AGENDA D-5
DECEMBER 2006

MEMORANDUM

TO: Council, SSC and AP Members

FROM: Chris Oliver
Executive Director

ESTIMATED TIME
3 HOURS

DATE: November 27, 2006

SUBJECT: Staff Tasking

ACTION REQUIRED

(a) Review tasking and committees and provide direction.
(b) Review progress on Arctic Ocean management discussion paper.
(c) Review PGSEIS Workplan and determine priority issues.

BACKGROUND

The list of Council committees is attached as Item D-5(a). Item D-5(b) is the three meeting outlook, and Item D-5(c) and Item D-5(d) are the summary of current projects, timelines, and tasking. In October, the Council added two new projects (GOA arrowtooth flounder MRA, Arctic Ocean management) to the tasking list. Additionally, there were several new CDQ related projects stemming from the recent Coast Guard Act. The Council may wish to discuss tasking priorities to address these projects, as well as potential additions discussed at this meeting, given the resources necessary to complete existing priority projects.

Arctic Ocean Management

In October, the Council requested staff to prepare a discussion paper that explores potential options for managing fisheries in the Arctic Ocean, should they develop in the future. A draft paper is attached as Item D-5(e).

Programmatic Groundfish SEIS Workplan

In 2004, the Council developed a workplan to bring groundfish management in line with its revised management policy (adopted as part of the PGSEIS). This workplan is reviewed by the Council at each meeting as part of the staff tasking agenda item, and is posted on the Council's website. The workplan, updated to reflect the current status of each item, and its relationship to the management objectives, is attached as Item D-5(f).

The Council may wish to revise the workplan's priority action items at this meeting, as some of these items have been achieved. In October, the Council reviewed a report on the Council's progress on implementing the workplan. The report, attached as Item D-5(g), has been revised based on the SSC comments from October, and, at the Council's request, supplemented with additional information regarding community consultation and participation. Item D-5(h) provides a strawman revised workplan, using the existing workplan annotated with the staff notes from the progress report.

NPFMC Committees & Workgroups

(revised November 27, 2006)

Council/Board of Fisheries Joint Protocol Committee

Updated: 7/28/03	Council:	Board:
	Dave Benson	Mel Morris
	Doug Hoedel	Art Nelson
Staff: Jane DiCosimo	Eric Olson	(Vacant)

Council Chairman and Executive Director Committee

Appointed April 2005	**CFMC**: C:Eugenio Pinerio ED: Miguel Rolon	**NPFMC**: C: Stephanie Madsen ED: Chris Oliver
Staff: Chris Oliver	**GMFMC**: C: Robin Riechers ED: Wayne Swingle	**PFMC**: C: Donald Hansen ED: Don McIsaac
	MAFMC: C: W. Peter Jensen ED: Dan Furlong	**SAFMC**: C: George J. Geiger ED: Robert Mahood
	NEFMC: C: John Pappalardo ED: Paul Howard	**WPFMC**: C: Frank McCoy ED: Kitty Simonds

Council Executive Committee

Updated: as needed	Chair: Stephanie Madsen Jim Balsiger/Sue Salveson McKie Campbell Roy Hyder
Staff: Chris Oliver	Jeff Koenings

Crab Interim Action Committee

[Required under BSAI Crab FMP]

Jim Balsiger, NMFS McKie Campbell, ADF&G Jeff Koenings, WDF

NPFMC Committees & Workgroups
(revised November 27, 2006)

Ecosystem Committee

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

Enforcement Committee

Updated: July 2003 Status: Active Staff: Cathy Coon/Chris Oliver	Chair: Roy Hyder Capt. Mike Cerne, USCG James Cockrell, F&W Protection Bill Karp, NMFS Earl Krygier, ADF&G Lisa Lindeman, NOAA - GC Jeff Passer, NMFS-Enforcement Sue Salveson, NMFS

Finance Committee

Updated: 9/28/05 Status: Meet as necessary Staff: Gail Bendixen/Chris Oliver	Chair: Stephanie Madsen Jim Balsiger/Sue Salveson McKie Campbell (ADF&G) Dave Hanson Roy Hyder Jeff Koenings (WDF) Gordon Kruse

Fur Seal Committee

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

NPFMC Committees & Workgroups
(revised November 27, 2006)

GOA Groundfish Rationalization Community Committee

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

Halibut Charter Stakeholder Committee

Appointed: January 2006 Staff: Jane DiCosimo	Chair: Dave Hanson Seth Bone Robert Candopoulos Ricky Gease John Goodhand Kathy Hansen Kelly Hepler	Dan Hull Joe Kyle Larry McQuarrie Rex Murphy Charles "Chaco" Pearman Greg Sutter

IFQ Implementation Committee

Status: Reconstituted as shown (July 2003) Staff: Jane DiCosimo	Chair: Jeff Stephan Bob Alverson Cora Crome Tim Henkel Dennis Hicks	Don Iverson Don Lane Gerry Merrigan Kris Norosz Paul Peyton

Non-Target Species Committee

Updated: 7/31/06 Appointed: 7/26/03 Staff: Jane DiCosimo, NPFMC/ Sarah Gaichas, NMFS	Chair: Dave Benson Julie Bonney Ken Goldman Karl Haflinger Simon Kinneen Peggy Murphy	Michelle Ridgway Janet Smoker Paul Spencer Lori Swanson Dave Wood

Observer Advisory Committee

Reconstituted: 1/31/06 Status: Active Staff: Chris Oliver/ Nicole Kimball	Chair: Joe Kyle Bob Alverson Jerry Bongen Julie Bonney Rocky Caldero Paul MacGregor	Tracey Mayhew Brent Paine Peter Risse Kathy Robinson Susan Robinson Thorn Smith

NPFMC Committees & Workgroups
(revised November 27, 2006)

Pacific Northwest Crab Industry Advisory Committee

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

Steller Sea Lion Mitigation Committee

Appointed: 2/10/01	Chair: Larry Cotter	Daniel Hennen
Updated: Jan 2006	Jerry Bongen	Sue Hills
	Julie Bonney	Frank Kelty
[formerly SSL RPA Committee;	Sam Cotten	Terry Leitzell
renamed at Feb 02 meeting]	Ed Dersham	Dave Little
	Kevin Duffy	Steve MacLean
	John Gauvin	Max Malavansky, Jr
Staff: Bill Wilson	John Henderschedt	Art Nelson

VMS Committee

Appointed: 06/02	Chair: Earl Krygier	Ed Page
	Al Burch	Lori Swanson
Status: Idle, pending direction	Capt. Mike Cerne	
	Guy Holt	
Staff: Cathy Coon	Bob Mikol	

