species in the order Euphaussiacea
Macro-zoops	Functional group including pasiphaid, seregestid and other pelagic shrimps, chaetognaths, pelagic polychaetes, pelagic amphipods, and gelatinous zooplankton
Cephalopods	Functional group of cephalopods, such as *Loligo*, *Gonatus*, and *Octopus* species
Forage fish	Functional group of principally clupeids and osmerids, including northern anchovy, Pacific herring, sandlance, eulachon, surf smelt, and whitebait smelt
Mesopelagics	Functional group of many meso- and bathypelagic species, including northern lampfish, California headlightfish, blue lanternfish and longfin dragonfish
Benthic fish	Functional group including grenadiers (*macrouridae*), eelpouts (*Zoarcidae*), snailfish (*Cyclopteridae*), poachers (*Agonida*e), and sculpins (*Cottidae*)
Small flatfish	Functional group including Dover sole (*Microstomus pacificus*), english sole (*Parophys vetulus*), rex sole (*Glyptocephalus zachirus*), sanddabs (*Citharichthys* spp.), and others
Pelagics	Includes Pacific sardine (*Sardinops sagax*), jack mackerel (*Trachurus symetricus*) and Pacific mackerel (*Scomber japonicus*)
Pandalid shrimp	*Pandalus jordani*
Dungeness crab	*Cancer magister*
Salmon	Chinook and coho salmon (*Oncorhynchus* spp.)
Elasmobranchs	Includes dogfish (*Squalus acanthias*), cat sharks (*Apristurus* spp.), soupfin (*Galeorhinus galeus*) and thresher (*Alopias* spp.) sharks, and skates (*Raja* and *Bathyraja* spp.)
Rockfish	Includes all *Sebastes* species, most abundant species include widow (*S. entomelas*), yellowtail (*S. flavidu*s), canary (*S. pinniger*), and Pacific Ocean perch (*S. alutus*)
Thornyheads	Shortspine (*Sebastolobus alascanus*) and longspine (*S. altivelis*) thornyheads
Pacific hake	*Merluccius productus*
Sablefish	*Anoplopoma fimbria*
Lingcod	*Ophiodon elongates*
Albacore	*Thunnus alalunga*
Large flats	Includes arrowtooth flounder (*Atheresthes stomias*), Pacific halibut (*Hippoglossus stenolepu*s) and Petrale sole (*Eopsetta jordani*)
Seabirds	Includes shearwaters (*Puffinus* spp.), common murres (*Uria aalgae*), other alcids, gulls (*Larus* spp.), albatross, phalaropes, petrels and others.
Toothed whales	Primarily Dall's porpoise (*Phocoena dalli*), Pacific white-sided dolphin (*Lagenorhynchus obliquidens*), sperm whales (*Physeter macrocephalus*), and Orcas (*Orcinus orca*)
Pinnipeds	Primarily Steller sea lions (*Eumetopias jubatus*), California sea lions (*Zalophus californianus*), fur seals (*Callorhinus ursinus*) and harbor seals (*Phoca vitulina*)
Baleen whales	Primarily humpback whales (*Megaptera novaeangiliea*), but including minke (*B. acutorostrata*), fin, (*B. physalus*), and gray whales (*Eschrichtius robustus*)

dynamics and plausible ecosystem futures [74]. Perhaps their greatest asset is that they can complement the insights gained from single-species models through a more strategic consideration of past and current abundance and productivity, and consequently provide a means to quantify the interconnectedness of parts within the system, and evaluate plausible trade-offs between these parts as a result management decisions.

3.3. Demographics, life history and biocomplexity

As suggested by the discussion of the compositionalist and the functionalist perspectives, even a robust and successfully implemented combination of single and multi-species data, models, reference points and thresholds would be insufficient to fully adopt an ecosystem perspective. The challenging but critically important measures of diversity, biocomplexity, and ecological integrity may be just as important to managing for an ecosystem perspective as more ''functionalist'' single-species reference points and objectives. Although models play a critical role by allowing the management community to relate to the consequences of their decisions, both single species and ecosystem models tend to reflect a functionalist perspective with regard to their presumed properties of resilience [21]. Yet, even the impacts of successfully implemented management measures to demographic and life history characteristics of some species may be contrary to perspectives of sustainability based on evolutionary ecology. Fishing has been widely accepted (and experimentally demonstrated) to be a form of artificial selection towards

smaller size or younger age at reproduction [75,76], and the potential consequences of such selection are important for both conservation and economic reasons.[4] In particular, the assumptions of fisheries science and the stock assessments upon which management is based ignore the potential evolutionary consequences of harvesting, which could reduce the sustainable yield of a population by decreasing the amount of somatic growth relative to reproductive effort [77]. This has resulted in what some have dubbed the "tropicalization" of many marine fish populations, meaning the imposition of traits such as faster growth rates, smaller size, and earlier maturity schedules which may be ill-suited to the environment in which such populations live, and could result in reductions in long-term yield [78].

Lotka [79] was among the earliest to propose that the ability of populations to persist or recover is constrained if the distribution of age structure is pushed beyond a certain threshold, a threshold that has since been referred to as the "boundary of sustainability" [80]. In particular, longevity appears to be an archetypical life history adaptation of many temperate water populations to episodic recruitment failure in a variable and an uncertain environment, and it has consequently been suggested that age structure should not be forced to diverge far from the values that evolved for each stock prior to human exploitation [81–83]. Prior to the development of large-scale fisheries, a majority of the biomass of commercially important sablefish, Dover sole and many rockfish populations consisted of fish greater than 20 years of age, with individuals of many species capable of reaching ages of 80 or more [84,85]. As of 2005, seven species of rockfish (Sebastes spp.) as well as lingcod are managed under NMFS overfished species rebuilding plans. These species declined to depleted levels as a result of a combination of low productivity, poor environmental conditions, and high harvest rates, and have expected recovery times of several to many decades [86]. In addition, substantial community changes may also be associated with groundfish declines, as four of the species (cowcod, bocaccio, yelloweye rockfish and lingcod) are large, long-lived piscivores that may have played an important role in maintaining the community structure of the rocky reef ecosystems that they used to dominate [87,88].

There is also growing evidence of variability in the reproductive abilities of younger and older individuals of many species, the inference being that a broad distribution of age structure is beneficial to the recruitment and productivity of many stocks [89–91]. For example, it has been shown that older female black rockfish produce larvae with faster growth rates and greater larval survival than younger fish, with age being a more significant predictor than size alone [92]. Older females also gave birth earlier in the year than younger females [93]. Such considerations are not limited to long-lived species, as it has been demonstrated that the "biocomplexity" of stock structure in western Alaskan sockeye salmon plays a critical role in providing both stability and sustainability to fisheries [94], findings that echo those for West Coast salmon populations [95,96]. All of these examples reveal that for many fish populations, long-term sustainability is based on complementary patterns of production from different stock components under varying environmental conditions. Complementary patterns of production help sustain fishermen as well, as Hanna [97] found that the diversification of fishing strategies between groundfish, shrimp and crab benefited fishermen by reducing the variability of landings and earnings.

The application of marine protected areas (MPAs) and other spatially based management efforts (such as rotating closures and ocean zoning) have been increasingly proposed as potential tools in future marine resource management [16,98,99]. An NRC panel charged with investigating the potential application of MPAs in marine resource management concluded that there was compelling evidence for their use in managing fisheries, protecting habitat and biodiversity, and otherwise enhancing the anthropogenic value of marine habitat [100]. As management tools, MPAs offer a form of insurance against overexploitation and recruitment overfishing, help preserve a broad age distribution, and protect vulnerable non-target species and habitat. Both proponents and critics point out, however, that the nature of any implementation could be associated with increased fishing mortality and impacts outside MPA boundaries [101,102]. Yet, the need for spatial management to achieve current conservation objectives, such as rebuilding depleted rockfish stocks for the Pacific Council, suggests that such measures may have much to offer with regard to maintaining life history characteristics and biocomplexity in marine populations. Regardless of the mechanism, it is increasingly important for all stakeholders to recognize that maintaining life history traits and otherwise facilitating each population's insurance strategy for coping with the environment is a critical element of any sustainable approach to long-term fisheries management.

4. Moving towards ecosystem-based management in the California Current

The Sustainable Fisheries Act clearly altered the nature of fisheries management in the United States,

[4]Although the current National Standard guidelines recognize the significance of demographic and evolutionary impacts of fishing on both populations and ecosystems, this recognition does not require the gathering or analysis of new data to address life history uncertainties or the protection of marine ecosystems [120].

and in the California Current such changes came in the midst of an extended period of poor environmental conditions that contributed substantially to fisheries crises. These crises, in association with growing recognition of the low productivity of many stocks, brought about wave after wave of reductions in total allowable catches and trip limits. Consequently, much of the PFMC's current activities are focused on ongoing crises, resulting in substantial limitations on the ability to develop and implement new initiatives. Thus, regardless of whether the process is mandated or voluntary, there should be an emphasis on an evolutionary, rather than revolutionary, move towards an ecosystem approach [103]. As discussed earlier, there have been major improvements in the monitoring and management of California Current fisheries, including efforts to evaluate and protect essential fish habitat [104], new bycatch evaluation and reduction measures [105,106], the use of environmental indicators in setting harvest rates, capacity reduction programs [107–109], and the recently initiated consideration of rights-based fishing regimes [110]. Obviously, all of these developments have occurred in the context of the current management regime, which in turn suggests that movement towards an ecosystem-based approach is consistent with the current fisheries management institutions. While an appropriately funded mandate to develop FEPs would be desirable from the perspective of truly developing an ecosystem perspective, this should not preclude the development of a road map towards adopting an ecosystem-based approach to management, or otherwise integrating ecosystem considerations into the current management regime to the greatest extent possible.

As an active adaptive approach, McEvoy [22] suggested that the best managers might be able to do "is to monitor and adjust the interaction between a volatile ecology, a creative economy, and society's understanding and control as they go along." Similarly, Gunderson et al. [111] and Holling and Meffe [21] argue that the key to maintaining resilience in ecosystems is to facilitate existing processes and variability, rather than to try to control them. In other words, the key objective of an ecosystem approach is to facilitate healthy interactions between ecological, socio-economic and governance elements of the fisheries system. Clearly the need to recognize and assess the roles of climate and ecological complexity must be balanced with the need for understanding the socio-ecological interactions between fishermen and fishery resources and the sustainability of the fisheries system as a whole. Such recognition is increasingly widespread in the resource management community, which has led to the growth of a new discipline, dubbed the socio-ecological approach by Berkes et al. [23] and "sustainability science" by Kates et al. [112]. Although the ability to model the key interactions between humans and the ecosystem are critical to this emerging discipline, advances in modeling human processes have lagged far behind the modeling of biophysical processes [113]. The consequences of salmon and rockfish crises now resonate widely across fisheries sectors, where modeling the projected impacts of regulatory changes has required making increasingly tenuous assumptions regarding the behavior of both fishermen and the resources themselves, as managers struggle to balance the need to minimize mortality of overfished species against the need to maintain fishing opportunities on healthier stocks.

A useful framework for formally phasing in ecosystem considerations from a management perspective was presented by Goodman et al. [114], and here that framework is used to consider how the PFMC might phase from implicit to explicit consideration of ecosystem processes. In the conventional assessment worldview (Fig. 6), the ecosystem is considered principally in the context of target populations. There is both direct feedback between these populations and the fishing fleets (industry) and indirect feedback through the governance sector. This indirect feedback occurs through the evaluation of survey, effort and catch data, which is used to develop stock assessments and other evaluations of the status of resources. Where direct feedback between the resource and the fishery is strong (such as seems to be the case with pandalid shrimp and Dungeness crab in the California Current), the role of governance can be limited without substantial risk to the resource. However, where the direct feedback between resources and fisheries is weak, as it is with many of the long-lived and slow growing groundfish, sustainability is almost fully dependent on the indirect feedback of governance. If that feedback is too slow, or management actions are ineffective, the resource is far more likely to be overexploited, leading to negative impacts on both the ecosystem and the economy.

In the first stage of moving towards an ecosystem approach, described as the explicit ecosystem effects worldview, the status of target stocks, their prey, and their predators are formally considered by the governance sector in the context of environmental conditions and trophic interactions (Fig. 7). Fishing activities would continue to be largely governed by estimates of target stock status and yield as in the conventional worldview, and the governance sector would remain heavily dependent upon the indirect feedback of stock and target species status from catches, surveys and effort data. For the PFMC, an initial mechanism to implement this approach would be to establish an ecosystem considerations technical team, which would be tasked primarily with the responsibility for advising the Council on the state of the environment and providing ecosystem guidance on management decisions, just as management teams and advisory panels do for current FMPs. This team or panel could also potentially act as

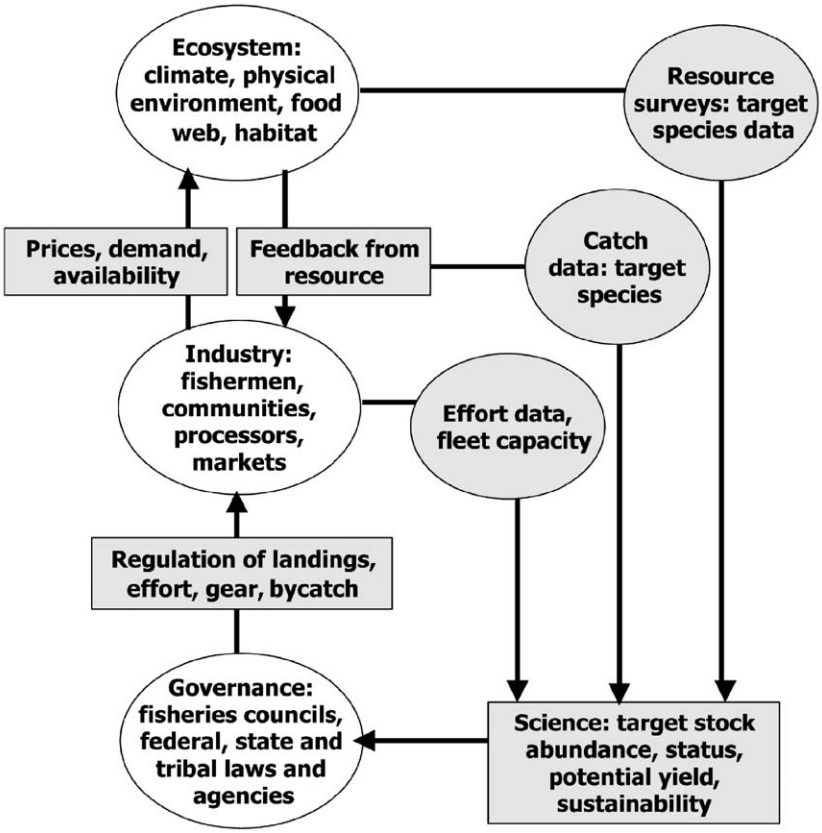

Fig. 6. The conventional fisheries management worldview, in which there is both direct feedback between these populations (the ecosystem) and the fishing fleets (economy) and indirect feedback through management (governance). This indirect feedback occurs through the evaluation of survey, effort and catch data, which is used to develop stock assessments and other evaluations of the status of exploited resources. Adapted from Goodman et al. [114].

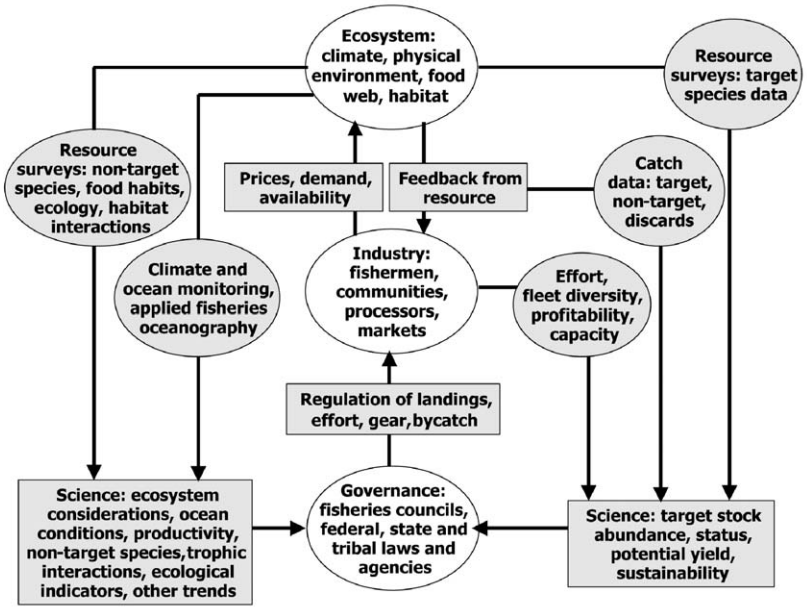

Fig. 7. A transitory stage between the conventional fisheries management view and a wholly ecosystem-based management perspective. Tractable problems are addressed by the governance sector to the extent practicable, while climate, productivity, habitat, and the needs of predators are implicitly considered in the context of making decisions. Adapted from Goodman et al. [114].

the primary source of skill and effort for crafting a FEP, revising a programmatic EIS, or otherwise coordinating management efforts across management plans or for species not currently managed by the Council (e.g., krill). The principal obligation of this team would be to provide ecosystem guidance, as related to climate, trophic, life history or other considerations, to the consideration of harvest guidelines and other decisions in the management cycle (advise relevant to habitat considerations, clearly critical to any ecosystem perspective, is currently provided by an existing habitat committee). By explicitly evaluating linkages between climate and productivity, or the role of the stocks in question as key predators or forage item for other species in the ecosystem, this body would also be capable of providing an ecosystem context for single-species assessments, and would serve as a conduit and intermediary for contemporary ecosystem information and research that might be directly relevant to Council activities or decisions.

This is essentially the current approach of the NPFMC, where a formalized system of assessing status and trends in the environment, and providing managers and decision makers with indicators of environmental and human impacts on the ecosystem, has been evolving over the last decade [28,51,115]. The key ecosystem objectives for the NPFMC have also been identified, and include maintaining predator/prey relationships, energy flows and balance, and diversity. Yet, despite the NPFMC's track record of largely maintaining harvest rates at or below MSY (or proxies thereof) levels, and with the majority of stocks managed by the Council at or above the target biomass levels, conservation concerns have dominated the North Pacific Council's management agenda. These concerns have been related to ecosystem changes that include altered productivity and distribution of many finfish populations, tremendous changes in the physical environment, and ongoing declines in marine mammals. To address these concerns, the NPFMC and the NMFS have had to integrate and apply scientific information across disciplines (marine mammals, finfish stock assessments, climate research) to the ecosystem level. The NPFMC experience demonstrates both the ability to achieve success in formally bringing ecosystem considerations to the table, and the challenges of actually using ecosystem models, data, or guidance within the contemporary fisheries management framework.