DRAFT NPFMC THREE-MEETING OUTLOOK - updated 11/27/06

December 4, 2006 Anchorage, Alaska	February 5, 2007 Portland, Oregon	March 26, 2007 Anchorage, Alaska
30th Anniversary Celebration Dec. 9		
BOF actions: ***Report and action as necessary***		
ESA Consultation on FMPs: ***Action as necessary***	Draft BiOp and SSLMC Comments: ***Review/Action (T)***	ESA Consultation on FMPs: ***Action as necessary***
AI pollock fishery EFP: ***Receive report/review new EFP***		SSLMC proposals: ***Review/Action as necessary***
List of Fisheries for 2007: ***Report and action as necessary***		
Review SSLMC Proposal ranking tool ***(SSC only)***		BSAI Crab 18 month review: ***Receive Report***
Seabird Interactions EA/RIR/IRFA: ***Initial Review***	Seabird Interactions EA/RIR/IRFA: ***Final Action (T)***	
NPRB Report	BSAI sector split for Pacific cod: ***Review discussion paper***	BSAI sector split for Pacific cod: ***Action as necessary***
Charter Halibut Mgmt: ***moratorium discussion paper***	Charter Halibut Mgmt: ***Initial review of moratorium (T)***	Charter Halibut Mgmt: ***Final action on moratorium***
Permanent solution discussion paper	***Permanent solution: action as necessary***	***Permanent solution: action as necessary***
5 fish limit/ State mgmt discussion papers		
Halibut Separate Accountability: ***Discuss/action as necessary***		
Halibut Subsistence Survey Report: ***Review***	AFA Coop reports	Socioeconomic Data Collection: ***Workgroup report***
MRA adjustments: ***Final Action***	VMS Requirements: ***Initial Review***	VMS Requirements: ***Final Action***
		Cost Recovery: ***Discussion Paper (T)***
	Observer Program: **Report and action as necessary**	Observer Program: ***Action as necessary***
	GOA arrowtooth MRA: ***Review discussion paper (T)***	
Trawl LLP Recency: ***Review Progress***	Trawl LLP Recency: ***Initial review (T)***	Trawl LLP Recency: ***Final Action (T)***
Salmon Bycatch (B-1): ***Report/Review EFP***	Salmon Bycatch (B-1): ***Discussion Paper (T)***	Salmon Bycatch (B-1): ***Initial Review (T)***
		Salmon Bycatch Workshop (SSC)
VIP Repeal: ***Final Action***	CDQ Am. 71/22: ***Discussion paper on Alternatives***	CDQ Am. 71/22: ***Action as necessary***
	CDQ regulation of harvest: ***Initial Review (T)***	CDQ regulation of harvest: ***Final Action (T)***
GOA Rationalization: ***Review analysis and refine alternatives***	GOA Rationalization: ***Action as necessary***	GOA Rationalization: ***Action as necessary***
Arctic management: ***Review discussion paper***	Crab Vessel Use Caps: ***Review Information***	Crab Vessel Use Caps: ***Action as necessary***
BS Habitat Conservation: ***Finalize alternatives (T)***	BS Habitat Conservation: ***Initial Review (T)***	BS Habitat Conservation: ***Final Action (T)***
	EFH AI Open Area Adjustment: ***Initial Review***	EFH AI Open Area Adjustment: ***Final Action***
		Other Species: ***Discussion paper***
		Non-target species: ***Update (T)***
EIS for TACs: ***Summary of Comments on DEIS***		
Groundfish Specifications: ***Adopt final specs for 07/08***	Dark rockfish: ***Initial Review***	Dark rockfish: ***Final Action***
Groundfish SAFE Reports: ***Review***	Rockfish Management: ***CIE Review Summary***	Rockfish Management: ***Action as necessary***
		Scallop SAFE: Review
PSEIS Workplan: ***Review***	AI FEP: ***Action as necessary***	AI FEP: ***Initial Review***
	BSAI Crab Overfishing Definition: ***Initial review***	BSAI Crab Overfishing Definition: ***Final Action***

TAC - Total Allowable Catch
BSAI - Bering Sea and Aleutian Islands
IFQ - Individual Fishing Quota
GHL - Guideline Harvest Level
HAPC - Habitat Areas of Particular Concern
LLP - License Limitation Program
VIP - Vessel Incentive Program
PSC - Prohibited Species Catch

AI - Aleutian Islands
GOA - Gulf of Alaska
SSL - Steller Sea Lion
BOF - Board of Fisheries
FEP - Fishery Ecosystem Plan
CDQ - Community Development Quota
ESA - Endangered Species Act
(T) Tentatively scheduled

Future Meeting Dates and Locations
February 5 - 13, 2007 in Portland
March 26 - April 2, 2007 in Anchorage
June 4 - 12, 2007 in Sitka
October 1 - 9, 2007 in Anchorage
December 3 - 11, 2007 in Anchorage

AGENDA D-5(b)
DECEMBER 2006

Council Project Summary Updated November 27, 2006

Council Projects	Projected Weeks	Council/ NMFS %	Comments
Groundfish Fishery Issues			
GOA Rationalization	?	70/30	Review Alts in Dec. (Mark,DianaE,DianaS,Nicole,Elaine,contractors,NMFS)
IR/IU flatfish adjustments (Am 79)	0	20/80	Approved. GRS set at 65% in 2008
IR/IU flatfish trailing amendments (Am 80)	1	80/20	Being prepared for Secretarial Review (Jon/Marck/contract)
Break out other species category into TAC groups	10	60/40	Discussin paper in April (Jane/NMFS)
Rockfish management	?	60/40	Discuss in February (Jane/NMFS).
Observer Program (fee and deployment mechanism)	0	80/20	Being prepared for Secretarial review (Nicole/Chris)
BSAI Pacific cod Allocations (Am 85)	2	90/10	Being Prepared for Secretarial Review (Nicole/NMFS)
VMS Requirements	2	10/90	Initial Review in February (NMFS/Cathy)
GOA Dark Rockfish	4	90/10	Initial Review in February (Diana S./NMFS)
GOA Rockfish Demonstration Program	1	10/90	Awaiting publication of final rule (Mark/NMFS)
Groundfish overfishing definitions	?	10/90	On hold pending EIS for NS 1 (NMFS HQ)
MRA enforcement for non-AFA trawl sector	?	10/90	Final action in December (NMFS)
BSAI Trawl CV Eligibility	8	90/10	Discussion paper in December (Jim/Mark/Elaine/NMFS)
GOA arrowtooth MRA	?	10/90	Discuss in February (NMFS/Diana S.).
Pacific cod BS and AI split	8	90/10	Discussion paper in February (Jon/Nicole/NMFS)
BSAI Sablefish (misc.)	8	70/30	Plan Team Workgroup formed December 2006 (Jane/NMFS)
Halibut Fishery Issues			
Halibut Charter Moratorium	?	90/10	Discussion paper in December (Jane/Nicole/NMFS/contractor)
Halibut Charter Allocations/Share Based Solutions	?	90/10	Discussion paper in December (Jane/Nicole/NMFS/contractor)
Halibut Charter GHL Measures	0	90/10	Being prepared for Secretarial review (Jane/contractor/NMFS)
IFQ Omnibus 4	0	90/10	Rule published in FR on November 1.
IFQ Omnibus 5	0	90/10	Being prepared for Secretarial Review (Jane/Jim/NMFS)
Halibut subsistence III amendment	0	90/10	Being prepared for Secretarial Review (Jane/Jim/NMFS)

Crab Fishery Issues

Crab Overfishing definition revision	?	20/80	Initial review in February (NMFS/ADF&G/Diana S/Jon)
BSAI Crab Vessel Use Caps	6	90/10	Review data in February (Mark/NMFS)
Crab 18 month review (C shares; arbitration)	6	80/20	Paper in April 2007 (Mark/NMFS)

CDQ Issues

CDQ eligible communities	0	50/50	Integrated into Am. 71/22 (Nicole)
CDQ: After the fact transfers	1	10/90	Secretarial draft being revised for Coast Guard Act consistency (Nicole)
CDQ Cost-Recovery	?	10/90	(NMFS/Nicole)
CDQ Amendment 71/22	?	50/50	Discuss alternatives in February (Nicole/NMFS)
CDQ: Regulation of harvest (MSA provision)	?	50/50	Initial Review in February (Nicole/NMFS)

Bycatch Issues

Repeal of VIP	2	0/100	Final Action in December (NMFS)
Opilio VIP	2	50/50	Not started - Pending action on existing VIP
GOA Salmon and Crab Bycatch Controls	12	80/20	Review data at future meeting (Diana S./Cathy/Elaine/ADF&G)
Catch/bycatch disclosure (vessel level)	2	70/30	Discussion paper - Postponed
BSAI Salmon Bycatch (Package A)	0	80/20	Being prepared for Secretarial Review (DianaS/NMFS)
BSAI Salmon Bycatch (Package B)	10	70/30	Discuss in February (Diana S./other)
Non-target (other rockfish, other flatfish, o. species) development	?	60/40	Ongoing committee discussions (Jane/NMFS).

Ecosystem Issues

Bering Sea habitat conservation	8	50/50	Refine alternatives in December (NMFS/Cathy)
Ecosystem-based Management	?	90/10	Alaska Marine Ecosystem Forum established (Diana E)
Aleutian Islands Fishery Ecosystem Plan	10	90/10	Writing team appointed (Diana E.)
Arctic Fishery Management Planning	?	90/10	Review draft paper in December (Bill, Diana E)
ESA-listed Salmon Consultation on FMPs	2	20/80	In progress (NMFS/Bill/DianaS)
ESA Consultation on FMPs	12	90/10	SSL Mitigation Committee developing changes (NMFS/Bill)
Seabird interactions	8	50/50	Initial Review in December (NMFS/Bill)
SSL Recovery Plan	2	10/90	Draft recovery plan being revised (NMFS/Bill)

Project timeline and major tasking for council staff. Updated 11/27/06

Analytical Staff	December	January	February	March	April	May	June
Mark Fina, Sr. Economist							
GOA Rationalization	Discuss						
BSAI crab vessel use caps			Review data				
Crab 18 month review					Review		
Miscellaneous Oversight							
Jon McCracken, Economist							
Crab Overfishing (assist)			Initial Review (T)		Final Action (T)		
P.cod BS and AI split (lead)							
Misc. economic assistance							
Jim Richardson, Economist							
GOA Rationalization (assist)							
Misc. economic assistance							
BSAI Trawl CV eligibility	Discuss		Initial Review (T)		Final Action (T)		
Elaine Dinneford, Fishery Analyst							
Data Support (all projects)							
AKFIN Liaison							
Jeannie Heltzel, Data Analyst							
Data Support (all projects)							
AKFIN Liaison							
Jane DiCosimo, Sr. Plan Coord							
Rockfish Management			CIE Review				
Other species/non-target					Discussion paper		
Halibut Charter Issues	Discuss		Initial Review (T)		Final Action (T)		
Diana Stram, Plan Coordinator							
Salmon/crab bycatch (Lead)	Discuss		Discuss		Salmon Workshop		
Crab Management	Discuss		Initial Review (T)		Final Action (T)		
Scallop Management			PT 2/23-24		Review SAFE		
GOA dark rockfish			Initial Review (T)		Final Action (T)		
Bill Wilson, Protect Species							
Marine Mammal issues							
Seabird Bycatch	Initial Review		Final Action				
FMP Consultation							
Diana Evans, NEPA Specialist							
GOA Rationalization NEPA Lead	Discuss						
EAM and AI FEP			Discuss		Initial Review (T)		Final Action (T)
NEPA assistance							
Cathy Coon, Fishery Analyst							
Salmon/Crab Bycatch (assist)			Initial Review (T)		Final Action (T)		
AI EFH adjustment							
Being Sea EFH (lead)	Discuss		Initial Review (T)		Final Action (T)		
Nicole Kimball, Fishery Analyst							
CDQ Projects (lead)			Initial Review (T)		Initial/Final Action (T)		
Observer Program (lead)			Report				
Halibut Charter (community)	Discuss		Initial Review (T)		Final Action (T)		
GOA Rationalization (community)							Discussion paper

North Pacific Fishery Management Council

Fishery Management Options for the Alaskan EEZ in the Chukchi and Beaufort Seas of the Arctic Ocean – A Discussion Paper

Bill Wilson
December 2006

Introduction

At its October 2006 meeting, the Council asked staff to prepare a draft discussion paper on options for management of fisheries in the U.S. Exclusive Economic Zone (EEZ) waters of the Arctic Ocean offshore Alaska. The Arctic Ocean has two regional seas that are adjacent to Alaska, the Chukchi Sea and the Beaufort Sea. With the apparent climate change trends, it is conceivable that as oceans warm the Alaska Arctic EEZ could offer commercial fishing opportunities in the future (Newton 2005). The Council is interested in exploring possible policy options, such as a Fishery Management Plan, to address management of any existing or potential future commercial fisheries in this region.

Under the Magnuson-Stevens fishery Conservation and Management Act, the Council is authorized to conserve and manage the fishery resources of the Alaskan EEZ, including the Chukchi and Beaufort Seas. To date, no large commercial fisheries have developed in the area, and thus the Council has not had a compelling reason to develop fishery management plans for these Arctic marine areas off Alaska. A brief description of current Federal management authority in the region is discussed below under "Management Issues".

But the environment for commercial fishery development in the Alaskan Arctic may be changing, with warming trends in ocean temperatures and changes in seasonal sea ice conditions potentially favoring the development of commercial fisheries. Recent popular literature has featured this issue (e.g. Hawks 2006). Recently, scientists have compiled information on changes in Arctic climate, ocean conditions, sea ice cover, and permafrost and vegetation change (Richter-Menge et al. 2006), noting that sea ice has dramatically changed. Greater ice-free seasons coupled with warming waters and fish range expansion could together create conditions that could lead to commercial fishery development. And there are species of finfish and shellfish that occur in these waters that conceivably could support commercial fisheries if exploitable biomass levels are sufficient. Although at this time there are no such fisheries in the Alaskan EEZ in the Arctic Ocean, and no routine fish surveys conducted in the region, the Council may wish to explore policy and management options to prepare for future change.