Clearly, there is a middle ground to be found in transitioning from a single species to a truly holistic ecosystem perspective, and this middle ground likely represents what may be feasible in any implementation of an ecosystem-based approach to fisheries management in the near future. In the idealized ecosystem management view, governance is provided with nearly complete knowledge regarding ocean conditions, productivity and the status of both target and non-target biota, as well as indicators of diversity and other measures of ecological health and integrity. In theory, this integrated ecosystem approach would make management decisions based on fully integrated estimates of ecosystem productivity and ecological interactions (such as the needs of other predators), and explicitly minimize the consequences of fishing on habitat, ecological structure, and life history traits. In practice, however, models may be able to offer some prediction of possible future trends under various climate scenarios and management strategies, but these models will in the near term unavoidably be constrained by a high degree of uncertainty. While the application of a range of models would increase the confidence in model scenarios, there are still far too many unanswered basic ecological questions to expect that such intimate knowledge of ecological processes, mechanisms or dynamics will soon be forthcoming [116]. The future of fisheries management may be one of increasing uncertainty, particularly as the cumulative impacts of localized and global change interact in patterns that vary from those in the historical past.

5. Conclusions

Management bodies and decision makers are making ecosystem management decisions every day, and there is increasingly relevant ecosystem information available that may help inform such decisions. Although management decisions will continue to be made with incomplete information, they can be improved upon with greater appreciation and knowledge of the state of the ecosystem, with respect to the role of climate, the complexity of trophic interactions, the importance of life history considerations, and the recognition of socio-economic interactions with these factors. In the short term, the Pacific Council could establish an ecosystem committee charged with developing and integrating existing ecosystem considerations as briefing materials, to inform and acclimate the Council community to existing data, knowledge, and potential directions for monitoring, modeling or research efforts. In the longer term, both the Council and the NMFS should develop a road map for phasing in ecosystem considerations within the current management context, and in the absence of a legal mandate for the development of FEPs, use the existing NEPA framework to assemble those elements proposed by the Ecosystem Principles Panel that have not already been initiated.

Despite the problems and challenges associated with today's fisheries crises, recognition of the important conservation role that MSY, reference points, and stock rebuilding requirements have made is key [117]. As Larkin [118] said in his premature eulogy to the theory

of MSY, to appreciate what that single-species models and management based on MSY has done, we should consider what the state of the world's fisheries might be today if the concept had not been developed and widely implemented: "The fish, I'm sure, would shudder to think of it." Yet, the growing recognition for the role of the short- and long-term environmental variability, of habitat, trophic interactions and life history considerations leads one to the conclusion that there is much room for improvement. To paraphrase Gunderson and Holling [119], the single-species approach is not wrong, it is just incomplete. So too are the compositionalist, functionalist, and socio-economic approaches to ecosystem management described earlier: none are necessarily wrong, but all are based on worldviews that are to some extent incomplete. Consequently, each view may resonate with a different group of stakeholders. The real near-term contribution of any of these worldviews is that all would provide a greater ecosystem context for the existing set of single-species-based models and management strategies. In demonstrating the breadth of our uncertainty, ecosystem assessments, models, and management approaches should help to implement management strategies that are more robust to environmental and ecological variability and change.

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February 13, 2007

Mr. Joseph Uravitch
National MPA Center, N/ORM
National Oceanic and Atmospheric Administration
1505 East-West Highway
Silver Spring, MD 20910

Re: Pacific Fishery Management Council Comments on the Draft Framework for Developing the National System of Marine Protected Areas.

Dear Mr. Uravitch:

Thank you for the opportunity to review and comment on the National Marine Protected Areas Center's Draft Framework for Developing the National System of Marine Protected Areas. Your letter and Draft Framework were provided to the Pacific Fishery Management Council (Pacific Council) at its November 2006 meeting in Del Mar, California. Due to the heavy workload associated with the November 2006 meeting, placing this matter on the agenda for the Council and its advisory bodies was not possible. However, on behalf of the Council, I would like to take this opportunity to provide the following general comments on the Draft Framework.

As you are aware the Pacific Council and the National Marine Fisheries Service (NMFS) has implemented several area management concepts including coastwide Rockfish Conservation Areas closed to commercial and recreational fisheries for the protection of overfished groundfish species and areas closed to trawl or bottom contacting fishing gear to protect groundfish essential fish habitat. In developing the later, the Pacific Council worked closely with the National Marine Sanctuary Program to meet shared goals and objectives to protect habitat areas within the Channel Islands, Cordell Bank, and Monterey Bay National Marine Sanctuaries. Many, if not all of these area management actions meet the proposed criteria for marine protected areas (MPAs) in the Draft Framework and should be considered during Phase I efforts to build the initial network or existing MPAs. The Pacific Council is encouraged by this effort to inventory MPAs and marine managed areas and is optimistic that this comprehensive assessment will prove useful to the Pacific Council and the Nation as ecosystem-based fishery management and place-based area management concepts are further investigated.

The Pacific Council is in the initial stages of exploring ecosystem-based fishery management principles and is considering the development of a Fishery Ecosystem Plan, in part, to help coordinate, monitor, and assess the effectiveness of area and place-based management efforts. The goals and objectives of the proposed Fishery Ecosystem Plan will likely share attributes of the rational, goals, and objectives of the National System of MPAs. The Pacific Council would welcome collaboration with the MPA Center to ensure the goals and objectives of national and

regional area management plans are based on the best available science and achieve healthy marine ecosystems and sustainable fisheries.

As development of a National MPA Network begins to identify potential gaps and additional conservation needs under Phase 2 of the Draft Framework, it will essential to maintain coordination between the National MPA Center and the Regional Fishery Management Councils, particularly in the early stages of considering new MPAs, if necessary. Should new MPAs or existing MPA's in West Coast National Marine Sanctuaries be deemed to require additional fishery restrictions, the Pacific Council maintains the position that regulation of marine fisheries should occur solely under the authority of the Magnuson-Stevens Fishery Conservation and Management Act via the Pacific Council forum and the regulatory authority of NMFS and the States.

The Pacific Council and I, look forward to continued work with the National MPA Center on the National System of Marine Protected Areas. If you or your staff should have any questions regarding this letter, please contact me or Mr. Mike Burner, the lead Staff Officer on this matter at 503-820-2280.

Sincerely,

Donald McIsaac, Ph.D.
Executive Director

MDB:rdd

c: Council Members
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Dear Mr. Kelsey:

Thank you for the opportunity to provide comments on the National Marine Protected Areas (MPA) Center's *Draft Framework for Developing the National System of Marine Protected Areas*. This framework provides an outline to implement a presidential executive order[1] to develop a national system of marine protected areas (MPAs). It is clear that considerable consultation, public comment, and care went into drafting the framework. Based on consultation with the Washington State Department of Fish and Wildlife and other state agencies, the Washington State Department of Ecology offers the following comments on this draft framework on behalf of Washington State.

General

Overall, the framework provides a good balance between the many authorities and interests in our nation's marine areas. In general, the framework: 1) respects the authority of states, local, and tribal governments; 2) provides for voluntary involvement; and 3) promotes coordination. Washington considers all three of these to be key components to developing a national system of MPAs.

The State of Washington, along with four coastal tribes and the Olympic Coast National Marine Sanctuary, recently formed an Intergovernmental Policy Council to manage the marine resources of the Olympic Coast National Marine Sanctuary. The effort will improve government-to-government communication among the tribes, state, and sanctuary on management of these marine waters. As sovereign nations, many tribes have treaty fishing

[1] Executive Order No. 13158, May 2000.

rights and co-management responsibilities with the State of Washington for fish and other natural resources in the state. Thus, it is important, as recognized by the MPA Center, that MPAs in the national network and future MPAs recognize the authority and role of other entities such as tribes, states, and other governments in managing marine resources.

Two common types of regulatory action are typically needed in creating MPAs: prohibition of certain fishing activities and, potentially, additional measures for habitat protection. Depending on the regulatory action, there are different sets of overlapping jurisdictions. For example, for fishing regulations in Washington State, the overlapping authorities are the National Marine Fisheries Service, the treaty tribes, and the Washington Department of Fish and Wildlife. Establishing habitat protection measures on Washington's outer coast adds to the mix the authorities of the Olympic Coast National Marine Sanctuary, the U.S. Fish and Wildlife Service, and the Washington Departments of Ecology and Natural Resources.

While the draft framework provides an opportunity for these different authorities to coordinate, it is unclear whether the purpose is primarily for information sharing, or whether the collective group is expected to develop recommendations for each representative to take back to their respective agencies. It is also unclear how the National MPA Center will fit into existing processes, such as the Pacific Fishery Management Council process, which is currently handling much of the coordination relative to fishing regulations that this framework seems to address. **Recommendation: The MPA Center should clarify the purpose of coordination and how the MPA Center will fit into existing regulatory processes.**

In summary, Washington especially values the independence and voluntary involvement by states, tribes, and local governments that is described in the framework. Additionally, we recognize that increased coordination and communication among regulatory agencies regarding operation and development of MPAs can promote better partnerships that increase efficiency, maximize effectiveness, and improve resource management. Therefore, we support the information-sharing approach provided by the framework.

Section VI. Goals, Objectives, and Key Definitions for the National System of MPAs

All of the goals and objectives appear to center on an ecosystem-based management approach and, again, there appears to be considerable overlap with work that is being done in other arenas on the West Coast. At their November 2006 meeting, the Pacific Fishery Management Council initiated development of a Fishery Ecosystem Plan that will incorporate ecosystem-based fishery management principles. The intent of this plan is to recognize the importance of understanding both marine ecological principles and human interactions, while noting that striking a balance between competing goals will bring challenges. While the development of this plan appears consistent with the goals and objectives described in the MPA Center's framework, we believe that regional differences in ecosystems need to be taken into account

when viewing this from a national perspective. **Recommendation: We advocate continuing to work through the Pacific Fishery Management Council process to develop and adopt the specific goals and objectives for ecosystem-based fishery management on the West Coast.**

Section VII. Developing the National System of MPAs

The draft framework document touches upon an important issue that needs to be considered when reviewing the comprehensive list of current MPAs on the West Coast—that is, many areas are de-facto MPAs. Many of these areas, however, may not be reflected in the current inventory of MPAs. These de-facto MPAs are in place for many different reasons—some protect habitat, others protect specific species of rockfish, and others provide tools for fishery management. A few areas are completely closed to all fishing activities, but the majority of them are closed to specific gear types and/or activities. These gear-specific closures have direct fishery allocation implications among many different governments and sectors—including state, tribal, non-tribal commercial, and recreational. This is one of the primary reasons that the creation of new MPAs, and/or the definition of a national system of current MPAs, that have a fishery closure component need to be developed through the regional fishery management council process.

To facilitate national coordination, the draft framework suggests establishing a national System Steering Committee. With regard to regulating fishing activities, the State of Washington continues to support the position described in the Pacific Fishery Management Council's correspondence with the Secretary of Commerce. That is, that fishing regulatory authority should be exercised under the Magnuson-Stevens Fishery Conservation and Management Act, rather than through the National Marine Sanctuary Act and, in this case, through a steering committee established by the National MPA Center. **Recommendation: We support the creation of the steering committee for the purposes of information sharing and potential development of recommendations that could be forwarded to the appropriate regulatory agencies for consideration.**

According to the draft, specifics on how to determine representation on the national steering committee will be based on comments received. Washington believes this committee must contain ample regional representatives from a wide array of interests. This includes representatives from regional fishery management councils; state and tribal governments; marine user groups such as fishing, shipping, and recreational interests; and managers of marine protected areas. **Recommendation: Include a wide range of regional representation on the national steering committee such as tribes, states, marine user groups, and fishery management councils.**

Section IX. Implementing MPA Executive Order Section 5. "Agency Responsibilities"
The executive order requires federal agencies to "avoid harm to the natural and cultural resources that are protected by an MPA." As outlined by the draft framework, this "avoid harm" provision will be implemented through existing authorities and review mechanisms and enforceable through annual self-reporting. Washington appreciates federal agencies' wanting to provide maximum efficiency by incorporating this review into existing work. Additionally, the executive order did not provide for additional authorities pertaining to agency review of a proposed activity for impacts to MPAs. The mechanism currently suggested that federal agencies request a review by the MPA Center using existing agency review procedures. The MPA Center will, in turn, provide voluntary technical guidance and best practices to federal agencies regarding marine protected areas.

One of the many federal laws identified as an existing authority for incorporating this MPA review is the Coastal Zone Management Act (CZMA) – a federal authority delegated to coastal states. The CZMA does not currently require federal agencies to consult with other federal agencies regarding federal consistency, unless a federal law is encompassed in the state's coastal program. Be aware that state programs have limitations in their ability to achieve the MPA Center's "avoid harm" provision. State programs vary widely in their enforceable policies for CZMA federal consistency determinations and many may not include provisions that address avoiding harm to MPAs. **Recommendation: The MPA Center must clarify and provide more details on how avoiding harm to MPAs will be addressed by CZMA's existing review process.**

The draft framework contends that no definitions exist for "avoid harm," "affect", or "to the extent permitted by law and to the maximum extent practicable." Furthermore, it suggests that an agency's requirement for "avoid harm" will depend on the nature of the activity and the legal framework for a particular MPA. Unfortunately, without a definition of "avoid harm" it will be nearly impossible to assess whether harm is being avoided by federal agency actions. The lack of a definition sets up a moving target for federal agencies, the public, and interested stakeholders. **Recommendation: We suggest developing a definition that encompasses the general conditions and requirements under the "avoid harm" provision for various classes of MPAs to provide greater clarity to all.**

Finally, the framework allows the determination of whether an agency is taking actions to avoid harm to be made by the individual agency itself. Washington State is concerned that this method for reporting lacks independent review against a defined standard. Ultimately, this will result in uncertainty and lack of accountability for federal agencies regarding "avoiding harm" to marine protected areas – the goal of this part of the executive order.

Section X. Evaluating the Effectiveness of the National System of MPAs

The framework suggests that results of monitoring and evaluating the National System will help identify and shape future initiatives including: "priority marine area and resources gaps to be filled." However, the framework is silent on how these gaps will be filled. The framework does not specify whether this gap analysis could be used to propose establishing new MPAs. **Recommendation: Washington requests clarification on the potential and expected outcomes of this evaluation method.**

Washington State appreciates the efforts of the MPA Center to provide a framework for developing a national system of marine protected areas. Thank you for considering our comments.

Sincerely,

Gordon White
Program Manager
Shorelands and Environmental Assistance Program

DRAFT SUMMARY MINUTES

Joint Session of the Habitat Committee and the Ecosystem Based Fishery Management Subcommittee of the Scientific and Statistical Committee

Pacific Fishery Management Council
Hilton San Diego/Del Mar Hotel
15575 Jimmy Durante Blvd
Del Mar, California 92014

November 14, 2006

Call to Order

At its September 2006 meeting, the Pacific Fishery Management Council (Council) scheduled a joint session of the Habitat Committee (HC) and the Ecosystem-Based Fishery Management (EBFM) Subcommittee of the Scientific and Statistical Committee (SSC) to begin the task of reviewing the science of EBFM and the application of EBFM principles in other regions, and to consider existing and potential future applications of EBFM in Council fishery management.

HC Members in Attendance

Mr. Stuart Ellis, Columbia River Inter-Tribal Fish Commission, Portland, OR
Ms. Liz Hamilton, Northwest Sportfishing Industry Association, Oregon City, OR
Mr. Huff McGonigal, NOAA, National Marine Sanctuary Program, Monterey, CA
Dr. Charlie Petrosky, Idaho Department of Fish and Game, Boise, ID
Ms. Fran Recht, Pacific States Marine Fisheries Commission, Portland, OR
Ms. Teresa Scott, Washington Department of Fish and Wildlife, Olympia, WA
Dr. Waldo Wakefield, NOAA, Northwest Fisheries Science Center, Newport, OR
Dr. Hal Weeks, Oregon Department of Fish and Wildlife, Newport, OR

SSC Members in Attendance

Mr. Tom Barnes, California Department on Fish and Game, La Jolla, CA
Mr. Robert Conrad, Northwest Indian Fisheries Commission, Olympia, WA
Dr. Michael Dalton, National Marine Fisheries Service, Seattle, WA
Dr. Martin Dorn, National Marine Fisheries Service, Seattle, WA
Dr. Owen Hamel, National Marine Fisheries Service, Seattle, WA
Mr. Tom Jagielo, Washington Department of Fish and Wildlife, Olympia, WA
Dr. Peter Lawson, National Marine Fisheries Service, Newport, OR
Dr. André Punt, University of Washington, Seattle, WA
Dr. Steve Ralston, National Marine Fisheries Service, Santa Cruz, CA
Ms. Cynthia Thomson, National Marine Fisheries Service, Santa Cruz, CA

Others in Attendance

Ms. Carol Bernthal, NOAA, Olympic Coast National Marine Sanctuary
Mr. Mike Burner, Pacific Fishery Management Council
Mr. Alan Byrne, Idaho Department of Fish and Game
Mr. John Field, NOAA, Southwest Fisheries Science Center
Ms. Jennifer Gilden, Pacific Fishery Management Council
Mr. Peter Huhtala, Pacific Marine Conservation Council
Mr. Josh Lindsay, NOAA, Southwest Regional Office
Mr. Kirk Lynn, California Department of Fish and Game
Ms. Megan Mackey, Pacific Marine Conservation Council
Ms. Jennifer Martin, PRBO Conservation Science
Ms. Stacey Miller, NOAA, Northwest Fisheries Science Center
Mr. Russell Porter, Pacific States Marine Fisheries Commission
Mr. Santi Roberts, Oceana
Mr. John Wallace, NOAA, Northwest Fisheries Science Center

Review of Meeting Purpose and Goals

Mike Burner provided an overview of the evolution of the joint session and a review of Council direction for the meeting. The SSC has recommended to the Council that the SSC and its EBFM Subcommittee be charged with putting together an annual "State of the Ecosystem" type of report for the Council which would build off current work being done on ecosystem assessment and principles by the National Oceanic and Atmospheric Administration (NOAA), the National Marine Fisheries Services (NMFS), and the Regional Fishery Management Councils. Much of this work is in response to the Sustainable Fisheries Act and the resulting recommendations of the Ecosystem Principles Advisory Panel convened in 1999.

The Habitat Committee has also discussed EBFM principles and their potential application to the Council fishery management process. At the June 2006 Council meeting, the HC expressed interest in developing a workable definition of EBFM based on existing definitions, describing actions the Council has already taken that address an ecosystem-based management approach, and working with other advisory bodies to discuss incremental steps the Council could take toward ecosystem-based management.

The purpose of this joint session is to coordinate the efforts of the SSC and the HC in regards to EBFM and to discuss a collaborative process of providing sound advice to the Council on the potential application of EBFM principles in West Coast fishery management.

Review of Ecosystem Based Fishery Management (EBFM) Approaches in Other Regions and Regional Fishery Management Councils

Dr. Hal Weeks briefed the group on EBFM approaches in other Regional Fishery Management Councils.