This discussion paper only briefly summarizes information on the environment and fishery resources of the Arctic Ocean offshore Alaska, and explores some of the issues associated with establishing a fishery management policy for this region. This document also outlines some possible options the Council may wish to pursue in its future

discussions of fishery management in this region, and may eventually become a policy document that articulates the Council's management policies and authorities. The document could outline specific conservation and management measures that may be appropriate for emerging fisheries in the region, and the document could be amended as the environment changes and as fisheries develop.

Geography and Oceanography of the Region

The Chukchi Sea is an embayment of the Arctic Ocean bounded on the west by the east Siberian coast of the Russian Federation and on the east by the northwestern coast of Alaska. With an area of about 595,000 km^2, it extends roughly from Wrangel Island at the eastern side of the East Siberian Sea to Point Barrow and offshore to the 200 m isobath (Weingartner 1997). Along the Alaskan coast of the Chukchi Sea, Kotzebue Sound is a large embayment between Bering Strait and Point Hope. Along the Alaskan Seward Peninsula coast between Point Lay and Wainwright, a chain of nearshore barrier islands form a lagoon system that becomes estuarine during summer.

Offshore, the Chukchi Sea is relatively shallow with depths generally under 60 meters. Warm, low salinity marine water seasonally freshened by outflow from the Yukon River enters the Chukchi from the south through Bering Strait. During the open water season water movement is northward through Bering Strait into the Arctic Ocean, and circulation is partly subject to wind driven currents. The Chukchi Sea is ice covered for about 8 months, with ice retreat occurring in June and July and ice returning by October. The Beaufort Sea, covering an area of about 476,000 km^2, lies offshore north of the Alaskan arctic coast and extends generally from the Point Barrow area eastward to the delta of the Mackenzie River and the west coast of Banks Island in the Canadian High Arctic. The Beaufort Sea has a narrow Continental Shelf that extends offshore 50-100 km (30 to 60 miles). The Beaufort Sea is characterized by barrier island-lagoon systems extending along shore from the western Mackenzie Delta to the Colville River. Water circulation is dominated by the southern edge of the perpetual clockwise gyre of the Canadian Basin resulting in surface movement that is generally westward with a subsurface Beaufort Undercurrent flowing in the opposite direction (Aagaard 1984). Close to shore in the open water season, surface currents are primarily wind driven, with the predominant direction to the west. However, winds can be either easterly or westerly, and thus alongshore surface currents can flow either direction. Ice covers the sea for up to 9 months.

Both the Chukchi and Beaufort Seas are strongly influenced by seasonal ice cover. Ice directly affects the distribution and annual movement patterns of marine mammals. Ice freezes to the bottom in the fall in shallow nearshore areas, and exhibits a shear zone where shorefast ice interfaces with the constantly moving offshore ice pack. Ice ridges, seafloor gouging, and other ice-related phenomena influence the benthic environment. Sea ice melting in spring nourishes primary production as the ice edge melts and retreats, opening a highly productive estuarine-like nearshore corridor in which anadromous and amphidromous fish, marine fish, shorebirds and other waterfowl flourish; many marine mammals generally remain with the ice pack as it retreats offshore.

Vessel movement in the region is restricted by ice conditions, generally allowing vessel transit during a short one to two month period each summer, although in recent years the length of the vessel transit season has been longer because of warmer water.

Productivity of the Arctic Ocean is considered to be low, probably due to long winters of low light penetration and thus lower plankton production. The Chukchi is more productive, due partly to the influx of nutrients in waters from the Pacific Ocean and Bering Sea flowing northward through Bering Strait. During summer months production increases as sea ice melts, although water stratification can limit summer vertical mixing during the open water season. In the Beaufort during summer, strong west winds may induce upwelling of cold, more nutrient rich waters inshore, and with melting of bottomfast ice, benthic organisms move inshore and support a rich fauna of fish and birds. During winter, seasonal ice freezes to thickness of two or more meters, through which seals maintain breathing holes and holes that are access to birthing lairs under snow cover. Polar bears range throughout the Arctic Ocean, and are more common close to shore during winter months when prey and ice conditions are more favorable. Very little is known of marine fish distribution, abundance, diversity, or habitat use patterns in the winter. Anadromous and amphidromous fishes overwinter in unfrozen pockets of fresh or brackish water in rivers and river deltas.

Human Habitation and Land Status

Human habitation of the Arctic has been continuous since the last ice age, and some evidence supports an ancient influx of humans from the west across a land bridge in the Bering Strait area. Communities along the coast of the Chukchi and Beaufort Seas are closely tied to the fish, birds, and marine mammals of the ocean as well as terrestrial mammals, particularly caribou. In the Chukchi region, many villages dot the shoreline, including the large community of Kotzebue and smaller villages such as Shishmaref, Point Lay, and Wainwright. In the Beaufort Sea region, Barrow dominates as the government seat of the North Slope Borough and the largest community north of the Brooks Range. Villages along or near the Beaufort coast include Kaktovik and Nuiqsut. With discovery of petroleum deposits in the Prudhoe Bay region in 1968, an industrial community of Deadhorse formed. The oil fields of the Prudhoe Bay region extend from the Colville River and Delta eastward to the Sagavanirktok River. Population of villages in the Arctic region range from several hundred to five to seven thousand residents in Barrow and Kotzebue. Approximately 7,400 people work in the Prudhoe Bay oil fields (NRC 2003).

Land status in the Arctic Region includes a mix of local governmental, refuge, and park areas that border portions of the Chukchi and Beaufort Sea coasts. The North Slope Borough extends from the Chukchi Sea coast and along the entire Alaskan Beaufort Sea coast inland to the Brooks Range and eastward to the Canadian Border, encompassing over 228,000 km^2 (88,000 sq mi). The Northwest Arctic Borough, formed in 1986, encompasses the villages of northwest Alaska in the Kobuk and Noatak River drainages; this borough borders the Chukchi Sea from Cape Seppings in the north to just west of

Cape Espenberg in the south. In the eastern Arctic, the Arctic National Wildlife Refuge covers over 7.3 million hectares (18 million acres), about 40% of which is wilderness. This refuge borders the Beaufort Sea coast from approximately the Canning River Delta to the Canadian border and is managed by the U.S. Fish & Wildlife Service. The 9.3 million hectare (23 million acre) National Petroleum Reserve Alaska, managed by the U.S. Bureau of Land Management, extends from the Brooks Range northward to the Beaufort coast. The Reserve extends along the Beaufort coast from the Colville River westward to Point Barrow and then southward, fronting the Chukchi Sea coast from Icy Cape to Wainwright. Cape Krusenstern National Monument and Bering Land Bridge National Preserve extend along large portions of the Chukchi Sea coast and are managed by the U.S. National Park Service. The most northerly parts of the Alaska Maritime National Wildlife Refuge are at Cape Lisburne and Point Hope.