The North Pacific Fishery Management Council (NPFMC) and South Atlantic Fishery Management Council (SAFMC) have done perhaps the greatest amount of work with EBFM implementation. NPFMC efforts were sparked by stellar sea lion recovery issues. The NPFMC produced an ecosystem considerations document that has grown from 20 to 320 pages. One aspect of the NPFMC approach is to request that all stock assessment authors address two questions when completing an assessment: 1) what are the ecosystem effects on the stocks being assessed?; and 2) what are the ecosystem effects of the fishery for that stock (i.e. habitat impacts from bottom-tending gear, localized depletion, etc.)?

The SAFMC took a different approach than the NPFMC, stemming from essential fish habitat (EFH) provisions in the 1996 Sustainable Fisheries Act (SFA). Through their EFH process, they developed a habitat plan and a conceptual approach for converting it into an ecosystem plan.

The Western Pacific Fishery Management Council (WPFMC) has also taken significant action to implement EBFM principles. The WPFMC replaced its species-based fishery management plans (FMPs) with five draft area-based management plans, each based on a different geographic area and unique ecosystem managed by the WPFMC.

The Gulf of Mexico Fishery Management Council has formed an Ecosystem Scientific and Statistical Committee, and the New England Fishery Management Council has formed a Habitat/MPA/ Ecosystems Oversight Committee. Both have held workshops on EBFM. The Mid-Atlantic Fishery Management Council has also formed a subcommittee on EBFM, but Dr. Weeks was not able to find much information on these efforts. Dr. Weeks noted that a Congressional allocation of about $2 million was shared between four councils to conduct such workshops and to develop EBFM concepts.

The group discussed the lack of existing guidelines on EBFM and had questions about what authorities exist for implementing EBFM principles. Dr. Weeks noted that the original Magnuson-Stevens Fishery Conservation and Management Act (MSA) is largely silent regarding specific EBFM provisions, but the 1996 Sustainable Fisheries Act's provisions for identifying and protecting EFH are a good starting point. The group noted that (at the time) the MSA was due for reauthorization, but it was unclear when reauthorization would occur.

Dr. Punt asked if there was evidence that their EBFM approach had changed how the NPFMC makes its decisions. Dr. Dorn said that NPFMC plan and its annual report on the ecosystem influence management indirectly. The ecosystem information provided to the NPFMC is considered under the NPFMC's precautionary single species management regime. Dr. Weeks added that he served on the NPFMC staff for a while and felt the NPFMC approach doesn't necessarily alter their decision rules, but creates an ecosystem-based context within which their species-based management plans are implemented.

Dr. Punt noted that the NPFMC has identified ecosystem indicators and that a key difference in

ecosystem-based versus single-species management pertains to the difficulty of defining appropriate indicators for ecosystem impacts. Dr. Dorn reported that the NPFMC has begun the process of assessing ecosystem indicators and associated thresholds, but that these indicators and thresholds have no management actions associated with them directly. Concepts such as comparing the level of fishing mortality relative to predation on a particular species are evolving.

Dr. Wakefield said part of the NOAA funding for EBFM was applied to ecosystem pilot projects on the West Coast, including a small amount of money to begin developing an ecosystem GIS tool and database at the Pacific States Marine Fisheries Commission (PSMFC). Additionally, the Northwest Fisheries Science Center is working on a pilot project to map seafloor habitat types as part of the groundfish EFH process.

The group briefly discussed the use of indicators in EBFM. There is not necessarily a need for quantifiable indicators with specific numeric thresholds; rather, a qualitative system could be useful. Qualitative status ratings for ecosystem indicators, such as a "red/green/yellow light" mechanism, have proven useful in management. Dr. Punt noted that other programs have struggled with turning such an indicator system into management advice for use by decision makers, particularly when the indicators give a mixed signal (i.e. two greens and a red).

Presentation: "Ecosystem Based Fishery Management, Some Practical Suggestions"

In July 2006, PSMFC sponsored a panel discussion entitled *Strengthening Scientific Input and Ecosystem-Based Fishery Management for the Pacific and North Pacific Fishery Management Councils*. Panel participants included Ms. Recht, Dr. Punt, and Dr. Lawson, all of whom briefed the group on the discussions. Topics covered included developing a practical definition of an ecosystem-based approach to fisheries management, determining the characteristics or management elements of an ecosystem-based approach to fisheries management that can be further incorporated into fishery management programs of the Council and the NPFMC, and reviewing the role of science under EBFM approaches. The panel discussion led to a report as well as a paper presented by Dr. Lawson and Dr. Punt entitled *Ecosystem Based Fishery Management: Some Practical Suggestions.*

Group discussion focused on the development of a working definition of EBFM. The definition drafted by the July 2006 Panel (in box below) was agreed to be the best definition to date.

> "Ecosystem-based fishery management recognizes the physical, biological, economic and social interactions among the affected components of the ecosystem and attempts to manage fisheries to achieve a stipulated spectrum of societal goals, some of which may be in competition."

The group discussed societal goals such as harvest, existence value, ecotourism, and other types of tourism. These goals are not clearly defined or recognized under the current system, and fishery management regimes don't often consider existence values and non-extractive tourism benefits. Any broad spectrum of societal goals is likely to include goals that are mutually exclusive to some degree, and balancing these competing goals is a long-standing part of fishery policy decision making and will continue to be a central part of fishery management under an EBFM approach.

The group also discussed how EBFM approaches and the above definition would fit the existing mandates and provisions of the MSA. The group determined that nothing in the definition is outside

the realm of the current MSA framework.

Dr. Punt presented a Management Strategy Evaluation (MSE) modeling approach that can be used as a tool for comparing and contrasting alternate management approaches. The approach simulates fishery management and stock assessment systems under various management strategies and assumptions about uncertainty, and compares the outcomes to an established set of management goals. MSE has the potential for testing various management responses, such as harvest level increases or decreases, to changes in ecosystem indicators.

Dr. Punt also provided an overview of Atlantis, an ecosystem modeling tool. Atlantis is used extensively in Australia to form the basis for MSEs. The NWFSC is working on building an Atlantis model for the West Coast.

Both the Atlantis model and MSE approach have potential benefits to the further development of an EBFM approach in either the Council or NPFMC arenas. However, both tools will require considerable technical work to complete the modeling and then to evaluate alternative management strategies.

Current Council Actions Contributing to an Ecosystem Approach

The Habitat Committee completed and presented an initial review of existing Council actions and policies that contribute to an EBFM approach (see table in Appendix A). Although the table is a first draft, it highlights that the Council has already done a considerable amount of work that could be folded into an EBFM plan.

Next Steps, Tasks for Each Group, and Future Meeting Planning

The group agreed that this joint session was a useful first step in coordinating many ongoing efforts to help the Council address EBFM concepts, but more time will be needed to develop a comprehensive report and to complete the tasks discussed here. Due to time constraints the group did not draft a joint statement for the Council at the November 2006 meeting, but the HC will present some of the initial findings as well as a request for additional meeting time under the November 2006 Habitat Report to the Council.

ADJOURN

PFMC

03/23/07

Appendix A

Habitat Committee Summary of Current Council Actions Contributing to an Ecosystem Approach (and Possible Next Steps)
November 14, 2006 (DRAFT)

Topics	Current Council Actions	Potential Steps and/or Tools to Improve Fisheries Management/Move Towards an Ecosystem-Based Approach
Formalize Council intentions toward EBFM	• Joint HC/SSC EBMSC meeting • Questions regarding fishing regulations in NMS (CINMS)	• Establish ongoing committee to continue explore implementing EBFM
Establish EFH	• Groundfish EFH mapping & EIS • comprehensive assembly of groundfish life history info • Study fishing gear types and their environmental effects • Habitat suitability index – species assemblages	
Spatial management (Place-based management) / Habitat protection measures	• Bottom contact gear closures in areas of biogenic habitat • Gear restrictions; beam trawl, dredge gear • SSC Marine Reserves White paper	
Protect prey	• Krill ban • Low CPS harvest rates in recognition of roles as prey for other managed species	• Expand list of protected forage species
Weak stock protection measures	• Cowcod and RCA closures (effect benefits ecosystem) • Bycatch Reduction measures	
Coordination with place-based processes / programs	• Council consultations on nonfishing impacts in EFH (including comments to FERC and Klamath report) • Coordination between NMS and Council	• Foster coordination with state (and other federal) processes • Expand state MPAs into federal waters where appropriate

Topics	Current Council Actions	Potential Steps and/or Tools to Improve Fisheries Management/Move Towards an Ecosystem-Based Approach
Acknowledge climate, oceanic, terrestrial, life history factors specifically in management (tools; models)	• CPS FMP Temp elements • OPI coho forecast incorporates upwelling • Sablefish model incorporates ecosystem components (predation; forage; temperature)	• Ask NOAA's help in synthesizing available information relevant to California Current ecosystem and useful for management • Consider incorporating environmental or climatic/oceanographic factors into salmon forecasts • Expand use of freshwater, estuarine, juvenile survivals, pelagic age structures into models.
Ecosystem monitoring	• Research and data needs document describes data needed	• Track metrics: bird, mammal, and baitfish populations; socioeconomic trends; other ecosystem metrics/indicators in an Ecosystem SAFE document • More effective use / distribution to Research and Data Needs document to NMS and Academic communities • Partner with NMS to synthesize current monitoring information (incorporate ecosystem considerations chapter in rebuilding plans and Our Living Oceans document)
Stock assessments	•	Questions used in NPFMC to enhance SAFE document: • What are the ecosystem impacts on the stock you're assessing? (Oceanographic conditions, status of forage and predators). • What are the ecosystem effects of the fishery for the stock that you're assessing? (Impacts of mobile-tending bottom gear on habitat features, removal of prey and predator (impacts to food web), etc.)

Agenda Item C.5.b
Supplemental HC Report
April 2007

HABITAT COMMITTEE (HC) REPORT ON ECOSYSTEM FISHERY MANAGEMENT PLAN

The HC supports the ideas framed in the staff white paper, Agenda Item C.5.a, Attachment 1. As noted in Agenda Item C.5.a, Supplement Attachment 4, the Council has already taken multiple steps towards ecosystem-based fishery management (EBFM). The HC urges the Council to continue to move forward with EBFM by appointing a plan development committee or team. The HC believes such a team should encompass a broad range of ecological, social, and economic expertise. This could include representatives from other Council management teams and advisory subpanels (including the HC), academics, and other outside experts.

The HC believes such a team should be charged with identifying specific problems or issues the Council hopes to solve through EBFM, and placing those topics into an ecosystem context. This can become the Council's vision for launching the EBFM planning activity. A second step would be to identify and incorporate available information to further this process.

We urge the Council to set an ambitious schedule for the first phase of team activity. The team should meet this summer and provide its first status report to Council this fall.

The HC believes that EBFM provides a necessary tool to help the Council ensure that fisheries and fishing-dependent communities remain healthy and sustainable.

PFMC
04/03/07

GROUNDFISH ADVISORY SUBPANEL REPORT ON ECOSYSTEM FISHERY MANAGEMENT PLAN

The Groundfish Advisory Subpanel (GAP) supports the development of the Ecosystem Fishery Management Plan (EFMP) as a means by which the Pacific Council can integrate area management, marine protected areas and marine reserves under the authority of the Magnuson-Stevens Act. The GAP also recognizes that Marine Protected Areas are just one element of the EFMP, which is a broader way to implement the Council's move towards ecosystem-based fishery management as recommended by the newly reauthorized Magnuson-Stevens Fishery Conservation and Management Act (MSA).

The GAP expressed great trepidation over what ecosystem-based management might actually mean for the Council, and thus about the evolution of an Ecosystem Fishery Management Plan. The GAP does recognize that several actions taken by the Council are in line with ecosystem-based management, including protecting the food web (krill ban) and the precautionary approach taken in protecting habitat through the essential fish habitat process. In addition, the GAP is eager for essential fishery and ecosystem information, and recognizes the EFMP may be a useful vehicle for research into such critical issues as area-based total allowable catch (TAC) setting and better understanding what the most appropriate harvest level might be for forage fish given their importance in the food web.

Among other things, the EFMP could serve to:

I. Provide Essential Fishery Information: An EFMP can provide essential information for stock assessments and management decisions, such as:

- Predator – Prey relationships.
- Understanding the relationships between surface fish and bottom fish in deep water reserves.
- Oceanographic conditions.
- Monitoring and evaluation of existing reserves at the Channel Islands, for example.
- Marine Mammal issues.
- Monitoring and evaluation of de facto reserves like the Cowcod Conservation Area and Rockfish Conservation Area.
- Provide guidance for management decisions and stock assessments.
- Water quality and pollution.

II. Establish Council authority to regulate the water column for species not currently managed under Council FMPs: There needs to be a way that the Council can create marine protected areas if necessary. An EFMP can cut across all fishery management plans to do this. There is currently a dispute between the National Marine Sanctuaries (NMS) and MSA about whether Councils can create no-take reserves. The EFMP needs to encompass existing FMPs. Numerous proposals have been received by the Council from the NMS, under the guise of habitat protection, to close areas to fishing, and ultimately to gain the authority for the NMS to regulate fishing under their designation

documents. The GAP is not in favor of new reserves until we evaluate the effectiveness of existing reserves at the Channel Islands and MLPA-created marine protected areas in meeting their objectives and providing essential fishery information. The reserves we have now need to start functioning to serve fishery management decisions.

Recommendations:

1. The GAP recommends the formation of a Plan Team comprised of advisory panel members and technical staff. The GAP is concerned about the consequences of this Plan, and afraid that a model with so many variables as an EFMP could result in further constraints on fisheries. We do understand that oceanographic conditions play a key role in stock abundances, but we don't want to find ourselves in a situation where we are looking at the clouds to make management decisions. Before we proceed, there needs to be a review of past Council actions that move toward ecosystem-based management; for example: the ban on krill fishing.
2. Stakeholders should be involved from Day One in the EFMP.
3. We strongly feel that existing reserves and marine protected areas be used for research that improves fishery management decisions.
4. Request a report from the North Pacific Council about their ecosystem management plan and for staff to compile ecosystem-related documents relevant to the West Coast, for example, the CALCOFI "State of the California Current" ecosystem report.
5. The GAP is concerned about the cost associated with an EFMP. However, the NMS have funding for these goals and the Pacific States Marine Fisheries Commission can serve as a conduit for NMS and private funding that can create essential fishery information for stock assessments and management decisions.
6. Research priorities: area based TAC settings; appropriate harvest rates for forage fish.

PFMC
04/03/07

GROUNDFISH MANAGEMENT TEAM (GMT) REPORT ON ECOSYSTEM FISHERY MANAGEMENT PLAN

The GMT recognizes the value of a management tool that could more easily address issues that have repercussions across fishery management plans (FMPs), such as essential fish habitat issues, marine protected areas, and possibly trophic interactions (such as the krill fishery ban). An ecosystem FMP (E-FMP) or a fisheries ecosystem plan (FEP) are two possible vehicles for developing such a tool. There are also potential benefits in developing an ecosystem status and trends document, to inform the Council community of relevant changes in climate, ocean and ecosystem conditions. One potential template for such a document could be the "State of the California Current Ecosystem" report produced annually by the CalCOFI consortium. Such a report might benefit from a status review of federally and state managed fisheries (e.g., markets, participation, area management measures, conservation concerns) for which effort shifts and other interactions are commonplace.

An E-FMP or FEP could also provide a more integrated regulatory framework to address many of the spatial management issues that are increasingly necessary in the existing management regime. For example, the inseason action for groundfish adopted in March of this year created a rockfish conservation area (RCA) configuration that is substantially more complex than other recent spatial management measures. Tactically, this made sense as it allowed the Council to stay within optimum yields (OYs) for rebuilding species while providing modest economic opportunities to existing fisheries. However, the GMT has frequently recommended that a more strategic consideration of the cumulative consequences of spatial management measures be undertaken, and that efforts be made to develop information to support more refined area management approaches. The GMT also notes that the area-based management analysis proposed as part of the trawl individual quota (TIQ) process could prove valuable in moving this effort forward. An E-FMP could also provide a vehicle for greater evaluation of habitat and species distribution that might facilitate future spatially explicit management decisions, such as management strategy evaluation (MSE) (see Agenda Item C.5.a, Supplemental Attachment 4).

Another strategic issue could be that of ecosystem shifts and long term rebuilding targets. The current management regime is based on rebuilding targets that assume equilibrium resilience, in other words, that stocks can rebuild to levels near the B_{MSY} proxy within some extended period of time. Yet in the face of a highly dynamic ecosystem and potential cumulative effects of past fishing (including depletion and subsequent recovery of marine mammals, or cultivation/ depensation processes), such rebuilding targets could be unachievable. A review of such considerations (including the results of spatially explicit multispecies models) could inform the Council of appropriate management goals in the face of such challenges. More explicit consideration of predator-prey relationships among harvested species and across fishery management plans could inform the management process.

The Council staff white paper on this issue (Agenda Item C.5.a, Attachment 1) suggests that an exploratory plan development team comprised of members of existing FMP management teams to consider options that would complement, but not replace, existing FMPs. The GMT would recommend that this development team include representation from other advisory bodies as well. The GMT considers this approach to be reasonable in the near term. The GMT also

recommends that the Council consider types of ecosystem science information that would best inform current and future management. For example, one element of a gradual implementation of a more formal ecosystem management process could be to schedule presentations over a series of meetings that would serve to educate the Council community on the types of ecosystem information and analyses that would benefit ongoing management actions. This approach would be consistent with balancing current workload priorities while still moving towards an ecosystem approach to fisheries management.

GMT Recommendations

Provide guidance for the development of an exploratory plan development team comprised of members of existing advisory bodies to consider ecosystem management options that would complement, but not replace, existing FMPs.

Schedule presentations in future Council agendas to inform the Council community of ecosystem status and trends or other relevant ongoing research.

PFMC
04/03/07

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON ECOSYSTEM FISHERY MANAGEMENT PLAN

The Scientific and Statistical Committee (SSC) discussed the concept of ecosystem-based fishery management, and how it may move forward for Council-managed fisheries. A clear link between current fishery management practices and developing explicit ecosystem considerations is provided by the Magnuson-Stevens Fishery Conservation and Management Act definition of optimum yield that states: "optimum yield … takes into account the protection of marine ecosystems."

The SSC found the "Staff White Paper – Development of an Ecosystem Fishery Management Plan" to provide a useful framework for beginning the process of developing an Ecosystem Fishery Management Plan (EFMP). In particular, the SSC concurs that a Plan Development Team (Team) should be established for this purpose, as is proposed in the white paper. However, the white paper focuses primarily on the process and does not specify the rationale or specific elements that should be included in an EFMP. Since many of the fundamental issues have not been resolved concerning how ecosystem considerations could work in fishery management, the SSC suggests that the initial charge for the Team be to define the objectives of an EFMP, and how those objectives could be translated into policy.

The SSC notes that existing control rules for Council-managed species provide only limited ecosystem considerations. Consequently, it would be useful to have a summary of the degree to which these considerations are currently being addressed, and an explanation of how existing Council management practices may be inadequate in this regard.

Key issues that should be addressed at the outset of the EFMP process are to define the ecosystem(s) being managed, and to establish the scope of ecosystem impacts that would ideally be addressed under the proposed EFMP. Also, it is important early in the process to consider the data and scientific requirements for providing practical ecosystem advice to the Council.

PFMC
04/03/07

LEGISLATIVE MATTERS

The Legislative Committee (Committee) is scheduled to meet Monday, April 2 at 9:30 a.m. with a primary objective to review the *National Offshore Aquaculture Act of 2007*. The Committee will also review implementation of new provisions in the recently reauthorized Magnuson-Stevens Fishery Conservation and Management Act (MSA).

On March 12, 2007, U.S. Commerce Secretary Carlos M. Gutierrez (Secretary) announced that the National Oceanic and Atmospheric Administration's *National Offshore Aquaculture Act of 2007* (Agenda Item C.6.a, Attachment 1) had been sent to Congress. The bill proposes a Federal regulatory framework for fish and shellfish aquaculture within the U.S. Exclusive Economic Zone (3-200 miles offshore). The Pacific Fishery Management Council (Council) and the Committee had reviewed previous versions of the bill as introduced in the 109th Congress and recommended provisions in the bill to allow coastal states to opt-out of offshore aquaculture and to strengthen environmental review requirements. Included in the current Administration bill are provisions which require the Secretary to establish environmental requirements for offshore aquaculture activities and to allow coastal states to opt-out of offshore aquaculture within 12 miles of their coastline. Committee comments on the *National Offshore Aquaculture Act of 2007* will be provided in a report to the Council under this agenda item on Friday, April 6.

The Committee will also review the issues and reference materials associated with implantation of new requirements of the MSA (Agenda Item C.2). Committee recommendations to the Council regarding Council participation and input during the process of developing new policies and procedures for compliance with the newly reauthorized MSA will be provided under Agenda Item C.2 on Tuesday, April 3.

The Council is tasked with considering its Legislative Committee recommendations on these and other legislative matters and responding, as appropriate.

Council Action:

Consider recommendations of the Legislative Committee.

Reference Materials:

1. Situation Summary and Attachments for Council Agenda Item C.2, *Magnuson-Stevens Act Reauthorization Implementation.*
2. Agenda Item C.6.a, Attachment 1, The Administration's *National Offshore Aquaculture Act of 2007.*
3. Agenda Item C.6.a, Attachment 2, Section-by-Section Analysis of the Administration's *National Offshore Aquaculture Act of 2007.*
4. Agenda Item C.6.b, Supplemental Legislative Committee Report.

Agenda Order:

a. Agenda Item Overview — Mike Burner
b. Legislative Committee Report — Dave Hanson
c. Reports and Comments of Advisory Bodies
d. Public Comment
e. **Council Action:** Consider Recommendations of the Legislative Committee

PFMC
03/16/07

A BILL

To provide the necessary authority to the Secretary of Commerce for the establishment and implementation of a regulatory system for offshore aquaculture in the United States Exclusive Economic Zone, and for other purposes.

Be it enacted by the Senate and the House of Representatives of the United States of America in Congress assembled, That

SECTION 1. SHORT TITLE.

This Act may be cited as the "National Offshore Aquaculture Act of 2007".

SEC. 2. FINDINGS.

(a) It is the policy of the United States to:

(1) Support an offshore aquaculture industry that will produce food and other valuable products, protect wild stocks and the quality of marine ecosystems, and be compatible with other uses of the Exclusive Economic Zone;

(2) Encourage the development of environmentally responsible offshore aquaculture by authorizing offshore aquaculture operations and research;

(3) Establish a permitting process for offshore aquaculture that encourages private investment in aquaculture operations and research, provides opportunity for public comment, and addresses the potential risks to and impacts (including cumulative impacts) on marine ecosystems, human health and safety, other ocean uses, and coastal communities from offshore aquaculture;

(4) Promote, through public-private partnerships, research and development in marine aquaculture science, technology, and related social, economic, legal, and environmental management disciplines that will enable marine aquaculture operations to achieve operational objectives while protecting marine ecosystem quality.

(b) Offshore aquaculture activities within the Exclusive Economic Zone of the United States constitute activities with respect to which the United States has proclaimed sovereign rights and jurisdiction under Presidential Proclamation 5030 of March 10, 1983.

SEC. 3. DEFINITIONS.

As used in this Act –

(a) The term "coastal State" means a state of the United States in, or bordering on, the Atlantic, Pacific, or Arctic Ocean, the Gulf of Mexico, or Long Island Sound. The term also includes Puerto Rico, the Virgin Islands, Guam, the Commonwealth of the Northern Mariana Islands, the Trust Territories of the Pacific Islands, and American Samoa.

(b) The term "coastline" means the line of ordinary low water along that portion of the coast that is in direct contact with the open sea and the line marking the seaward limit of inland waters.

(c) The term "Exclusive Economic Zone" means, unless otherwise specified by the President in the public interest in a writing published in the *Federal Register*, a zone, the outer boundary of which is 200 nautical miles from the baseline from which the breadth of the territorial sea is measured, except as established by a maritime boundary treaty in force, or being provisionally applied by the United States or, in the absence of such a treaty where the distance between the United States and another nation is less than 400 nautical miles, a line equidistant between the United States and the other nation. Without affecting any Presidential Proclamation with regard to the establishment of the United States territorial sea or Exclusive Economic Zone, the inner boundary of that zone is

(1) a line coterminous with the seaward boundary of each of the several coastal States, as defined in 43 U.S.C. § 1312;

(2) a line three marine leagues from the coastline of the Commonwealth of Puerto Rico;

(3) a line three geographical miles from the coastlines of American Samoa, the United States Virgin Islands, and Guam;

(4) for the Commonwealth of the Northern Mariana Islands,

(A) its coastline, until such time as the Commonwealth of the Northern Mariana Islands is granted authority by the United States to regulate all fishing to a line seaward of its coastline, and

(B) upon the United States' grant of such authority, the line established by such grant of authority; and

(5) for any possession of the United States not referred to in subparagraph (2), (3), or (4), the coastline of such possession.

Nothing in this definition shall be construed as diminishing the authority of the Department of Defense, the Department of the Interior or any other federal department or agency.

(d) The term "lessee" means any party to a lease, right-of-use and easement, or right-of-way, or an approved assignment thereof, issued pursuant to the Outer Continental Shelf Lands Act, 43 U.S.C. § 1331 et seq.

(e) The term "marine species" means finfish, mollusks, crustaceans, marine algae, and all other forms of marine life, excluding marine mammals and birds.

(f) The term "offshore aquaculture" means all activities, including the operation of offshore aquaculture facilities, involved in the propagation and rearing, or attempted propagation and rearing, of marine species in the United States Exclusive Economic Zone.

(g) The term "offshore aquaculture facility" means: 1) an installation or structure used, in whole or in part, for offshore aquaculture; or 2) an area of the seabed or the subsoil used for offshore aquaculture of living organisms belonging to sedentary species.

(h) The term "offshore aquaculture permit" means an authorization issued under section 4(b) to raise specified marine species in a specific offshore aquaculture facility within a specified area of the Exclusive Economic Zone.

(i) The term "person" means any individual (whether or not a citizen or national of the United States), any corporation, partnership, association, or other non-governmental entity (whether or not organized or existing under the laws of any State), and State, local or tribal government or entity thereof, and, except as otherwise specified by the President in writing, the Federal Government or an entity thereof, and, to the extent specified by the President in writing, a foreign government or an entity thereof.

(j) The term "Secretary" means the Secretary of Commerce.

SEC. 4. OFFSHORE AQUACULTURE PERMITS.

(a) GENERAL

(1) The Secretary shall establish, through rulemaking, in consultation as appropriate with other relevant federal agencies, coastal States, and regional fishery management councils established under section 302 of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1852), a process to make areas of the Exclusive Economic Zone available to eligible persons for the development and operation of offshore aquaculture facilities, which shall include:

(A) Procedures and criteria necessary to issue and modify permits under this Act;

(B) Procedures to coordinate the offshore aquaculture permitting process, and related siting, operations, environmental protection, monitoring, enforcement, research, and economic and social activities, with similar activities administered by other federal agencies and coastal States;

(C) Consideration of the potential environmental, social, economic, and cultural impacts of offshore aquaculture and inclusion, where appropriate, of permit conditions to address negative impacts;

(D) Public notice and opportunity for public comment prior to issuance of offshore aquaculture permits;

(E) Procedures to monitor and evaluate compliance with the provisions of offshore aquaculture permits, including the collection of biological, chemical and physical oceanographic data, and social, production, and economic data; and

(F) Procedures for transferring permits from the original permit holder to a person meeting the eligibility criteria in section 4(b)(2)(A) and able to satisfy the requirements for bonds or other guarantees prescribed under section 4(c)(3).

(2) The Secretary shall prepare an analysis under the National Environmental Policy Act of 1969 (42 U.S.C. §§ 4321 et seq.) with respect to the process for issuing permits.

(3) The Secretary shall periodically review the procedures and criteria for issuance of offshore aquaculture permits and modify them as appropriate, in consultation as appropriate with other federal agencies, the coastal States, and regional fishery management councils, based on the best available science.

(4) The Secretary shall consult as appropriate with other federal agencies and coastal States to identify the environmental requirements that apply to offshore aquaculture

under existing laws and regulations. The Secretary shall establish through rulemaking, in consultation with appropriate federal agencies, coastal States, and regional fishery management councils established under section 302 of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1852), additional environmental requirements to address environmental risks and impacts associated with offshore aquaculture, to the extent necessary. The environmental requirements shall address, but are not limited to:

(A) risks to and impacts on natural fish stocks and fisheries, including safeguards needed to conserve genetic resources, to prevent or minimize the transmission of disease or parasites to wild stocks, and to prevent the escape of marine species that may cause significant environmental harm;

(B) risks to and impacts on marine ecosystems; biological, chemical and physical features of water quality and habitat; marine species, marine mammals and birds;

(C) cumulative effects of the aquaculture operation and other aquaculture operations in the vicinity of the proposed site;

(D) environmental monitoring, data archiving, and reporting by the permit holder;

(E) requirements that marine species propagated and reared through offshore aquaculture be species native to the geographic region unless a scientific risk analysis shows that the risk of harm to the marine environment from the offshore culture of non-indigenous or genetically modified marine species is negligible or can be effectively mitigated; and

(F) maintaining record systems to track inventory and movement of fish or other marine species in the offshore aquaculture facility or harvested from such facility, and, if

necessary, tagging, marking, or otherwise identifying fish or other marine species in the offshore aquaculture facility or harvested from such facility.

(5) The Secretary, in cooperation with other federal agencies, shall:

(A) Collect information needed to evaluate the suitability of sites for offshore aquaculture; and

(B) Monitor the effects of offshore aquaculture on marine ecosystems and implement such measures as may be necessary to protect the environment. Measures may include, but are not limited to, temporary or permanent relocation of offshore aquaculture sites, a moratorium on additional sites within a prescribed area, and other appropriate measures as determined by the Secretary.

(b) PERMITS – Subject to the provisions of subsection (e), the Secretary may issue offshore aquaculture permits under such terms and conditions as the Secretary shall prescribe. Permits issued under this Act authorize the permit holder to conduct offshore aquaculture consistent with the provisions of this Act, regulations issued under this Act, any specific terms, conditions and restrictions applied to the permit by the Secretary, and other applicable law.

(1) PROCEDURES FOR ISSUANCE OF PERMITS

(A) The applicant for an offshore aquaculture permit shall submit an application to the Secretary specifying the proposed location and type of operation, the marine species to be propagated or reared, or both, at the offshore aquaculture facility, and other design, construction, and operational information, as specified by regulation.

(B) Within 120 days after determining that a permit application is complete and has satisfied all applicable statutory and regulatory requirements, as specified by regulation, the Secretary shall issue or deny the permit. If the Secretary is unable to issue or

deny a permit within this time period, the Secretary shall provide written notice to the applicant indicating the reasons for the delay and establishing a reasonable timeline for issuing or denying the permit.

(2) PERMIT CONDITIONS

(A) An offshore aquaculture permit holder must (i) be a resident of the United States, (ii) be a corporation, partnership or other entity organized and existing under the laws of a State or the United States, or (iii) if neither (i) or (ii) applies, to the extent required by the Secretary by regulation after coordination with the Secretary of State, waive any immunity, and consent to the jurisdiction of the United States and its courts, for matters arising in relation to such permit, and appoint and maintain agents within the United States who are authorized to receive and respond to any legal process issued in the United States with respect to such permit holder.

(B) Subject to the provisions of subsection (e), the Secretary shall establish the terms, conditions, and restrictions that apply to offshore aquaculture permits, and shall specify in the permits the duration, size, and location of the offshore aquaculture facility.

(C) Except for projects involving pilot-scale testing or farm-scale research on aquaculture science and technologies and offshore aquaculture permits requiring concurrence of the Secretary of the Interior under subsection 4(e)(1), the permit shall have a duration of 20 years, renewable thereafter at the discretion of the Secretary in up to 20-year increments. The duration of permits requiring concurrence of the Secretary of the Interior under subsection 4(e)(1) shall be developed in consultation as appropriate with the Secretary of the Interior, except that any such permit shall expire no later than the date that the lessee, or the lessee's operator, submits to the Secretary of the Interior a final application for the

decommissioning and removal of an existing facility upon which an offshore aquaculture facility is located.

(D) At the expiration or termination of an offshore aquaculture permit for any reason, the permit holder shall remove all structures, gear, and other property from the site, and take other measures to restore the site as may be prescribed by the Secretary.

(E) Failure to begin offshore aquaculture operations within a reasonable period of time, or prolonged interruption of offshore aquaculture operations, may result in the revocation of the permit.

(3) If the Secretary determines that issuance of a permit is not in the national interest, the Secretary may decline to issue such a permit or may impose such conditions as necessary to address such concerns.

(c) FEES AND OTHER PAYMENTS

(1) The Secretary is authorized to establish, through regulations, application fees and annual permit fees. Such fees shall be deposited as offsetting collections in the Operations, Research, and Facilities (ORF) account. Fees may be collected and made available only to the extent provided in advance in appropriation Acts.

(2) The Secretary may reduce or waive applicable fees or other payments established under this section for facilities used primarily for research.

(3) The Secretary shall require the permit holder to post a bond or other form of financial guarantee, in an amount to be determined by the Secretary as sufficient to cover any unpaid fees, the cost of removing an offshore aquaculture facility at the expiration or termination of an offshore aquaculture permit, and other financial risks as identified by the Secretary.

(d) COMPATIBILITY WITH OTHER USES

(1) The Secretary shall consult as appropriate with other federal agencies, coastal States, and regional fishery management councils to ensure that offshore aquaculture for which a permit is issued under this section is compatible with the use of the Exclusive Economic Zone for navigation, fishing, resource protection, recreation, national defense (including military readiness), mineral exploration and development, and other activities.

(2) The Secretary shall not authorize permits for new offshore aquaculture facilities within 12 miles of the coastline of a coastal State if that coastal State has submitted a written notice to the Secretary that the coastal State opposes such activities. This provision will not apply to permit applications received by the Secretary prior to the date the notice is received from a coastal State. A coastal State that transmitted such notice to the Secretary under this paragraph may revoke that notice in writing at any time.

(3) Federal agencies implementing this Act, persons subject to this Act, and coastal States seeking to review permit applications under this Act shall comply with the applicable section of the Coastal Zone Management Act (i.e., 16 U.S.C. §§ 1456(c)(1), (c)(3)(A), (c)(3)(B) or (d)) and its corresponding federal regulations.

(4) Offshore aquaculture conducted in accordance with permits issued pursuant to this Act is excluded from the definition of "fishing" in the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1802(15)). The Secretary shall ensure, to the extent practicable, that offshore aquaculture does not interfere with conservation and management measures promulgated under the Magnuson-Stevens Fishery Conservation and Management Act.

(5) The Secretary may promulgate regulations that the Secretary finds to be reasonable and necessary to protect offshore aquaculture facilities, and, where appropriate, shall request that the Secretary of the department in which the Coast Guard is operating establish navigational safety zones around such facilities. In addition, in the case of any offshore aquaculture facility described in section 4(e)(1), the Secretary of the department in which the Coast Guard is operating shall consult with the Secretary of the Interior before designating such a zone.

(6) After consultation with the Secretary, the Secretary of State, and the Secretary of Defense, the Secretary of the department in which the Coast Guard is operating may designate a zone of appropriate size around and including any offshore aquaculture facility for the purpose of navigational safety. In such a zone, no installations, structures, or uses will be allowed that are incompatible with the operation of the offshore aquaculture facility. The Secretary of the department in which the Coast Guard is operating may define, by rulemaking, activities that are allowed within such a zone.

(7) (A) Subject to paragraph (B), if the Secretary, after consultation with federal agencies as appropriate and after affording the permit holder notice and an opportunity to be heard, determines that suspension, modification, or revocation of a permit is in the national interest, the Secretary may suspend, modify, or revoke such permit.

(B) If the Secretary determines that an emergency exists that poses a risk to the safety of humans, to the marine environment or marine species, or to the security of the United States and that requires suspension, modification, or revocation of a permit, the Secretary may suspend, modify, or revoke the permit for such time as the Secretary may determine necessary to meet the emergency. The Secretary shall afford the permit holder a prompt post-

suspension or post-modification opportunity to be heard regarding the suspension, modification, or revocation.

(8) Permits issued under this Act do not supersede or substitute for any other authorization required under applicable federal or State law or regulation.

(e) ACTIONS AFFECTING THE OUTER CONTINENTAL SHELF –

(1) The Secretary shall obtain the concurrence of the Secretary of the Interior on permits for offshore aquaculture facilities located:

(A) on leases, right-of-use and easements, or rights of way authorized or permitted under the Outer Continental Shelf Lands Act, as amended (43 U.S.C. §§ 1331, et seq.), or

(B) within 1 mile of any other facility permitted or for which a plan has been approved under the Outer Continental Shelf Lands Act.

(2) Offshore aquaculture may not be located on facilities subject to section 4(e)(1)(A) without the prior consent of the lessee, its designated operator, and owner of the facility.

(3) The Secretary of the Interior shall review and approve any agreement between a lessee, designated operator, and owner of a facility subject to this subsection and a prospective aquaculture operator to ensure that it is consistent with the federal lease terms, Department of the Interior regulations, and the Secretary of the Interior's role in the protection of the marine environment, property, or human life or health. An agreement under this subsection shall be part of the information reviewed pursuant to the Coastal Zone Management Act review process described in subsection 4(e)(4) and shall not be subject to a separate Coastal Zone Management Act review.