The U.S. Canadian border extends north and slightly eastward in the offshore Beaufort Sea, and the demarcation between the U.S. and the Russian Federation is the International Date Line extending through the middle of Bering Strait northward at 169 degrees West longitude.

Many of these land reserve boundaries are shown on Figure 1.

Finfish and Shellfish Species of the Arctic Ocean

Surveys of fish species present in this region have been few. Early exploration of this region by wooden sailing ships and whaling vessels included both commercial interests (whales, other marine mammals) and scientific interests and produced a few records of fish species present. In the middle of the 20th Century, exploration of the region was sponsored by the U.S. Coast Guard, National Science Foundation, and eventually by the oil and gas industry, leading to a basic understanding of marine organisms inhabiting the region. Industrial development at Prudhoe Bay and surrounding oil fields has prompted concern over effects on coastal fishes (Thorsteinson and Wilson 1995) and several decades of fish studies have been conducted in this region (Wilson and Gallaway 1997). Recently, the University of Alaska, in cooperation with other investigators, has conducted several surveys of the region, in particular a series of cruises with Russian Scientists with support from NOAA. The North Pacific Research Board recently sponsored a synthesis of information on the Chukchi and Beaufort Sea marine ecosystem and will be available in report form soon (Hopcroft et al. In Prep).

One major species of finfish in the Beaufort is the Arctic cod, a gadid that can be seasonally abundant but may not occur in commercially exploitable quantities; data are not available to assess the stock dynamics of Arctic cod in the Arctic offshore of Alaska. The Arctic cod is distributed throughout the circumpolar north. Biomass estimates are few; one estimate is a calculation by Frost and Lowry (1984) of approximately 86,000 mt. This species is a food source for marine mammals and birds of the Arctic, and as juveniles is known to be prey for other species of fish, particularly anadromous and amphidromous fishes that occur in nearshore Beaufort and Chukchi Sea waters during the summer open water season.

Shellfish such as crab and shrimp occur in the Chukchi Sea, but commercially exploitable populations likely are rare north of Norton Sound and Bering Strait. A small fishery for red king crab occurs in the Kotzebue Sound area. Snail populations occur in the Chukchi Sea, although they have not been commercially exploited. Crab and epibenthic crustaceans occur in the Beaufort Sea. Very little is known about the shellfish fauna of the region.

Fisheries of the Chukchi and Beaufort Seas

Arctic cod have previously been harvested commercially in marine waters of the Russian Federation and some northern European countries, primarily in the northern Atlantic Ocean and the Barents and White Seas. There may be some continuing harvests of Arctic cod in the Canadian north. No commercial harvests of Arctic cod occur in U.S. waters.

Other species exploited commercially elsewhere that are present in the region include the yellowfin sole (Chukchi Sea) and in the eastern Beaufort Sea the Greenland halibut. A recent research cruise in the Chukchi Sea resulted in the capture of a few walleye pollock, representing a new range extension for this species (RUSALCA 2004 cruise, www.arctic.noaa.gov/aro/russian-american/cruise6-adult-fish.htm). Other species captured by bottom trawl in the RUSALCA 2004 cruise included saffron cod, Bering flounder, and eelpouts, sculpins, poachers, pricklebacks, and snailfish.

State of Alaska commercial fisheries in the Chukchi Sea region are centered in Kotzebue Sound where a summer and fall salmon fishery occurs annually, targeting chum salmon. A few other species of salmon are harvested incidentally as well as Dolly Varden. The Noatak and Kobuk rivers are the principal salmon habitats in this area. There is a commercial sheefish (inconnu) fishery that occurs in Hotham Inlet with a harvest quota of 25,000 pounds, but usually only a few thousand pounds are sold commercially (Jim Menard, ADF&G, pers. comm.). There is a small red king crab fishery out of Kotzebue; there were no catches this past year and minimal catches the previous year (Jim Menard, ADF&G, pers. comm.).

In the Beaufort Sea, a small commercial fishery for Arctic cisco, least cisco, and a few broad and humpback whitefish occurs annually in the delta waters of the Colville River (20,000 to 25,000 fish annually). This fishery involves gillnets placed under the river ice in brackish waters during the October and November period. These whitefish are marketed locally in the Barrow area and a few are smoked and marketed in Fairbanks. No other documented active marine or freshwater commercial fisheries occur in that area. However, there is potential for miscellaneous fisheries on a case-by-case basis through a Commissioner's permit depending on interest and size of fish stock (Fred Bue, ADF&G, pers. comm.).

Exploratory fisheries have recently been conducted in the Canadian portion of the Beaufort Sea north of the Yukon Territory. Species of interest include cod, crab,

gastropods, and other fishes (Common Ground newsletter, Winter 2005, http://www.jointsecretariat.ca/JS/pdf/Winter%202005%20Vol5-2.pdf).

Little sport fishing occurs in marine waters of the region. Some sport fishing may occur in the Kotzebue Sound area, targeting Dolly Varden and salmon. Some sport fishing activity occurs in the Prudhoe Bay industrial area by oilfield workers, primarily along the Beaufort Sea coast at Prudhoe Bay; fishermen target Dolly Varden and the occasional Arctic grayling.

Subsistence fisheries occur near most coastal villages of the region or at fish camps located various distances from villages. Chum salmon and some Dolly Varden are harvested in the Kotzebue Sound region. Whitefish are more prevalent in catches in the northern area of the Chukchi Sea, and in the Beaufort subsistence fisheries focus almost exclusively on whitefish. Arctic cisco and least cisco as well as broad whitefish and a few other species are commonly harvested along the Beaufort Sea coast; about 40,000 fish are harvested annually (Thorsteinson and Wilson 1995). Most coastal subsistence fishing occurs near villages and also in the Teshekpuk Lake region.

Subsistence harvests of marine mammals, including beluga whales, occur year round, with beluga hunting more prevalent in summer open water months. Ice seals are harvested when accessible on winter sea ice.

Bowhead whaling is an important part of the subsistence and social system in local communities in both the Chukchi and Beaufort Seas. Managed by the Alaska Eskimo Whaling Commission, bowheads are hunted by whalers from ten whaling communities: Gambell, Savoonga, Wales, Little Diomede, Kivalina, Point Hope, Wainwright, Barrow, Nuiqsut, and Kaktovik. Bowheads migrate north from the Bering Sea through the Chukchi and adjacent to the Point Barrow area in spring, generally following leads in the ice. Subsistence whalers from northern Bering Sea and Chukchi Sea communities, including Barrow, target bowheads in this spring migration. The return migration occurs along the Beaufort Coast where villages of Kaktovik, Nuiqsut, and Barrow and occasionally communities further south conduct the fall hunt. Other marine mammals harvested in the region include ringed and bearded seals.

Other Arctic Ocean Activity

Oil and gas development has occurred in the Alaskan Arctic since the 1960s, and offshore production of petroleum resources has been continuous since the late 1980s, most of which occurs in State waters. Petroleum development in the Alaskan Beaufort Sea EEZ currently is small compared with other areas in Alaska but increased seismic exploration in the Beaufort and Chukchi Seas may lead to additional production. MMS estimates of recoverable oil and gas resources suggest that continued development of offshore hydrocarbons is likely to occur in future years, both in the Chukchi and the Beaufort Seas.

Along with this development, marine transportation systems have evolved. Ice breaking vessels and tug and barge equipment have traveled along Alaska's Arctic coasts since the development of the Prudhoe Bay oil and gas deposits. Ice breaking U.S. Coast Guard (and U.S. Revenue Service) vessels have patrolled the region for over a century, and ice strengthened research vessels occasionally transit the area. Military operations under the ice cover have likely been continuous for many decades. The military has explored options for climate warming trends and increasing military activities in the region (ONR 2001). If warming trends continue, interest will increase in commercial transportation by vessels in the ice free waters of the Beaufort as this would significantly shorten transit times between the west and east coasts of Canada and the U.S.

Management Issues

Under the Magnuson-Stevens Act, the Council has the authority to develop fishery management plans for EEZ fisheries offshore of Alaska, including the Chukchi and Beaufort Seas. Some of the Council's FMPs partially cover fishing activities in the Arctic. The following summarizes the status of authorized Federal management of marine organisms harvested in commercial fisheries of Alaska's EEZ.

Current groundfish fishery regulations at CFR 679.1(b) specify that the Fishery Management Plan for the Groundfish Fishery of the Bering Sea and Aleutian Islands Management Area governs commercial fishing by U.S. vessels for groundfish in the Bering Sea and Aleutian Islands Management Area as described in Figure 1 to CFR 679.2 (see Figure 2 attached to this discussion paper). The BSAI is defined as the U.S. EEZ of the eastern Bering Sea and that portion of the North Pacific Ocean adjacent to the Aleutian Islands with a northern boundary defined as Bering Strait (defined as a straight line from Cape Prince of Whales [sic] to Cape Dezhneva, Russia). In Figure 1 to CFR 679.1(b), the Chukchi Sea is designated Statistical Reporting Area 400. Statistical Area 400 is defined as the area north of a diagonal line between 66° 00' N, 169° 42.5' W (Cape Dezhneva, Russia) and 65° 37.5' N, 168° 7.5' W (Cape Prince of Wales, Alaska) and to the limits of the U.S. EEZ as described in the current edition of NOAA chart INT 814 Bering Sea (Northern Part)(Note: Chart numbering is uncertain; Chart 514 may be the current number for this area). Inspection of this chart suggests that only a portion of the U.S. EEZ of the Chukchi Sea is considered part of Statistical Area 400. Statistical Area 514 is the northernmost statistical area in the BSAI, but it extends as far north as "the southern boundary of the Chukchi Sea, area 400." Thus, the Chukchi Sea is not part of the BSAI management area, nor is the Beaufort Sea.

Regulations at 679.2 also define the management of king and Tanner crab under the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crab as encompassing the area of the Alaskan EEZ in the Chukchi Sea south of Point Hope (68° 21' N. lat) through the Bering Sea and Aleutian Islands areas. Thus current Federal jurisdiction for Tanner and king crab, and regulations associated with these fisheries, extend partly into the Chukchi Sea. This includes some portions of the Chukchi Sea, but not all, and none of the Beaufort Sea.

There are no commercial halibut fisheries in this region. The International Pacific Halibut Commission (IPHC) exercises jurisdiction in all maritime waters of the U.S. and Canada wherever halibut are present (Gregg Williams, IPHC, pers. comm.). The IPHC has previously received proposals for an experimental fishery in the Chukchi Sea, but no fishery has developed. The Halibut Convention applies to halibut fisheries in "Convention Waters" which are defined to mean the "territorial waters and the high seas off the western coasts of the United States of America and of Canada, including the southern as well as the western coasts of Alaska." It is unclear whether Convention Waters include the Chukchi Sea, although the IPHC apparently does appear to include the Chukchi Sea given how the Commission has addressed experimental halibut fisheries in the past. The State Department could be contacted for additional information on how halibut fisheries might be dealt with in the Chukchi and Beaufort Seas off Alaska.

The Fishery Management Plan for the Scallop Fishery off Alaska governs commercial fishing for scallops in Federal waters off Alaska by vessels of the U.S. The description of the geographic coverage of the scallop FMP appears to exclude the Chukchi Sea. The regulations at 679.1(h) govern "commercial fishing for scallops in the Federal waters off Alaska by vessels of the United States..." There is little other information on the geographic scope of the regulations, but there may be question whether the FMP governs fishing in the EEZ north of Bering Strait (Jonathan Pollard, NOAA General Counsel Office, AKR, pers. comm.). Currently, management is deferred to the State of Alaska and those regulations could apply to an emerging fishery in the Arctic. The Northern Bering Sea Shellfish Statistical Area, which includes scallop fishing, extends into the Chukchi Sea to just north of Point Hope (68° 30' N).

The Fishery Management Plan for the Salmon Fisheries in the EEZ off the Coast of Alaska governs fishing by U.S. commercial fishing vessels in the Salmon Management Area. This Area is defined as the waters of the EEZ off the coast of Alaska (referencing Figure 23 of Part 679) including the Chukchi Sea and Beaufort Sea (679.2). Under 679.3(f), commercial fishing for salmon in the U.S. EEZ of the Chukchi and Beaufort Seas is prohibited.

An emerging fishery not covered by the above FMPs or regulations could be regulated by the State of Alaska as authorized by the MSA Section 306(a)(3)(A). This section provides for State authorization of a fishery outside State boundaries if the vessel is registered with the State and there is no FMP or other applicable Federal regulations for the fishery in which the vessel is operating. Presumably, NMFS could authorize such a fishery as well through the Council process or by emergency rule.

Policy Options

Given the physical conditions (ice, short seasons, distance from ports and support facilities) that could limit conventional fishing activity in Arctic waters, and the apparently low abundance of potentially-exploitable finfish or shellfish resources there, the likelihood of significant fishery development in the near future seems low. But with climate warming trends and the possibility of reduced ice cover in future decades, these

conditions may change. Thus, the Council may wish to take a proactive stance and start to consider policy options.

The Council could explore such options as prohibiting commercial fishing in the EEZ, or allowing some experimental fisheries to occur, or encouraging fishery development on a case by case basis. Each policy option could have supporting rationale. For example, a fishing prohibition might be based on concerns over habitat damage, interference with subsistence whaling activities, or disturbance of marine mammals. In general, the Council would state the fisheries it desires to conserve and manage and develop an appropriate regulatory vehicle to accomplish its objectives.