(4) Coordinated Coastal Zone Management Act review

(A) If the applicant for an offshore aquaculture facility that will utilize a facility subject to this subsection is required to submit to a coastal State a consistency certification for its aquaculture application under section 307(c)(3)(A) of the Coastal Zone Management Act (16 U.S.C. § 1456(c)(3)(A)), the coastal State's review under the Coastal Zone Management Act and corresponding federal regulations shall also include any modification to a lessee's approved plan or other document for which a consistency certification would otherwise be required under applicable federal regulations, including changes to its plan for decommissioning any facilities, resulting from or necessary for the issuance of the offshore aquaculture permit, provided that information related to such modifications or changes is received by the coastal State at the time the coastal State receives the offshore aquaculture permit applicant's consistency certification. In this case, lessees are not required to submit a separate consistency certification for any such modification or change under section 307(c)(3)(B) of the Coastal Zone Management Act (16 U.S.C. § 1456(c)(3)(B)) and the coastal State's concurrence or objection, or presumed concurrence, under section 307(c)(3)(A) of the Coastal Zone Management Act (16 U.S.C. § 1456(c)(3)(A)) in a consistency determination for the offshore aquaculture permit, shall apply to both the offshore aquaculture permit and to any related modifications or changes to a lessee's plan approved under the Outer Continental Shelf Lands Act.

(B) If a coastal State is not authorized by section 307(c)(3)(A) of the Coastal Zone Management Act (16 U.S.C. § 1456(c)(3)(A)) and corresponding federal regulations to review an offshore aquaculture application submitted under this Act, then any modifications or changes to a lessee's approved plan or other document requiring approval from

the Department of the Interior, shall be subject to coastal State review pursuant to the requirements of section 307(c)(3)(B) of the Coastal Zone Management Act (16 U.S.C. § 1456(c)(3)(B)), if a consistency certification for those modifications or changes is required under applicable federal regulations.

(5) For offshore aquaculture located on facilities subject to this subsection, the aquaculture permit holder and all parties that are or were lessees of the lease on which the facilities are located during the term of the offshore aquaculture permit shall be jointly and severally liable for the removal of any construction or modifications related to aquaculture operations if the aquaculture permit holder fails to do so and bonds established under this Act for aquaculture operations prove insufficient to cover those obligations. This subsection does not affect obligations to decommission facilities under the Outer Continental Shelf Lands Act.

(6) For aquaculture projects or operations subject to this subsection, the Secretary of the Interior is authorized to:

(A) Promulgate such rules and regulations as are necessary and appropriate to carry out the provisions of this subsection;

(B) Require and enforce such additional terms or conditions as the Secretary of the Interior deems necessary to protect the marine environment, property, or human life or health to ensure the compatibility of aquaculture operations with all activities for which permits have been issued under the Outer Continental Shelf Lands Act;

(C) Issue orders to the offshore aquaculture permit holder to take any action the Secretary of the Interior deems necessary to ensure safe operations on the facility to protect the marine environment, property, or human life or health. Failure to comply with the

Secretary of the Interior's orders will be deemed to constitute a violation of the Outer Continental Shelf Lands Act; and

(D) Enforce all requirements contained in such regulations, lease terms and conditions and orders pursuant to the Outer Continental Shelf Lands Act.

SEC. 5. RESEARCH AND DEVELOPMENT.

(a) In consultation as appropriate with other federal agencies, the Secretary may establish and conduct an integrated, multidisciplinary, scientific research and development program to further marine aquaculture technologies that are compatible with the protection of marine ecosystems.

(b) The Secretary is authorized to conduct research and development in partnership with offshore aquaculture permit holders.

(c) The Secretary, in collaboration with the Secretary of Agriculture, shall conduct research to reduce the use of wild fish in aquaculture feeds, including but not limited to the substitution of seafood processing wastes, cultured marine algae and microbial sources of nutrients important for human health and nutrition, agricultural crops, and other products.

SEC. 6. ADMINISTRATION.

(a) The Secretary shall promulgate such regulations as are necessary and appropriate to carry out the provisions of this Act. The Secretary may at any time amend such regulations, and such regulations shall, as of their effective date, apply to all operations conducted pursuant to permits issued under the provisions of this Act, regardless of the date of the issuance of such permit.

(b) The Secretary shall have the authority to enter into and perform such contracts, leases, grants, or cooperative agreements as may be necessary to carry out the purposes of this Act and

on such terms as the Administrator of the National Oceanic and Atmospheric Administration deems appropriate.

(c) For purposes related to the enforcement of this Act, the Secretary is authorized to use, with their consent and with or without reimbursement, the land, services, equipment, personnel, and facilities of any department, agency or instrumentality of the United States, or of any state, local government, Indian tribal government, Territory or possession, or of any political subdivision thereof, or of any foreign government or international organization.

(d) Authority to Utilize Grant Funds

(1) Except as provided in paragraph (2), the Secretary is authorized to apply for, accept, and obligate research grant funding from any federal source operating competitive grant programs where such funding furthers the purpose of this Act.

(2) The Secretary may not apply for, accept, or obligate any grant funding under paragraph (1) for which the granting agency lacks authority to grant funds to federal agencies, or for any purpose or subject to conditions that are prohibited by law or regulation.

(3) Appropriated funds may be used to satisfy a requirement to match grant funds with recipient agency funds, except that no grant may be accepted that requires a commitment in advance of appropriations.

(4) Funds received from grants shall be deposited in the National Oceanic and Atmospheric Administration account that serves to accomplish the purpose for which the grant was awarded.

(e) Nothing in this Act shall be construed to displace, supersede, or limit the jurisdiction, responsibilities or rights of any federal or State agency, or Indian Tribe or Alaska Native organization, under any federal law or treaty.

(f) The Constitution, laws, and treaties of the United States shall apply to an offshore aquaculture facility located in the Exclusive Economic Zone for which a permit has been issued or is required under this Act and to activities in the Exclusive Economic Zone connected, associated, or potentially interfering with the use or operation of such facility, in the same manner as if such facility were an area of exclusive federal jurisdiction located within a State. Nothing in this Act shall be construed to relieve, exempt, or immunize any person from any other requirement imposed by an applicable federal law, regulation, or treaty. Nothing in this Act shall be construed to confer citizenship to a person by birth or through naturalization or to entitle a person to avail himself of any law pertaining to immigration, naturalization, or nationality.

(g) The law of the nearest adjacent coastal State, now in effect or hereafter adopted, amended, or repealed, is declared to be the law of the United States, and shall apply to any offshore aquaculture facility for which a permit has been issued pursuant to this Act, to the extent applicable and not inconsistent with any provision or regulation under this Act or other federal laws and regulations now in effect or hereafter adopted, amended, or repealed. All such applicable laws shall be administered and enforced by the appropriate officers and courts of the United States. For purposes of this subsection, the nearest adjacent coastal State shall be that State whose seaward boundaries, if extended beyond 3 nautical miles, would encompass the site of the offshore aquaculture facility. State taxation laws shall not apply to offshore aquaculture facilities in the Exclusive Economic Zone.

SEC. 7. AUTHORIZATION OF APPROPRIATIONS.

There are authorized to be appropriated to the Secretary $4,052,000 in fiscal year 2008 and thereafter such sums as may be necessary for purposes of carrying out the provisions of this Act.

SEC. 8. UNLAWFUL ACTIVITIES.

It is unlawful for any person -

(a) to falsify any information required to be reported, communicated, or recorded pursuant to this Act or any regulation or permit issued under this Act, or to fail to submit in a timely fashion any required information, or to fail to report to the Secretary immediately any change in circumstances that has the effect of rendering any such information false, incomplete, or misleading;

(b) to engage in offshore aquaculture within the Exclusive Economic Zone of the United States or operate an offshore aquaculture facility within the Exclusive Economic Zone of the United States, except pursuant to a valid permit issued under this Act;

(c) to refuse to permit an authorized officer to conduct any lawful search or lawful inspection in connection with the enforcement of this Act or any regulation or permit issued under this Act;

(d) to forcibly assault, resist, oppose, impede, intimidate, or interfere with an authorized officer in the conduct of any search or inspection in connection with the enforcement of this Act or any regulation or permit issued under this Act;

(e) to resist a lawful arrest or detention for any act prohibited by this section;

(f) to interfere with, delay, or prevent, by any means, the apprehension, arrest, or detection of another person, knowing that such person has committed any act prohibited by this section;

(g) to import, export, sell, receive, acquire or purchase in interstate or foreign commerce any marine species in violation of this Act or any regulation or permit issued under this Act;

(h) upon the expiration or termination of any aquaculture permit for any reason, fail to remove all structures, gear, and other property from the site, or take other measures, as prescribed by the Secretary, to restore the site;

(i) to violate any provision of this Act, any regulation promulgated under this Act, or any term or condition of any permit issued under this Act; or

(j) to attempt to commit any act described in subsections (a), (b), (g), (h) or (i).

SEC. 9. ENFORCEMENT PROVISIONS.

(a) DUTIES OF SECRETARIES – Subject to sections 4(e)(6)(B) and (D), this Act shall be enforced by the Secretary and the Secretary of the department in which the Coast Guard is operating.

(b) POWERS OF ENFORCEMENT

(1) Any officer who is authorized pursuant to subsection (a) of this section by the Secretary or the Secretary of the department in which the Coast Guard is operating to enforce the provisions of this Act may -

(A) with or without a warrant or other process -

(i) arrest any person, if the officer has reasonable cause to believe that such person has committed or is committing an act prohibited by section 8 of this Act;

(ii) search or inspect any offshore aquaculture facility and any related land-based facility;

(iii) seize any offshore aquaculture facility (together with its equipment, records, furniture, appurtenances, stores, and cargo), and any vessel or vehicle, used or employed in aid of, or with respect to which it reasonably appears that such offshore

aquaculture facility was used or employed in aid of, the violation of any provision of this Act or any regulation or permit issued under this Act;

(iv) seize any marine species (wherever found) retained, in any manner, in connection with or as a result of the commission of any act prohibited by section 8 of this Act;

(v) seize any evidence related to any violation of any provision of this Act or any regulation or permit issued under this Act;

(B) execute any warrant or other process issued by any court of competent jurisdiction; and

(C) exercise any other lawful authority.

(2) Any officer who is authorized pursuant to subsection (a) of this section by the Secretary or the Secretary of the department in which the Coast Guard is operating to enforce the provisions of this Act may make an arrest without a warrant for (i) an offense against the United States committed in his presence, or (ii) for a felony cognizable under the laws of the United States, if he has reasonable grounds to believe that the person to be arrested has committed or is committing a felony. Any such authorized person may execute and serve a subpoena, arrest warrant or search warrant issued in accordance with Rule 41 of the Federal Rules of Criminal Procedure, or other warrant of civil or criminal process issued by any officer or court of competent jurisdiction for enforcement of the Act, or any regulation or permit issued under this Act.

(c) ISSUANCE OF CITATIONS – If any authorized officer finds that a person is engaging in or has engaged in offshore aquaculture in violation of any provision of this Act, such officer may issue a citation to that person.

(d) LIABILITY FOR COSTS – Any person who violates this Act, or a regulation or permit issued under this Act, shall be liable for the cost incurred in storage, care, and maintenance of any marine species or other property seized in connection with the violation.

SEC. 10. CIVIL ENFORCEMENT AND PERMIT SANCTIONS.

(a) CIVIL ADMINISTRATIVE PENALTIES

(1) Any person who is found by the Secretary, after notice and opportunity for a hearing in accordance with section 554 of Title 5, United States Code, to have violated this Act, or a regulation or permit issued under this Act, shall be liable to the United States for a civil penalty. The amount of the civil penalty under this paragraph shall not exceed $200,000 for each violation. Each day of a continuing violation shall constitute a separate violation.

(2) Compromise or Other Action by the Secretary -- The Secretary may compromise, modify, or remit, with or without conditions, any civil administrative penalty which is or may be imposed under this section and that has not been referred to the Attorney General for further enforcement action.

(b) CIVIL JUDICIAL PENALTIES – Any person who violates any provision of this Act, or any regulation or permit issued thereunder, shall be subject to a civil penalty not to exceed $250,000 for each such violation. Each day of a continuing violation shall constitute a separate violation. The Attorney General, upon the request of the Secretary, may commence a civil action in an appropriate district court of the United States, and such court shall have jurisdiction to award civil penalties and such other relief as justice may require. In determining the amount of a civil penalty, the court shall take into account the nature, circumstances, extent, and gravity of the prohibited acts committed and, with respect to the violator, the degree of culpability, any history of prior violations and such other matters as justice may require. In imposing such

penalty, the district court may also consider information related to the ability of the violator to pay.

(c) PERMIT SANCTIONS

(1) In any case in which -

(A) an offshore aquaculture facility has been used in the commission of an act prohibited under section 8 of this Act;

(B) the owner or operator of an offshore aquaculture facility or any other person who has been issued or has applied for a permit under section 4 of this Act has acted in violation of section 8 of this Act; or

(C) any amount in settlement of a civil forfeiture imposed on an offshore aquaculture facility or other property, or any civil penalty or criminal fine imposed under this Act or imposed on any other person who has been issued or has applied for a permit under any fishery resource statute enforced by the Secretary, has not been paid and is overdue, the Secretary may -

(i) revoke any permit issued with respect to such offshore aquaculture facility or applied for by such a person under this Act, with or without prejudice to the issuance of subsequent permits;

(ii) suspend such permit for a period of time considered by the Secretary to be appropriate;

(iii) deny such permit; or

(iv) impose additional conditions and restrictions on such permit.

(2) In imposing a sanction under this subsection, the Secretary shall take into account -

(A) the nature, circumstances, extent, and gravity of the prohibited acts for which the sanction is imposed; and

(B) with respect to the violator, the degree of culpability, any history of prior violations, and such other matters as justice may require.

(3) Transfer of ownership of an offshore aquaculture facility, by sale or otherwise, shall not extinguish any permit sanction that is in effect or is pending at the time of transfer of ownership. Before executing the transfer of ownership of an offshore aquaculture facility, by sale or otherwise, the owner shall disclose in writing to the prospective transferee the existence of any permit sanction that will be in effect or pending with respect to the offshore aquaculture facility at the time of the transfer. The Secretary may waive or compromise a sanction in the case of a transfer pursuant to court order.

(4) In the case of any permit that is suspended under this subsection for nonpayment of a civil penalty or criminal fine, the Secretary shall reinstate the permit upon payment of the penalty or fine and interest thereon at the prevailing rate.

(5) No sanctions shall be imposed under this subsection unless there has been prior opportunity for a hearing on the facts underlying the violation for which the sanction is imposed, either in conjunction with a civil penalty proceeding under this section or otherwise.

(d) INJUNCTIVE RELIEF -- Upon the request of the Secretary, the Attorney General of the United States is authorized to commence a civil action for appropriate relief, including a permanent or temporary injunction, for any violation of any provision of this Act, or regulation or permit issued under this Act.

(e) HEARING – For the purposes of conducting any investigation or hearing under this section or any other statute administered by the National Oceanic and Atmospheric

Administration which is determined on the record in accordance with the procedures provided for under section 554 of Title 5, the Secretary may issue subpoenas for the attendance and testimony of witnesses and the production of relevant papers, books, and documents, and may administer oaths. Witnesses summoned shall be paid the same fees and mileage that are paid to witnesses in the courts of the United States. In case of contempt or refusal to obey a subpoena served upon any person pursuant to this subsection, the district court of the United States for any district in which such person is found, resides, or transacts business, upon application by the United States and after notice to such person, shall have jurisdiction to issue an order requiring such person to appear and give testimony before the Secretary or to appear and produce documents before the Secretary, or both, and any failure to obey such order of the court may be punished by such court as a contempt thereof. Nothing in this Act shall be construed to grant jurisdiction to a district court to entertain an application for an order to enforce a subpoena issued by the Secretary of Commerce to the Federal Government or any entity thereof.

(f) JURISDICTION – The United States district courts shall have original jurisdiction of any action under this section arising out of or in connection with the construction or operation of aquaculture facilities, and proceedings with respect to any such action may be instituted in the judicial district in which any defendant resides or may be found, or in the judicial district of the adjacent coastal State nearest the place where the cause of action arose. For the purpose of this section, American Samoa shall be included within the judicial district of the District Court of the United States for the District of Hawaii. Each violation shall be a separate offense and the offense shall be deemed to have been committed not only in the district where the violation first occurred, but also in any other district as authorized by law.

(g) COLLECTION – If any person fails to pay an assessment of a civil penalty after it has become a final and unappealable order, or after the appropriate court has entered final judgment in favor of the Secretary, the matter may be referred to the Attorney General, who may recover the amount (plus interest at currently prevailing rates from the date of the final order). In such action the validity, amount and appropriateness of the final order imposing the civil penalty shall not be subject to review. Any person who fails to pay, on a timely basis, the amount of an assessment of a civil penalty shall be required to pay, in addition to such amount and interest, attorney's fees and costs for collection proceedings and a quarterly nonpayment penalty for each quarter during which such failure to pay persists. Such nonpayment penalty shall be in an amount equal to 20 percent of the aggregate amount of such person's penalties and nonpayment penalties which are unpaid as of the beginning of such quarter.

(h) NATIONWIDE SERVICE OF PROCESS – In any action by the United States under this title, process may be served in any district where the defendant is found, resides, transacts business or has appointed an agent for the service of process, and for civil cases may also be served in a place not within the United States in accordance with Rule 4 of the Federal Rules of Civil Procedure.

SEC. 11. CRIMINAL OFFENSES.

(a) Any person (other than a foreign government or any entity of such government) who knowingly commits an act prohibited by subsections 8(c), (d), (e), or (f) of the Act, shall be imprisoned for not more than five years or shall be fined not more than $500,000 for individuals or $1,000,000 for an organization, or both; except that if in the commission of any such offense the individual uses a dangerous weapon, engages in conduct that causes bodily injury to any

officer authorized to enforce the provisions of this title, or places any such officer in fear of imminent bodily injury, the maximum term of imprisonment is not more than ten years.

(b) Any person (other than a foreign government or any entity of such government) who knowingly violates any other provision of section 8, except subsections 8(c), (d), (e) or (f), of the Act, or any provision of any regulation promulgated pursuant to this title or any permit issued under this title, shall be imprisoned for not more than five years, or shall be fined not more than $500,000 for an individual or $1,000,000 for an organization, or both.

(c) The United States district courts shall have original jurisdiction of any action arising under this section out of or in connection with the construction or operation of aquaculture facilities, and proceedings with respect to any such action may be instituted in the judicial district in which any defendant resides or may be found. For the purpose of this section, American Samoa shall be included within the judicial district of the District Court of the United States for the District of Hawaii. Each violation shall be a separate offense and the offense shall be deemed to have been committed not only in the district where the violation first occurred, but also in any other district as authorized under law.

SEC. 12. FORFEITURES

(a) CRIMINAL FORFEITURE – A person who is convicted of an offense in violation of section 11 of this Act shall forfeit to the United States –

(1) any property, real or personal, constituting or traceable to the gross proceeds obtained, or retained, as a result of the offense including, without limitation, any marine species (or the fair market value thereof) taken or retained in connection with or as a result of the offense; and

(2) any property, real or personal, used or intended to be used to commit or to facilitate the commission of the offense, including, without limitation, any offshore aquaculture facility or vessel, including its structure, equipment, furniture, appurtenances, stores, and cargo, and any vehicle or aircraft.

Pursuant to Title 28, United States Code, Section 2461(c), the provisions of section 413 of the Controlled Substances Act (21 U.S.C. § 853) with the exception of subsection (d) of that section, shall apply to criminal forfeitures under this section.

(b) CIVIL FORFEITURE – The following shall be subject to forfeiture to the United States and no property right shall exist in them:

(1) any property, real or personal, constituting or traceable to the gross proceeds obtained, or retained, as a result of a violation of any provision of section 8 or subsection 4(b)(2)(D) of this Act, including, without limitation, any marine species (or the fair market value thereof) taken or retained in connection with or as a result of the violation; and

(2) any property, real or personal, used or intended to be used to commit or to facilitate the commission of any such violation, including, without limitation, any offshore aquaculture facility or vessel, including its structure, equipment, furniture, appurtenances, stores, and cargo, and any vehicle or aircraft.

Civil forfeitures under this section shall be governed by the procedures set forth in Title 18, United States Code, Chapter 46.

(c) REBUTTABLE PRESUMPTION – In any criminal or civil forfeiture proceeding under this section, there is a rebuttable presumption that all marine species found within an offshore aquaculture facility and seized in connection with a violation of section 8 of this Act were taken or retained in violation of this Act.

SEC. 13 – SEVERABILITY AND JUDICIAL REVIEW.

(a) SEVERABILITY – If any provision of this chapter or the application thereof to any person or circumstances is held invalid, the validity of the remainder of this chapter and of the application of such provision to other persons and circumstances shall not be affected thereby.

(b) JUDICIAL REVIEW –

(1) IN GENERAL – Judicial review of any action taken by the Secretary under this chapter shall be in accordance with sections 701 through 706 of Title 5, except that –

(A) review of any final agency action of the Secretary taken pursuant to section 11(a) or (c) of this title may be had only by the filing of a complaint by an interested person in the United States District Court for the appropriate district; any such complaint must be filed within 30 days of the date such final agency action is taken; and

(B) review of all other final agency actions of the Secretary under this chapter may be had only by the filing of a petition for review by an interested person in the Circuit Court of Appeals of the United States for the federal judicial district in which such person resides or transacts business which is directly affected by the action taken; such petition shall be filed within 120 days from the date such final action is taken.

(2) LIMITATION OF JUDICIAL REVIEW – Final agency action with respect to which review could have been obtained under paragraph (1)(B) of this subsection shall not be subject to judicial review in any civil or criminal proceeding for enforcement.

(3) AWARDS OF LITIGATION COSTS – In any judicial proceeding under paragraph (1) of this subsection, the court may award costs of litigation (including reasonable attorney and expert witness fees) to any prevailing party whenever it determines that such award is appropriate.

SECTION-BY-SECTION ANALYSIS

National Offshore Aquaculture Act of 2007

BACKGROUND

An earlier version of this bill, the National Offshore Aquaculture Act of 2005, was transmitted to the 109th Congress as part of the Administration's U.S. Ocean Action Plan. The bill was introduced by Senators Ted Stevens and Daniel K. Inouye in June 2005 as S. 1195, and the Ocean Policy Study Subcommittee of the Senate Committee on Commerce, Science and Transportation held two hearings on the bill in 2006. Although the 109th Congress did not complete action on S. 1195, national offshore aquaculture legislation remains a high priority for the Administration.

The National Offshore Aquaculture Act of 2007, a revised version of S. 1195:

- Strengthens the environmental provisions
- Clarifies the role for fishery management councils and coastal States
- Substitutes a single offshore aquaculture permit for separate site and operating permits
- Extends the duration of offshore aquaculture permits to 20 years rather than 10 years.

SUMMARY

The overall purpose of this Act is to provide the necessary authorities to the Secretary of Commerce to establish and implement a regulatory system for offshore aquaculture in the U.S. Exclusive Economic Zone (EEZ). Specifically, the Act:

- Authorizes the Secretary of Commerce to issue offshore aquaculture permits
- Requires the Secretary to establish environmental requirements
- Excludes permitted offshore aquaculture from the definition of "fishing" under the Magnuson-Stevens Fishery Conservation and Management Act
- Authorizes the establishment of a research and development program in support of marine aquaculture
- Requires the Secretary of Commerce to work with other federal agencies to develop and implement a coordinated permitting process for aquaculture in the EEZ
- Authorizes appropriations of $4,052,000 in fiscal year 2008 and thereafter for "such sums as may be necessary" to carry out this Act
- Provides for enforcement of the Act.

While the Act provides the Secretary of Commerce with the authority to permit and oversee offshore aquaculture, it also preserves the existing authorities of other federal agencies, States, Indian tribes and Alaska Native organizations, and requires concurrence from the Secretary of the Interior for aquaculture located on leases, right-of-use or easements, or rights of way authorized or permitted under the Outer Continental Shelf Lands Act (OCSLA), or within 1 mile of any facility permitted or for which a plan has been approved under OCSLA.

Implementation of this Act will provide the foundation for the development of an offshore aquaculture industry in the United States:

- It provides for the establishment of an efficient regulatory process.
- It provides for a research program specifically dedicated to the development of environmentally responsible marine aquaculture technologies.

SECTION 1. SHORT TITLE.
Section 1 designates this Act as the "National Offshore Aquaculture Act of 2007."

SECTION 2. FINDINGS.
Section 2(a) proclaims that it is the policy of the United States to support an offshore aquaculture industry compatible with marine ecosystems and other uses of the EEZ, encourage the development of responsible marine aquaculture in the EEZ, establish a permitting process for aquaculture in the EEZ that provides opportunity for public comment and addresses potential risks and impacts, and promote research and development in marine aquaculture. Section 2(b) states that offshore aquaculture is an activity with respect to which the United States proclaimed sovereign rights and jurisdiction under Presidential Proclamation 5030 of March 10, 1983.

The National Aquaculture Act of 1980 declared aquaculture development to be in the national interest, and required federal agencies to address barriers to such development. Both the Department of Commerce (in 1999) and, within the Department, the National Oceanic and Atmospheric Administration (NOAA) (in 1998) have endorsed aquaculture policies in support of the National Aquaculture Act, but additional statutory authority is needed to establish an enabling regulatory environment for aquaculture in the EEZ. This Act would authorize the Secretary of Commerce to establish and implement a permitting system, in consultation with other federal agencies, coastal States, and fishery management councils, to create such an environment. Transmittal of this legislation to Congress continues the Administration's commitment in the U.S. Ocean Action Plan and responds to the recommendations of the U.S. Commission on Ocean Policy.

SECTION 3. DEFINITIONS.
Section 3 defines key terms used in the Act. "Exclusive Economic Zone" is the area extending from the seaward boundary of states and territories out to 200 nautical miles from the baseline. The geographic extent of this area is consistent with the Exclusive Economic Zone as defined under the Administration's 2005 bill to reauthorize the Magnuson-Stevens Fishery Conservation and Management Act. "Offshore aquaculture" means all activities involved in the propagation and rearing (or attempted propagation and rearing) of marine species in the EEZ (i.e., beyond State or Territory jurisdiction). "Secretary" means the Secretary of Commerce.

Other terms defined include "coastal State", "coastline", "lessee", "marine species", "offshore aquaculture facility", "offshore aquaculture permit", and "person". "Offshore aquaculture facility" includes areas of the sea-bed or subsoil used for growing sedentary species, in addition to installations and structures located in the water column or on the surface. "Marine species" excludes birds and mammals. "Person" includes non-U.S. individuals and corporations. "Coastal State" includes U.S. Territories and possessions.

SECTION 4. OFFSHORE AQUACULTURE PERMITS.

This section provides the basis for a new federal regulatory system for offshore aquaculture:

- Section 4(a) requires the Secretary of Commerce to establish a process to allow use of the EEZ for offshore aquaculture and specifies certain elements that need to be addressed in that process, including environmental impacts.
- Section 4(b) authorizes the Secretary to issue offshore aquaculture permits and provides details on permit applications, terms and conditions, etc.
- Section 4(c) authorizes the Secretary of Commerce to collect and use fees and requires the posting of bonds or other financial guarantees.
- Section 4(d) includes provisions to ensure compatibility of offshore aquaculture with other uses, and includes roles for coastal States and fishery management councils.
- Section 4(e) requires concurrence by the Secretary of the Interior with respect to offshore aquaculture located on or near facilities managed by the Department of the Interior under the Outer Continental Shelf Lands Act and authorizes the Secretary of the Interior to impose requirements and issue and enforce regulations for these facilities.

This section outlines the specific authorities granted to the Secretary of Commerce and to the Secretary of the Interior, and establishes specific requirements that must be met in implementing this new regulatory system. Many of the details of this system will be developed through rulemaking following enactment of this legislation. The rulemaking process, which will include stakeholder input, will provide a more appropriate forum for such fine-tuning adjustments than can be accommodated in legislation. The statutory language provides sufficient authority and flexibility to address the full range of anticipated issues through the rulemaking process, and also makes plain that permits issued under the Act do not supersede or substitute for any other required authorizations under other applicable federal or State law.

Coordination with other federal agencies, coastal States, and fishery management councils is an important element of the regulatory system established in this Act. Specific agencies are not listed so as to not inadvertently preclude coordination with an agency not listed, and to avoid the need to amend this Act in response to future reorganizations or new or amended statutes governing other agencies. One exception is the inclusion of specific provisions, in section 4(e), relating to the Secretary of the Interior's responsibilities under the OCSLA. These provisions are necessary to clarify the role of the Secretary of the Interior with respect to any offshore aquaculture occurring on or near facilities permitted under the OCSLA.

The Act establishes specific offshore aquaculture permitting authority for the Department of Commerce and makes the Secretary of Commerce responsible for coordinating offshore aquaculture permitting activities. This will not preempt the authority of other federal agencies.

Section 4(a) – General.

Section 4(a) provisions apply to the overall permitting system authorized in the Act.

Overall process – Section 4(a)(1) requires that the Secretary of Commerce develop, through rulemaking, in consultation with other federal agencies, coastal States, and fishery management councils, the process for making areas of the EEZ available for development and operation of offshore aquaculture. The process must include necessary procedures and criteria for issuing and

modifying permits, coordinating the permitting process with other federal agencies and coastal States, facilitating the monitoring and evaluation of compliance with permits (including the collection of biological, chemical, and physical oceanographic data as well as social, production, and economic data), and transferring permits from the original permit holder to another person meeting the eligibility requirements and able to satisfy the requirements for bonds or other guarantees. The process must also consider the impacts of offshore aquaculture and appropriate conditions to address negative impacts.

These provisions require that the permit process include opportunities for the public to comment prior to the issuance of offshore aquaculture permits under this Act.

Section 4(a)(2) requires the Secretary to prepare an analysis under the National Environmental Policy Act (NEPA) with respect to the process for issuing offshore aquaculture permits. NOAA applies NEPA in the EEZ as a matter of policy (NOAA Administrative Order 216-6).

Periodic Review of Procedures and Criteria – Section 4(a)(3) requires the Secretary to periodically review and modify the procedures and criteria for issuing offshore aquaculture permits, as appropriate. This must be done in consultation with other federal agencies, coastal States, and fishery management councils, and must be based on the best available science.

Environmental Requirements – Section 4(a)(4) provides for the establishment of environmental requirements. These provisions are important not only to environmental nongovernmental organizations (NGOs) and other stakeholders concerned about the potential negative impacts of offshore aquaculture, but also to the aquaculture industry, since these requirements will establish expectations for the offshore aquaculture operations and provide a scientific basis for measuring compliance.

Section 4(a)(4) requires the Secretary to consult as appropriate with other federal agencies and coastal States to identify environmental requirements that apply to offshore aquaculture under existing laws. Multiple federal agencies have regulatory authority over aspects of offshore aquaculture operations in the EEZ, and their roles and the extent of their authorities will need to be clarified as part of the implementation of this Act. The U.S. Army Corps of Engineers (Corps) has been the *de facto* lead federal permitting agency for aquaculture in state waters by virtue of its authority under the Rivers and Harbors Act of 1899 to require a section 10 permit certifying that any structures will not interfere with navigation. District Corps offices have coordinated interagency reviews and prepared environmental assessments, with NOAA, the Environmental Protection Agency (EPA), and other federal agency participation.

After the existing environmental requirements that apply to offshore aquaculture are documented, the Secretary of Commerce is required to consult with appropriate federal agencies, coastal States and regional fishery management councils and establish through rulemaking additional environmental requirements to address environmental risks and impacts associated with offshore aquaculture, to the extent necessary. The environmental requirements must address risks to and impacts on natural fish stocks and marine ecosystems; cumulative effects; environmental monitoring, data archiving, and reporting by permit holders; risk-based

restrictions on species raised in offshore aquaculture; and mechanisms for tracking inventory and movement of fish or other marine species in offshore aquaculture facilities.

This provision preserves the roles and responsibilities of other federal agencies in establishing environmental requirements under current law while requiring the Secretary of Commerce to impose additional requirements specifically relating to offshore aquaculture activities for which permits are issued under this Act. The intent is to avoid duplicative and conflicting requirements, allow the Secretary to fill in any gaps or deficiencies in such environmental requirements, and facilitate the identification of all requirements that apply to an offshore aquaculture operation regardless of which Federal agency has primary responsibility. Environmental considerations such as use of pesticides and drugs are not addressed in this Act because other agencies (EPA, and the Food and Drug Administration) have primary responsibilities for such concerns.

Siting, Monitoring, and Evaluation –Section 4(a)(5) requires the Secretary to collect information to evaluate the suitability of sites for offshore aquaculture. The Secretary also must monitor the effects of aquaculture on marine ecosystems, and implement measures to protect the environment. Measures may include the temporary or permanent relocation of offshore aquaculture sites or a moratorium on additional sites within an area. The intent of this provision is to ensure monitoring of the cumulative impacts of all offshore aquaculture as well as the impacts of individual operations in the EEZ according to a common set of monitoring and evaluation protocols.

Section 4(b) – Permits.
Section 4(b) authorizes the Secretary of Commerce to issue offshore aquaculture permits to eligible persons. This section also clarifies that these permits do not supersede or substitute for any other authorization required under applicable federal or State law or regulation.

Procedures for issuance of permits – Section 4(b)(1) sets the requirements relating to the submission of an application and Secretary of Commerce decisions on permit applications.

- ***Applications*** – Section 4(b)(1)(A) identifies information to be provided by a permit applicant, including the proposed location and type of operation and the marine species to be propagated or reared, or both. Requirements for the submission of design, construction, and operational information will be specified in the rulemaking process.

- ***Timely Decisions*** – To ensure timely decisions, Section 4(b)(1)(B) requires the Secretary of Commerce to issue or deny each permit application within 120 days after determining that a permit application is complete and has satisfied all applicable statutory and regulatory requirements, as specified by regulation. This provision is needed to ensure that permits are issued within a reasonable time. A prolonged application process is one of the chief criticisms of the current regulatory system for offshore aquaculture. The 120-day requirement will not jeopardize the ability of NOAA or other agencies to satisfy environmental and other review requirements, since the 120-day period would not begin until these requirements have been satisfied. In the event that the 120-day requirement cannot be met, the Secretary is required to provide written notice to the applicant

indicating the reasons for the delay and a reasonable timeline for issuing or denying a permit.

Permit Conditions – Section 4(b)(2) sets the requirements for the permits themselves.

- ***Eligibility for permits*** – Section 4(b)(2)(A) specifies that offshore aquaculture permit holders must be residents of the United States (regardless of citizenship), or corporations, partnerships, or other entities that are organized and exist under the laws of a State or the United States. Others may receive permits if they waive immunity, consent to jurisdiction of the United States, and appoint and maintain agents within the United States who are authorized to receive and respond to any legal process issued in the United States.

  Terms and Conditions – Section 4(b)(2)(B) requires the Secretary to specify the duration, size, and location of the offshore aquaculture facility in the permit, and gives the Secretary broad latitude to establish specific terms, conditions, and restrictions that apply to a permit. The Secretary's authority to include special conditions on individual permits ensures the ability of the Secretary to address potential negative impacts that are specific to particular aquaculture sites or operations.

- ***Duration of permits*** –Section 4(b)(2)(C) specifies that offshore aquaculture permits have a duration of 20 years, and are renewable at the Secretary's discretion in up to 20-year increments. This provision is important to offshore aquaculture businesses, which require reasonable assurance of being able to occupy a particular site long enough to return a profit. It is also important to have a sufficiently long permit duration to satisfy financial institutions considering making loans to the aquaculture business. Many coastal States provide such security of tenure for aquaculture in State waters by offering leases.

  Two exceptions to the 20-year permit duration are projects involving pilot-scale testing or farm-scale research on aquaculture science and technologies, and offshore aquaculture located on leases, right-or-use and easements or rights-of-way authorized or permitted by the Department of the Interior under the OCSLA. In the latter case, the duration of the permit will be developed in consultation with the Secretary of the Interior. For aquaculture located on platforms or other facilities permitted under the OCSLA, the permit cannot extend beyond the date on which a lessee, or the lessee's operator, submits a final application to the Department of the Interior for decommissioning and removal of the facility upon which the offshore aquaculture facility is located. The OCSLA requires removal of all facilities once production ceases, and it is not anticipated that the aquaculture industry would assume liability for removing platforms, given the large costs associated with such an endeavor.

- ***Expiration or termination of permit*** – Section 4(b)(2)(D) requires the permit holders remove all structures, gear, and property from the site when a permit expires or is terminated. The Secretary may also require the permit holder to take other measures to restore the site.

- ***Requirement to use permit*** – Section 4(b)(2)(E) authorizes the Secretary of Commerce to revoke an offshore aquaculture permit if a permit holder fails to begin offshore aquaculture operations within a reasonable time, or if there is a prolonged interruption in offshore aquaculture activities under the permit. This provision is intended to prevent a speculative market for offshore aquaculture permits, by allowing the Secretary to revoke the permit of anyone who does not engage in offshore aquaculture at the approved site. It would also make previously approved sites available for other potential offshore aquaculture facilities.

National interest provision – Section 4(b)(3) gives the Secretary authority to decline to issue a permit, or to impose conditions on a permit, upon a determination that it is not in the national interest.

Section 4(c) - Fees and Other Payments.

Fees – Section 4(c)(1) authorizes the Secretary to establish application and annual permit fees and requires that fees be deposited in a NOAA appropriation account.