Next Steps

If the Council wishes to proceed with exploring policy options for the management of fisheries in the Chukchi/Beaufort Seas, the Council could task staff to flesh out a more detailed discussion paper. The Council may wish to include in that discussion paper one or more of the following management options.

1. Status Quo. The Council could determine that status quo is an option, at least for now. Under this option, the Council would do nothing and commercial fishing in the Alaskan Arctic EEZ would be allowed under existing FMPs or existing State or Federal regulations. This option could be described in more detail, including particularly the legal and regulatory issues associated with the current management regimes that are included in existing FMPs or outside FMPs. This would also include a more thorough description of authorities under the Halibut Act.
2. Prohibit Certain Commercial Fishing in the Arctic EEZ. The Council could develop a management policy or management plan that specifies that commercial fishing for certain marine organisms would not be allowed. The Council may determine that a conservation issue requires such a prohibition. Currently, the king and Tanner crab FMP covers part of the Chukchi Sea, and the current Salmon FMP prohibits salmon fishing in Arctic EEZ waters. The current scallop FMP covers the Arctic. Any of these Plans could be amended to include an Arctic prohibition, with supporting rationale. The Council could expressly determine that other kinds of fishing not part of existing FMPs could be prohibited, such as fishing for krill.
3. Defer management to the State of Alaska. Similar to actions the Council has taken previously with scallops and crab, the Council could defer future management of Arctic fisheries not covered under existing Federal FMPs to the State; the Council could retain responsibility for allocative decisions should such fisheries develop. Presumably, this would be similar to No. 2 above, except that instead of a prohibition, the Council would defer that decision to the State.
4. Draft a Fishery Ecosystem Plan. The Council could develop a policy document in the form of a FEP that acknowledges the unique habitat features and fishery resources of the area. The FEP would describe the area, describe current fisheries, identify known species and habitats, and identify current issues and

research needs. The FEP could provide a mechanism for continued Council interactions with other stakeholders in the region. An FEP would tie together the various provisions of existing FMPs and examine the status quo in light of ongoing and new scientific research, pending resource development (e.g. oil and gas lease sales), and continued climate change, and provide options for future fishery management based on this information.

5. Draft a Fishery Management Plan. An FMP for the Arctic Ocean would likely be similar in content to other Council FMPs, but since existing FMPs already provide a vehicle for management of salmon, scallops, and partly for king and Tanner crab, a new FMP would likely focus on groundfish. An Arctic Ocean groundfish fishery FMP would likely contain sections on management policy and objectives, conservation and management measures, description of stocks and fisheries, and descriptions of how the FMP relates to other laws, treaties, fisheries, and activities, particularly oil and gas development, in the region.
6. Extend the existing FMP for the BSAI groundfish fisheries to include the Arctic. This could take the form of including Statistical Area 400 – Chukchi Sea – in the BSAI FMP, and adding a new Management Area for the Beaufort Sea and development of regulations appropriate to the fishery resources in these areas.

There is a large amount of previously-written information on this region, and recently the North Pacific Research Board commissioned a synthesis report on climate change impacts on the Chukchi and Beaufort Seas. Other information sources would be the oil and gas industry, the U.S. Coast Guard, the Office of Naval Research, the U.S. Arctic Research Commission, other Federal and State agencies, the North Slope Borough and the Northwest Arctic Borough, and several oil and gas lease sale NEPA documents prepared by the Minerals Management Service for the Chukchi and Beaufort offshore planning areas.

A draft document could include descriptions of existing fish and shellfish species, fisheries, habitat features and unique habitat types, options for management areas, descriptions of possible participants, possible vessels and gear that could be used to prosecute fisheries, current Federal and State and local governmental regulatory authorities and relationships to possible EEZ fishery management, enforcement options, and research needs.

Since little is known about the potential for commercial exploitation of finfish or shellfish in this region, staff effort would initially focus on conducting a literature review, meeting with knowledgeable scientists, contacting Borough and local community residents to obtain traditional knowledge, and developing mapping capability and a data base.

The Council should give direction on the amount of time and effort they recommend investing in the development of a draft policy document.

<u>References</u>

Aagaard, K. 1984. The Beaufort Undercurrent. Pages 47-71 in P.W. Barnes, ed. The Alaskan Beaufort Sea, Ecosystems and Environments, Academic Press.

Frost, K.J. and L.F. Lowry. 1984. Trophic relationships of vertebrate consumers in the Alaskan Beaufort Sea. In: The Alaskan Beaufort Sea, Ecosystems and Environments, P.W. Barnes et al., eds., Academic Press, p. 381-401.

Hawks, J. 2006. Groundfish: Will Barrow become the next Dutch Harbor? Pacific Fishing, November, 2006. P. 8-9.

Hopcroft, R., B. Bluhm, R. Gradinger, T. Whitledge, T. Weingartner, B. Norcross, and A. Springer. In Preparation. Arctic Ocean Synthesis: Analysis of Climate Change Impacts in the Chukchi and Beaufort Seas with Strategies for Future Research. Institute of Marine Science, University of Alaska Fairbanks. North Pacific Research Board, draft report, August 2006. 116 p.

Richter-Menge, J., J. Overland, A. Proshutinsky, V. Romanovsky, L. Bengtsson, L. Brigham, M. Dyurgerov, J.C. Gascard, S. Gerland, R. Graversen, C. Haas, M. Karcher, P. Kuhry, J. Maslanik, H. Melling, W. Maslowsky, J. Morison, D. Perovich, R. Przybylak, V. Rachold, I. Rigor, A. Shiklomanov, J. Stroeve, D. Walker, and J. Walsh. 2006. State of the Arctic Report. NOAA OAR Special Report, NOAA/OAR/PMEL, Seattle, WA, 36 p.

NRC (National Research Council). 2003. Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope. Committee on Cumulative Environmental Effects of Oil and Gas Activities on Alaska's North Slope. The National Academies Press, Washington, D.C. 288 p.

Newton, G.B. 2005. From Arctic Ocean research to UNCLOS, Article 76, and back. Fourth Biennial Scientific Conference of ABLOS – Marine Scientific Research and the Law of the Sea, October 10-12, 2005, Monaco. Manuscript. 8 p.

ONR (Office of Naval Research). 2001. Naval Operations in an Ice-free Arctic. Final Report. Symposium on Naval Operations in an Ice-free Arctic, April 17-18, 2001. 70 p.