Right to waive fees – Section 4(c)(2) allows the Secretary to waive fees for research facilities. The fee structure may discourage innovative aquaculture operations or investments in research and development that are in the national interest.

Bonds – Section 4(c)(3) requires the applicant to post a bond or other form of financial guarantee in a sufficient amount to be determined by the Secretary to cover unpaid fees, the cost of removing a facility, and any other financial risks identified by the Secretary. This requirement reduces the financial risk to the Government of allowing aquaculture development in the EEZ, and provides a vehicle by which the Secretary can set bond requirements commensurate with the risk associated with specific aquaculture operations.

Section 4(d) – Compatibility with Other Uses.

This section provides mechanisms to ensure that the development of offshore aquaculture is compatible with other uses of ocean resources.

Consultations – Section 4(d)(1) requires the Secretary to consult with other federal agencies, coastal States, and fishery management councils to ensure compatibility with other uses of the EEZ – specifically, navigation, fishing, resource protection, recreation, national defense (including military readiness), and mineral exploration and development.

State right to object –Section 4(d)(2) allows coastal States to object to new offshore aquaculture development within 12 miles of their coastlines. The Secretary may not issue any new offshore aquaculture permits within 12 miles of any coastal State that objects by submitting a written notice; however, the coastal State's objection would not apply to permit applications received by the Secretary prior to the receipt of an objection. A coastal State could revoke its objection to offshore aquaculture at any time by submitting such revocation to the Secretary.

Whether or not a coastal State elects to opt out using this provision, a coastal State would also be able to object to the issuance or renewal of a permit through the consistency certification requirements of the Coastal Zone Management Act.

Coastal Zone Management Act consistency – Section 4(d)(3) requires compliance with applicable sections of the Coastal Zone Management Act, which requires federal activities, and any applicant for a required federal license or permit to conduct an activity, that affect any land or water use or natural resource of the coastal zone be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State coastal management programs.

Exclusion from definition of "fishing" under the Magnuson-Stevens Act– NOAA has for the past decade understood aquaculture to constitute "fishing" for both domestic and international law purposes. Section 4(d)(4) specifically excludes aquaculture conducted in the EEZ from the definition of "fishing" under the Magnuson-Stevens Fishery Conservation and Management Act (MSA). This is a very important provision for the offshore aquaculture industry, as MSA provisions that restrict the size, season, harvesting methods, and other aspects relating to the possession of species managed under fishery management plans would make everyday aspects of aquaculture operations illegal. Other provisions of MSA still would apply to aquaculture, such as taking of broodstock or juveniles from the wild. Also, to safeguard wild fisheries, the Secretary is required to ensure, to the extent practicable, that offshore aquaculture does not interfere with MSA conservation and management measures for wild stocks. In addition, Section 4(a)(4) requires the Secretary to consult with fishery management councils in establishing environmental requirements, including the establishment of mechanisms for tracking inventory and movement of fish or other marine species in offshore aquaculture facilities.

Protection of offshore aquaculture facilities – Sections 4(d)(5) authorizes the Secretary to promulgate regulations to protect offshore aquaculture facilities and, where appropriate, to request the Coast Guard to establish navigational safety zones. Section 4(d)(6) authorizes the Coast Guard to establish such zones.

Modification, suspension, and revocation of permits – Section 4(d)(7) grants the Secretary authority to modify, suspend, or revoke permits issued under the Act if the modification, suspension, or revocation is found to be in the national interest, after consulting with other agencies as appropriate and giving the permit holder notice and an opportunity to respond. However, if the Secretary determines an emergency exists that poses risks to human safety, the marine environment or marine species, or the security of the United States, the Secretary may immediately suspend, modify, or revoke the permit, and the permit holder would have an opportunity to be heard following the emergency modification, suspension, or revocation.

Other permit requirements –Section 4(d)(8) states that the issuance of permits under this Act does not obviate the requirement for authorization under other applicable authorities.

Section 4(e) – Actions Affecting the Outer Continental Shelf.

This section applies to offshore aquaculture facilities or operations located on areas managed by the Department of the Interior under the OCSLA. Facilities such as offshore oil and gas

platforms permitted under the OSCLA and other types of operations authorized under the Energy Policy Act of 2005 are potential sites for offshore aquaculture facilities, so the Secretary of the Interior may regulate offshore aquaculture located on such facilities. The Department of the Interior needs this authority in order to meet its health, safety, and other responsibilities on facilities that may be used for offshore aquaculture.

Concurrence – Section 4(e)(1) requires the concurrence of the Secretary of the Interior on permits for offshore aquaculture located on leases, right-of-use and easements, or rights-of-way authorized or permitted under the OCSLA or within 1 mile of facilities permitted or for which a plan has been approved under the OCSLA.

Consent of facility owner – Section 4(e)(2) requires the prior consent of the lessee, designated operator, and owner of the facility permitted under the OCSLA before a permit for offshore aquaculture on that facility may be issued under this Act.

Review of agreements – Section 4(e)(3) requires the Secretary of the Interior to review and approve any agreement between a lessee, designated operator, and owner of an OCSLA-permitted facility and a prospective aquaculture operator.

Coastal Zone Management Act coordination – Section 4(e)(4) provides for coordination of any additional consistency certifications required when offshore aquaculture takes place on facilities for which permits have been issued under the OCSLA.

Liability – Under Section 4(e)(5), the current and former OCSLA lessees, as well as the aquaculture permit holder, are jointly and severally liable for removal of any construction or modifications related to aquaculture operations if the aquaculture permit holder fails to do so and bonds posted for the aquaculture facility are insufficient to cover those obligations.

Authority of the Secretary of the Interior – Section 4(e)(6) authorizes the Secretary of the Interior to promulgate rules and regulations; require and enforce additional permit terms or conditions; issue orders to permit holders to protect the marine environment, property or human life or health; and enforce requirements contained in federal leases and OCSLA regulations.

SECTION 5. RESEARCH AND DEVELOPMENT.
This section acknowledges the need to cooperate with other federal agencies and industry for purposes of research and development.

Research Program – Section 5(a) authorizes the Secretary of Commerce, in consultation with other federal agencies, to establish and conduct an integrated, multidisciplinary, scientific research and development program to further marine aquaculture technologies compatible with the protection of marine ecosystems. Although not specified in the legislation, eligible areas of research would include scientific, social, legal, and environmental management issues.

Research partnerships – Section 5(b) authorizes the Secretary to conduct research and development in partnership with offshore aquaculture permit holders.

Research on aquaculture feeds – Section 5(c) requires the Secretary to collaborate with the Secretary of Agriculture to conduct research to reduce the use of wild fish in aquaculture feeds, including but not limited to the substitution of seafood processing wastes, cultured marine algae and microbial sources of nutrients important for human health and nutrition, agricultural crops, and other products. The goal of this research will be to reduce the use of fish oil and fish meal while maintaining the health and nutritional benefits these feed ingredients provide to humans who consume aquaculture products.

SECTION 6. ADMINISTRATION.

Rules and regulations – Section 6(a) requires the Secretary to promulgate, and amend as necessary, rules and regulations to carry out this Act.

Contracts, leases, grants, cooperative agreements – Section 6(b) provides authority to enter into contracts, leases, grants, and cooperative agreements.

Use and transfer of other resources – Section 6(c) authorizes the Secretary to enter into agreements with other federal agencies, State agencies, tribes, and other organizations, persons, and entities relating to the use or transfer of personnel, services, land, equipment, and facilities, with or without reimbursement, for purposes related to enforcement of this Act.

Acceptance of grants – Section 6(d) allows the Secretary to apply for and receive grants from federal sources.

Savings clause –Section 6(e) specifies that this Act is not intended to preempt the jurisdiction, responsibility or rights of other federal agencies, State agencies, Indian Tribes or Alaska Native organizations under any federal law or treaty.

Extraterritorial jurisdiction – Sections 6(f) extends the application of certain laws of the United States to offshore aquaculture facilities. Section 6(g) applies the law of the nearest adjacent coastal State to permitted offshore aquaculture facilities.

SECTION 7. AUTHORIZATION OF APPROPRIATIONS.

Section 7 authorizes appropriations to the Department of Commerce of $4,052,000 in fiscal year 2008 and thereafter such sums as may be necessary for purposes of carrying out the provisions of this Act. Implementation of the Act will require funding to cover the costs of developing and implementing a regulatory and administrative system for offshore aquaculture, supporting internal and external R&D, developing environmental requirements, and monitoring, compliance, and enforcement.

SECTION 8. UNLAWFUL ACTIVITIES.

Section 8 outlines activities that are unlawful under the Act. Unlawful activities include, but are not limited to, falsification of information; engaging in offshore aquaculture except pursuant to a valid permit issued under this Act; obstruction of lawful enforcement activities such as search or inspection; interference with lawful search or inspection by an enforcement officer; resisting or interfering with an arrest; interstate or foreign commerce of any marine species propagated or reared in violation of this Act or its regulations or permits; failing to remove all structures, gear,

and other property from the site, or to take other measures prescribed by the Secretary to restore the site, or violation of any provisions, regulations, or terms and conditions of permits issued under this Act.

SECTION 9. ENFORCEMENT PROVISIONS.
Section 9 grants enforcement authority under the Act to the Secretary of Commerce and the Secretary of the department in which the Coast Guard is operating. It is not intended to extend arrest powers to additional personnel or components. Section 9 also specifies the powers of enforcement officers, provides for the issuance of citations (written warnings), and holds violators subject to certain costs associated with the storage, care, and maintenance of seized property.

SECTION 10. CIVIL ENFORCEMENT AND PERMIT SANCTIONS.
Section 10 provides for both civil administrative and civil judicial penalties. Section 10 also authorizes the Secretary to revoke, suspend, deny, and impose additional conditions or restrictions on a permit holder found to be committing or to have committed an unlawful activity under the Act. This section also contains provisions relating to injunctive relief, hearings, jurisdiction, the collection of civil penalties and nationwide service of process. Civil administrative penalties assessed by the Secretary may not exceed $200,000 per violation, with each day of a continuing violation considered a separate offense. Civil judicial penalties assessed by the Secretary may not exceed $250,000 per violation, with each day of a continuing violation considered a separate offense.

SECTION 11. CRIMINAL OFFENSES.
Section 11 identifies criminal offenses and associated maximum fines and prison terms, and establishes Federal jurisdiction over these offenses.

SECTION 12. FORFEITURES.
Section 12 provides for the forfeiture of property seized in the enforcement of this Act, and specifies the jurisdiction with respect to such forfeitures as any district court of the United States. The section includes provisions on judgments and procedures, and a rebuttable presumption that all marine species found within an offshore aquaculture facility, and which are seized in connection with an act prohibited by Section 8, are presumed to have been taken or retained in violation of the Act.

SECTION 13. SEVERABILITY AND JUDICIAL REVIEW.
Section 13 provides for severability, judicial review, and awards of litigation cost.

State of Alaska

ANALYSIS OF "NATIONAL OFFSHORE AQUACULTURE ACT"

March 15, 2007

Background

The State of Alaska is opposed to finfish aquaculture in state waters. Alaska's legislature implemented a statutory prohibition for finfish in 1990, a position still widely supported by Alaskans today.

Alaska's wild capture fisheries generate between $1 and $2 billion (first wholesale) annually, and provide more than 50% of the basic private sector jobs in the dozens of communities on Alaska's vast coastline. Alaska's fisheries value is due, in large part, to successful market differentiation between wild and farmed seafood products. The continued successful marketing of Alaska's seafood is likely contingent upon a clear and unequivocal message that Alaska's seafood is wild and healthy, a message that will be confused should finfish aquaculture be allowed in waters off Alaska's shores.

A number of town meetings and forums were held in 2004 and 2005 following the U.S. Commission on Ocean Policy report supporting the development of offshore aquaculture (from 3 to 200 miles) and in response to S.1195, the Bush Administration's offshore aquaculture bill introduced by Senator Ted Stevens. Alaskans, then and now, remain opposed to finfish aquaculture in and off of Alaska's waters. Pervasive public concerns continue to exist over a number of issues related to offshore finfish aquaculture. These are:

- marketplace confusion about Alaska's healthy, wild seafood resulting in lost fisheries value;
- disease and parasite transmission;
- escapes/releases leading to potential colonization and genetic impacts; and
- environmental effects.

Because of their reliance on fisheries, Alaskans support:

- rigorous wild stock protection measures, including strict regulation of hatcheries;
- use of local brood stock;
- required marking/tagging of hatchery fish;
- studies on hatchery/wild stock interactions;
- protection of wild stock genetics;
- prevention of invasive species introductions; and
- wild stocks always having priority in fisheries management decisions.

Until equivalent measures are in place that assures protection of Alaska's wild stocks, Alaskans will not support offshore aquaculture development off of Alaska's shores.

Recommendations

Though the draft revised legislation is much improved over the previous bill, the State of Alaska believes that the following public policy issues must be addressed in any successful offshore aquaculture legislation.

A five year moratorium on new offshore aquaculture development until environmental and socio-economic impacts are adequately evaluated

Because the potential impacts of offshore aquaculture to the environment and to wild capture fisheries economies is so great, a moratorium that allows for adequate scientific research and socio-economic impact analysis is justified. During this time, the Department of Commerce should authorize only experimental aquaculture operations in support of such research and analysis. The moratorium and concurrent research will allow for important information to be acquired about offshore aquaculture and its potential impacts on the environment and on fishermen, processors, and fisheries-dependent communities. Such a moratorium will also give the public and the fishing industry the opportunity to adjust to changing markets, as well as to observe and comment on proposed permitting policies and processes.

A regulatory framework for evaluation of environmental and socio-economic impacts

Though the bill speaks of "consideration of the potential environmental, social, economic, and cultural impacts," the State of Alaska supports an explicit framework for such evaluation being mandated in statute and not developed simply through rulemaking. The potential impacts and effects of offshore aquaculture are of a magnitude that warrants a thoroughly defined process for the public and policymakers.

While this bill is much more comprehensive than the previous bill and does mention safeguarding genetic resources, prevention or minimization of disease or parasites to wild stocks and limits species produced to species native to a region, and fish marking, it is still not as rigorous a standard as Alaska requires of its own enhancement activities and needs to be.

Requirement for compliance with the National Environmental Policy Act (NEPA) and the Magnuson-Stevens Act (MSA)

The current draft legislation contains a number of undefined timelines and criterion such as "within a reasonable period," "periodically review," "to the extent necessary," "consideration of," "where appropriate," "may suspend," and "will consult." Therefore, policymakers and the affected public have no surety as to what the standards are. The development of offshore aquaculture is a major federal action, and as such, should be NEPA compliant at all levels to assure adequate public involvement and a thorough understanding of the activities to be undertaken and resultant impacts. Providing for NEPA compliance (or its equivalent) at all levels of this process is necessary to assure responsible decision-making through a known and defined public process with specific timelines and criterion.

Given that MSA is the federal statute governing fisheries management in the Exclusive Economic Zone (EEZ) and that offshore aquaculture will impact such management, it is

appropriate that offshore aquaculture be developed and coordinated under that same governance structure.

Meaningful roles for states and RFMCs

While the draft legislation provides for states to "opt out" of offshore aquaculture, it apparently doesn't provide for anything other than totally in or totally out. Some states may choose to engage in shellfish aquaculture, but not finfish. The bill needs to be modified accordingly. We further recommend that the language be changed so that states may "opt in" to offshore aquaculture development rather than be required to "opt out" of it.

In addition, providing for states to opt out only to twelve miles off their shores is completely unacceptable to the State of Alaska. The language must provide for states' ability to mitigate, to the maximum extent possible, undesirable impacts resulting from offshore aquaculture development. One tool for addressing overlapping state concerns is to use the Regional Fishery Management Councils (RFMCs) and/or Marine Fisheries Commissions as is currently done now for Fisheries Management Plans.

RFMC's should be tasked with evaluation of the potential risks and benefits of offshore aquaculture in their areas of jurisdiction and be empowered with lifting the moratorium as they determine appropriate. RFMCs have the expertise and judgment necessary for dealing with issues of biological, economic, and social importance to their regions' fisheries. Further, vesting RFMCs with approval and management authority for offshore aquaculture is the easiest way to "ensure, to the extent practicable, that offshore aquaculture does not interfere with conservation and management measures promulgated under the MSA," as suggested in the draft legislation.

Statutory prohibitions on production of specific major wild capture species

Alaska has been working diligently to establish wild Alaska salmon as a high-value brand. This branding is based, in part, on Alaska's reputation for natural, wild fish. The introduction of farmed fish into the Alaskan environment, whether through farming or escapements, puts this branding at risk. Prohibitions on farming of certain species, particularly salmon, halibut, and black cod, would prevent the tainting of the Alaska branding image and impacts to the consequent recent increases in commodity value. Moreover, the introduction of mass-produced, farmed fish has already severely impacted economies of rural Alaska communities. Species-specific prohibitions on aquaculture would allow these communities to survive and maintain traditional lifestyles.

Mitigation for impacts of global aquaculture on major wild capture species

Growth of aquaculture in the U.S. EEZ will have an impact on wild capture fisheries. As the federal government works to promote and build this competing industry, it should develop programs that maintain or increase the economic vitality of existing wild capture fisheries. The growth and development of the global salmon industry decreased the value of Alaska salmon substantially between the early 1990s and 2002. With average total harvest values of $500 million from 1990 – 1995, harvest values fell to $162 million in 2002. Without large fluctuations in volumes harvested, the primary reason for the

collapse was from the increased competition from farm salmon. The Alaska salmon industry is improving its competitive position through significant public assistance and marketing as wild and natural. To mitigate similar downfalls in the other Alaska fisheries, worth an estimated $805 million harvest value in 2005, programs should be implemented that focus on market and product diversification for wild capture fisheries, with an emphasis on highlighting the important characteristics of wild seafood. These types of programs may provide improvement to harvesting and processing infrastructure, quality improvement investments, value-added equipment, and marketing funds. Programs could also be put in place that limit the growth of farm fish production to a scale that does not flood the market with product in a manner that leads to excessive downward prices in both the aquaculture and wild capture fishery industries.

Inadequate permit requirements

Duration

The State of Alaska cannot support permit duration of 20 years given the unknown potential environmental and socio-economic impacts of offshore aquaculture. During the initial development of this program, permit duration should be limited to not more than 5-10 years in order to responsibly evaluate impacts and address them as they become known. In addition, permit duration of 20 years would likely create highly valued property rights that would likely be much more difficult to change in response to developing issues.

Renewals

The existing language also allows for indefinite permit renewals by the Secretary in a state that objects to offshore aquaculture in the EEZ off of that state for permits granted prior to receipt of the objection. Thus, if problems develop they cannot be addressed by an after-the-fact objection. Perhaps an alternative could provide for no more than one renewal period after an objection is received, or authority vested to suspend or modify a permit should be premised on either material non-compliance with the terms of a permit or a "national interests" finding. Given the potential fragility of the marine resources and coastal economies implicated by this legislation and the lengthy list of environmental factors to be addressed and minimized in a permit, ongoing activity should be premised on permit compliance, not an arbitrary time period.

Complete Application

The statute is unclear as to what a complete application is and what level of evaluation it will go through and how the public interacts with that process.

Enforcement and sanction issues

There are a number of problems with the draft bill's enforcement and sanctions sections. The bill should:

- Contain a provision for delegation of enforcement authority to states and/or cross-deputization so that states have the ability to take immediate action if/when problems occur;
- Contain a provision for restitution to states for expenses incurred by a state as a result of permit violations having negative impacts on that state's resources or economy;
- Contain an explicit provision for sale and/or destruction of seized living organisms;

- Contain a provision making it a violation of the Act to import or ship living and/or dead organisms through state waters where doing so is a violation of state law;
- Contain a provision for revenue sharing with states where penalties are imposed; and
- Contain a provision prohibiting sale of aquaculture products at prices less than a certain percentage of the market price of the same wild product.

Miscellaneous

Fees

The draft legislation does not require the Secretary to ensure that fees are sufficient to cover the costs of program administration. Provisions should be added requiring fees sufficient to cover all program administration costs, including reimbursement to states for time spent monitoring or commenting on permit applications. In addition, provisions could be added to provide for royalty payments for use of a public resource, including revenue sharing with adjacent states impacted by offshore aquaculture operations. While bonding is required, it does not cover any costs for liability for potential resultant damages and should.

Research

The legislation should define what "pilot-scale testing," "farm-scale research, and "facilities used primarily for research" are so that the intent is clearly understood and cannot be abused.

Reduction of the use of wild fish in aquaculture feeds

The legislation should require that the Secretary do more than "conduct research" to reduce the use of wild fish in aquaculture feeds. Pending the outcome of such research, the legislation should require the use of incentives or disincentives, if feasible, to implement such reductions.

USCG's "navigational safety zones"

The legislation should define what uses are allowed or disallowed in the USCG's "navigational safety zones" to provide clarification for the public.

Agenda Item C.6.b
Supplemental LC Report
April 2007

REPORT OF THE LEGISLATIVE COMMITTEE

The Legislative Committee (Committee) convened at 9:30 AM on Monday, April 2, 2007. In attendance were Committee members Kathy Fosmark, Don Hansen, Rod Moore, Dale Myer, and Roger Thomas. Also present were Council members Mark Helvey, Curt Melcher, David Ortman, Frank Warrens, and Gordy Williams; Council staff Don McIsaac and John Coon; and Trawl Individual Quota Committee member Dorothy Lowman.

As its first order of business, the Committee elected Rod Moore as Vice Chairman. Mr. Moore then took the Chair in the absence of Chairman Dave Hanson, who was attending a concurrent meeting of the North Pacific Fishery Management Council.

The Committee briefly discussed an administration proposal on offshore aquaculture development and noted receipt of comments from the State of Alaska regarding the proposal. After confirming that the proposal had not yet been introduced in either the U.S. House of Representatives or the U.S. Senate, and that the Council had not received a further request for comments from the U.S. Department of Commerce, the Committee tabled discussion on the measure, agreeing to consider it further at such time as a bill was introduced. The Committee also noted that it expected the individual States would provide comments to their Congressional delegations.

The Committee then turned to issues which need to be addressed as a result of amendments to the Magnuson-Stevens Act. Dr. McIsaac provided a brief summary of discussions that have taken place in the Council Coordinating Committee and reported on his meetings with the Executive Directors of the North Pacific and Western Pacific Fishery Management Councils. The Legislative Committee will provide reports on these under Council Agenda Items C.2.c and J.5.b respectively.

Finally under "Other Business" the Committee discussed Council Agenda Item I.1, "Review of Oregon OPAC Report" and agreed to provide comments under that agenda item.

The Committee adjourned at 10:50 AM.

PFMC
04/05/07

COUNCIL THREE MEETING OUTLOOK, DRAFT JUNE 2007 COUNCIL MEETING AGENDA, AND WORKLOAD PRIORITIES

This agenda item requests guidance on the following three matters:

1. The Council three-meeting outlook (June, September, and November).
2. The draft agenda for the June 2007 Council meeting in Foster City, California.
3. Council staff workload priorities for April 9, 2007 through June 15, 2007.

The Council preliminarily reviewed items 1 and 2 above under Agenda Item C.1 on Monday. With the inclusion of any input gathered from that review or other Council actions during the week, the Executive Director will review supplemental proposed drafts of the three items listed above and discuss any other matters relevant to the Council meeting agendas and workload. After considering any reports and comments from advisory bodies and public, the Council is scheduled to provide appropriate guidance for final agenda development and also has the opportunity to identify priorities for advisory body consideration for the June Council meeting.

Council Tasks:

1. **Provide guidance on potential agenda topics for the next three Council meetings.**
2. **Provide guidance on the draft agenda for the June 2007 Council meeting.**
3. **Provide guidance on priorities for Council workload management between the April and June Council meetings.**
4. **Identify priorities for advisory body consideration at the next Council meeting.**

Reference Materials:

1. Agenda Item C.7.a, Supplemental Attachment 1: Proposed Preliminary Three-Meeting Outlook for the Pacific Council.
2. Agenda Item C.7.a, Supplemental Attachment 2: Preliminary Draft Council Meeting Agenda, June 10-15, Foster City, California.
3. Agenda Item C.7.a, Supplemental Attachment 3: Council Workload Priorities April 9, 2007 through June 15, 2007.

Agenda Order:

a. Agenda Item Overview — Don McIsaac
b. Reports and Comments of Advisory Bodies
c. Public Comment
d. Council Guidance on Three Meeting Outlook, June Council Agenda, Council Staff Workload, and Priorities for Advisory Body Consideration

PFMC
03/20/07

Preliminary Three Meeting Outlook for the Pacific Council

(Contingent Items are Shaded and Counted in Time Estimate; Changes from C.1.a, At. 1 Between Dashed Lines)

June Foster City, CA 6/10-6/15/07 Estimated Percent of Standard Floor Time = 109%	September Undetermined (9/9-9/14/07) Estimated Percent of Standard Floor Time = 108%	November San Diego, CA (11/4-11/9/07) Estimated Percent of Standard Floor Time = 131%
Administrative	**Administrative**	**Administrative**
Closed Session; Open Session Call to Order; Min.	Closed Session; Open Session Call to Order; Min.	Closed Session; Open Session Call to Order; Min.
Legislative Committee Report	Legislative Committee Report	Legislative Committee Report
Fiscal Matters	Fiscal Matters	Fiscal Matters
Interim Appt. to Advisory Bodies	Interim Appointments to Advisory Bodies	Interim Appointments to Advisory Bodies
MSA Reauthorization Implementation	MSA Reauthorization Implementation	MSA Reauthorization Implementation
3 Mtg Outlook, Drft Sept Agenda, Workload (2 sessions)	3 Mtg Outlook, Drft Nov Agenda, Workload (2 sessions)	3 Mtg Outlook, Drft Mar Agenda, Workload (2 sessions)
Public Comment on Non-Agenda Items	Public Comment on Non-Agenda Items	Public Comment on Non-Agenda Items
RecFIN Sampling Update		
COP--Final RFMO Process & Draft EFHOC		
List of Fisheries Rev (MMPA) or as an Info Rpt just for Adv		
Coastal Pelagic Species	**Coastal Pelagic Species**	**Coastal Pelagic Species**
NMFS Rpt		NMFS Rpt
Pac. Mackerel Stk Assmnt & HG for 2007-2008: Adopt Final		Pac. Sardine Stk Assessment & HG for 2008: Adopt Final
Enforcement Issues	**Enforcement Issues**	**Enforcement Issues**
	State Activity Rpt	
Groundfish	**Groundfish**	**Groundfish**
NMFS Report (progress on	NMFS Report	NMFS Report
2007 Inseason Mgmt (2 Sessions)	2007 Inseason Management (2 Sessions)	2007 Inseason Management (2 Sessions)
Trawl IQ: Further Refinement of Alts.		Trawl IQ: Adopt Alts. to Analyze for DEIS
Intersector Allocation EIS: Adopt Alts. for Analysis		Intersector Allocation: Adopt Preferred Alt (Prelim DEIS)
Stock Assmnts 2009-10: Adopt 5 Updates (Cowcod, Widow Yelloweye, POP, Eng Sole) & 2 full (Skate & Sablefish)	Stock Assessments 2009-10: Adopt All Remaining	New Stock Assessments: Mop up, if Necessary
Open Access Limitation: Guide Development of Alts	Open Access Limitation: Refine Proposed Alts	Open Access Limitation: Adopt Prelim Alts for Pub Rev
Biennial Mgmt Spx (2009-2010): Prelim Sched & Process	Biennial Mgmt Spx (2009-2010): Final Sched & Process	Mgmt Spx for 2009-10: Adopt New RB Analyses, Prelim Range of ABCs & OYs, & Range of Mgmt Measures
EFPs for 2008: Preliminary Rev & comment		EFPs for 2008: Final Recommendations
Shore-based Whiting Monitoring Program: Adopt Final	Observer Data Delivery Schedule Revisions	Off-Year Sci. Improvements: Prioritize & Plan for 2008
FMP A-15 (AFA): Adopt Alts for Analysis & Public Rev (DEA)	FMP A-15 (AFA): Final Council Action	
Habitat Issues	**Habitat Issues**	**Habitat Issues**
Habitat Committee Report	Habitat Committee Report	Habitat Committee Report

Agenda Item C.7.a
Supplemental Attachment 1
April 2007

Preliminary Three Meeting Outlook for the Pacific Council

(Contingent Items are Shaded and Counted in Time Estimate; Changes from C.1.a, At. 1 Between Dashed Lines)

June Foster City, CA 6/10-6/15/07 Estimated Percent of Standard Floor Time = 109%	**September** Undetermined (9/9-9/14/07) Estimated Percent of Standard Floor Time = 108%	**November** San Diego, CA (11/4-11/9/07) Estimated Percent of Standard Floor Time = 131%
Highly Migratory Species	**Highly Migratory Species**	**Highly Migratory Species**
	NMFS Rpt	NMFS Rpt
(note: final adoption of COP for RFMO in Admin Agenda)	New EFPs for 2008: Adopt for Pub Rev	New EFPs for 2008: Adopt Final Recommendations
	Albacore Fishing Effort Characterization	
	Final SAFE Rpt: Adopt	
	Yellowfin Overfishing: Adopt Alts. for Pub Rev	Yellowfin Overfishing: Final Action
Marine Protected Areas	**Marine Protected Areas**	**Marine Protected Areas**
Pacific Halibut	**Pacific Halibut**	**Pacific Halibut**
	Changes to 2008 CSP & Regs: Adopt for Pub Rev	Changes to 2008 CSP & Regs: Adopt Final
	Halibut Bycatch Est for IPHC: review	
	Halibut Abundance Estimation for 2008	
Salmon	**Salmon**	**Salmon**
~~Mitchell Act EIS: Comments within Comment Period~~		Preseason Salmon Mgmt Sched for 2008: Appove
	2007 Methodology Review: Select Final Rev Priorities	2007 Methodology Review: Adopt Final Changes
	KRFC Escapement Shortfall Report: Progress Update	Prelim. KRFC Escapement Shortfall Report: Review
	Mitchell Act EIS: Provide Council Comments in Sept or---	Mitchell Act EIS: Provide Council Comments
Information Reports	**Information Reports**	**Information Reports**
~~Salmon Fishery Update~~	Salmon Fishery Update	Salmon Fishery Update
HMS Draft SAFE Rpt		
CPS Safe Rpt		
List of Fisheries (Comments by Advs. or Agenda item under Admin)		
Special Sessions	**Special Sessions**	**Special Sessions**
Joint Session Monday night Stock Assessment Rev	Joint Session Monday night for New Stock Ass. Rev	
Tuesday night Chairman's Reception	Wednesday night OCNMS Research Summary Rpt?	
		1 hr =3%

PROPOSED COUNCIL MEETING AGENDA, JUNE 10-15, 2007, FOSTER CITY, CALIFORNIA

	Sat & Sun	Mon, June 11	Tues, June 12	Wed, Jun 13	Thurs, June 14	Fri, June 15	Sat
Day-Time Council Floor Matters		**CLOSED SESSION** 2:00 pm **CALL TO ORDER** 3:00 pm (15 min) **ADMINISTRATIVE** B.1 Future Agenda Planning (15 min) B.2 Final COP for RFMO Proc. (30 min) B.X List of Fisheries (MMPA) (30 min) **OPEN PUBLIC COMMENT** C.1 Comments on Non-Agenda Items (30 min)	**SALMON** ~~E.1 Comments on Mitchell Act EIS (30 min)~~ **HABITAT** D.1 Current Issues (45 min) **GROUNDFISH** E.1 NMFS Report (45 min) E.2 Biennial Mgmt Spx Process 2009-10 (45 min) E.3 Final Amend. 10 (2.5 hr) E.4 Open Access Limitation Prelim Alts (3 hr)	**ADMINISTRATION** B.3 RecFIN Data & Sampling Refinements (1hr) B.4 Draft COP for EFHOC (30 min) **COASTAL PELAGIC SPECIES** F.1 NMFS Rpt (30 min) F.2 Pacific Mackerel Stock Assmnt. & HG 2007-2008 (1 hr) **GROUNDFISH** E.5 Preliminary Review of EFPs for 2008 (1 hr) E.6 Stock Assessments (Updates, plus Skate, & Sablefish) (2.5 hr) E.7 Inseason Adjustments (2 hr)	**GROUNDFISH** E.8 Intersector Allocation EIS (2.5 hr) E.9 Trawl IQ EIS (4 hr) **ADMINISTRATIVE** B.5 MSA Reauthorization Implementation (2 hr)	**GROUNDFISH** E.10 Final Inseason Adjustments (1 hr) E.11 Amendment 15 (AFA)—Adopt Alts for Pub Rev (4 hr) **ADMINISTRATIVE** B.6 Legislative Matters (30 min) B.7 Fiscal Matters (30 min) B.8 Interim Appointments (15 min) B.9 Minutes (15 min) B.10 3-Meeting Outlook, Sept Agenda, Workload (30 min)	??
		3 hr	**7 hr 45 min**	**8 hr 30 min**	**8 hr 30 min**	**7 hr**	
Committees	**Sat, June 9** 1:00 pm SSC GF Subcom **Sun, June 10** 9:00 am SSC GF Subcom 1:00 pm GAP 1:00 pm GMT	8:00 am GAP 8:00 am GMT 8:00 am SSC 8:30 am BC 9:00 am HC 10:00 am LC 11:00 am Chr B 4:30 pm EC	8:00 am EC 8:00 am GAP 8:00 am GMT 8:00 am SSC	8:00 am EC 8:00 am GAP 8:00 am GMT	8:00 am EC 8:00 am GAP 8:00 am GMT	8:00 am EC	

Council-sponsored evening sessions: *Monday Evening 7:00 pm Joint Session Groundfish Stock Assessment Review*
Tuesday Evening 6:00 pm Chairman's Reception

Agenda Item C.7.a
Supplemental Attachment 2
June 2007

COUNCIL WORK LOAD PRIORITIES APRIL 9, 2007 THROUGH JUNE15, 2007

(**Bolded** tasks represent a Core Program Responsibility)

	Salmon	Groundfish	CPS	HMS	Other
ACTIVE	**Safe Documents: Preseason Rpt III**	**Inseason Mgmt**	**Pacific Mackerel Stk Assessment & HG**	**Prepare Prelim SAFE**	**Admin Necessities (Briefing Book, minutes, Newsletter, Website, E-Filing,**
	Annual Specs & Sup FONSI		**Finalize SAFE 2007**		**COP (EFH, RFMO), Fiscal Matters,**
	Klamath Overfishing Assessment (STT, HC)	Trawl IQ Program: Refine Alts & Impact Anal.		Yellowfin OF Action Albacore Effort Characterization	**MSA Reauthorization Implementation** **Pacific Halibut Mgmt**
	GSI Workshop	Intersector Alloc.-- Develop Alts to Adopt Shore-based Whiting Monitoring Prgrm Final Approval Amend. 15 (AFA)--Alts. for Analysis & Public Review Open Access Limitations--Prelim Alts Review Prelim EFPs for 2008 Biennial Mgmt Spx Planning			**Abundance Estimation Rev** **Final Incidental Catch Regs** **Council Coordination Com Mtg** RecFIN Refinements
	STT Mtg--May or June MEW Mtg	STAR Panels--May 7-11, 21-25 SSC Subcom--Jun 9-10 TIQC Mtg--May 2-4 GAC Mtg--May 15-17 GMT Mtg--at Jun Council Mtg GAP Mtg--at Jun Council Mtg	Mack. STAR--May 1-3 CPSMT Mtg--May CPSAS Mtg--May	International HMS Forum involvement	Leg. Com Mtg--at Jun CM HC Mtg--at Jun CM SSC Mtg--at Jun CM EC Mtg--at Jun CM BC Mtg--at Jun CM Ecosystem-Based Mgmt
CONTINGENT		Gear Conversion		Amend. : Mgmt Regime for HS Longline Fishery Planning for Joint WPFMC-PFMC Mtg	PacFIN/EFIN issues
DELAYED	Mitchell Act EIS Com-in Fall Amendments: OCN Coho Matrix SOF Coho Allocation Cons. Objectives: Puget S. Chinook & Coho LCR Coho Sacramento River Chinook	Alternative Mgmt Approaches GF Strategic Plan Formal Review SSC Bycatch Workshop II Amend. 14--Ownership Limits Spiny Dogfish Endorsement FMP Amend.	International Mgmt		Communication Plan Economic Data Collection Program

THE GROUNDFISH ADVISORY SUBPANEL REPORT ON THE COUNCIL THREE MEETING OUTLOOK, DRAFT JUNE 2007 COUNCIL MEETING AGENDA, AND WORKLOAD PRIORITIES

The Groundfish Advisory Subpanel (GAP) discussed Council workload priorities and items considered for the June 2007 meeting. The GAP agrees with the items considered for the Council's June agenda, including the proposal by the California Department of Fish and Game to consider a plan for limiting entry in the directed open access fishery. The GAP feels that the implementation of Vessel Monitoring System will help define the open access fleet. While the GAP appreciates the State of California's intent to take the lead on this issue, the GAP recommends that industry stakeholders be involved with the process from the beginning.

The GAP also discussed a recommendation to consider changes to the ownership and control constraints imposed in the limited entry fixed gear sablefish fishery. The GAP believes this issue would best be analyzed and decided in the 2009-2010 biennial specifications and management measures process. Another issue brought to the GAP was to consider changing the length variance of five feet in limited entry permit length endorsements. A majority of the GAP believes this issue should also be considered in the 2009-2010 specifications process.

PFMC
04/03/07