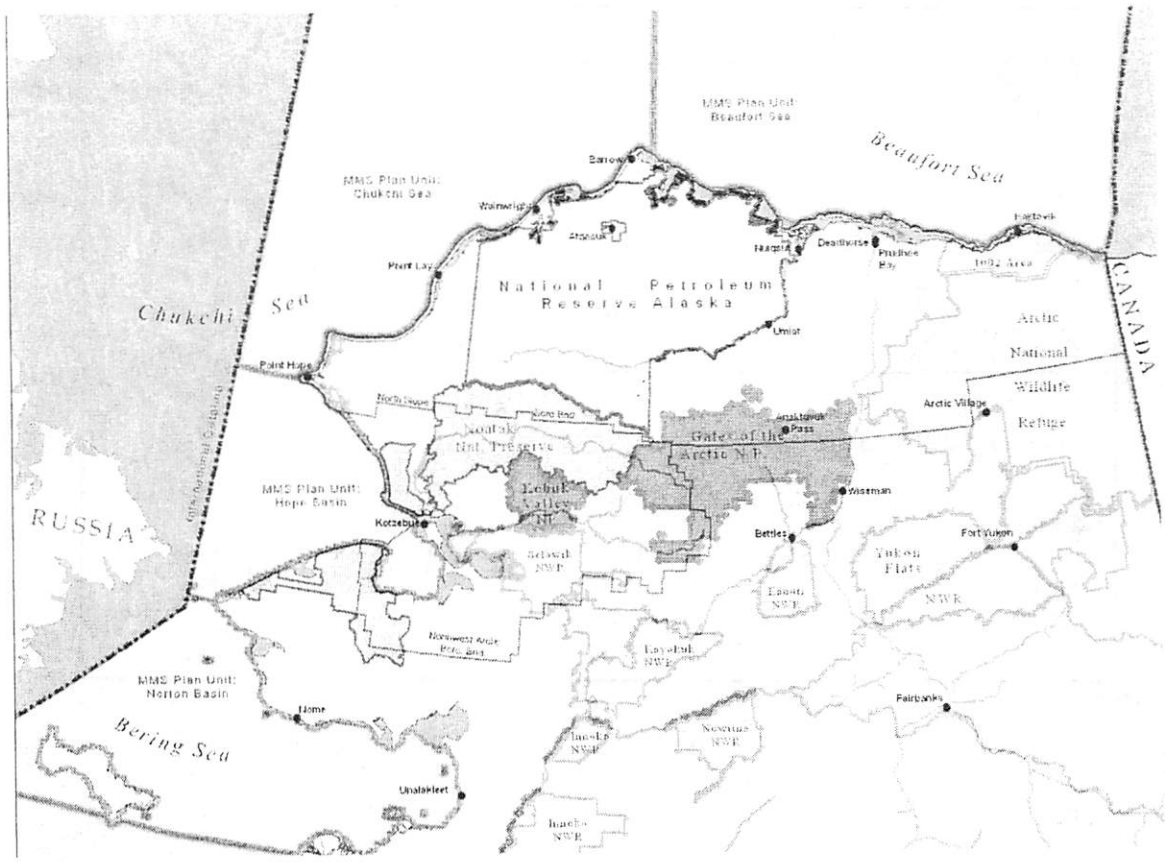
Thorsteinson, L.K. and W.J. Wilson. 1995. Anadromous fish of the central Alaska Beaufort Sea. Pages 341-343 in E.T. LaRoe et al., eds. Our Living Resources. A Report to the Nation on the Distribution, Abundance, and Health of U.S. Plants, Animals, and Ecosystems. U.S. Dept of the Interior, Washington, D.C. 530 p.

UNEP/GRID-Arendal, 'Ocean currents and sea ice extent', *UNEP/GRID-Arendal Maps and Graphics Library*, Dec 97, <http://maps.grida.no/go/graphic/ocean_currents_and_sea_ice_extent> [Accessed 7 November 2006]

Weingartner, T.J. 1997. A review of the physical oceanography of the northeastern Chukchi Sea. In: Fish Ecology in Arctic North America, J.B. Reynolds, ed., American Fisheries Society Symposium 19, Bethesda, MD, p. 40-59.

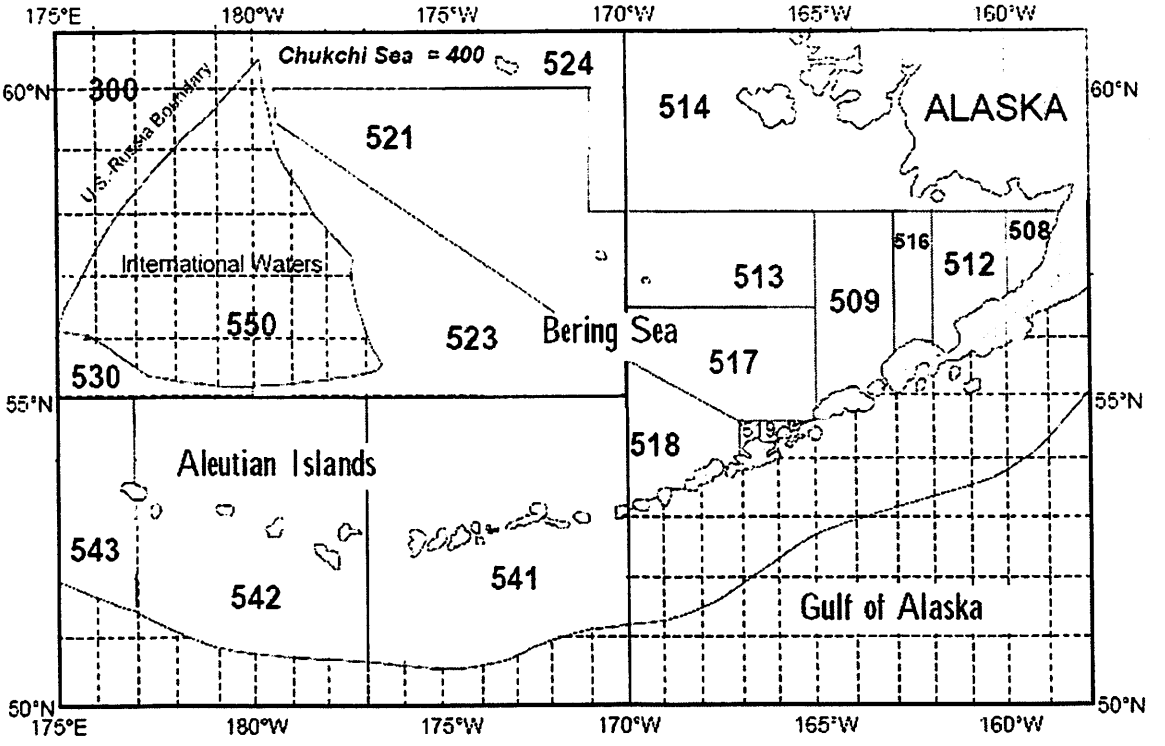
Wilson, W.J. and B.J. Gallaway. 1997. Synthesis in applied fish ecology: Twenty years of studies on effects of causeway development on fish populations in the Prudhoe Bay region, Alaska. Pages 326-339 in J. Reynolds, ed. Fish Ecology in Arctic North America. American Fisheries Society Symposium 19, Bethesda, MD. 345 p.

Figure 1. Some land status features of northern Alaska adjacent to the Chukchi and Beaufort Seas.

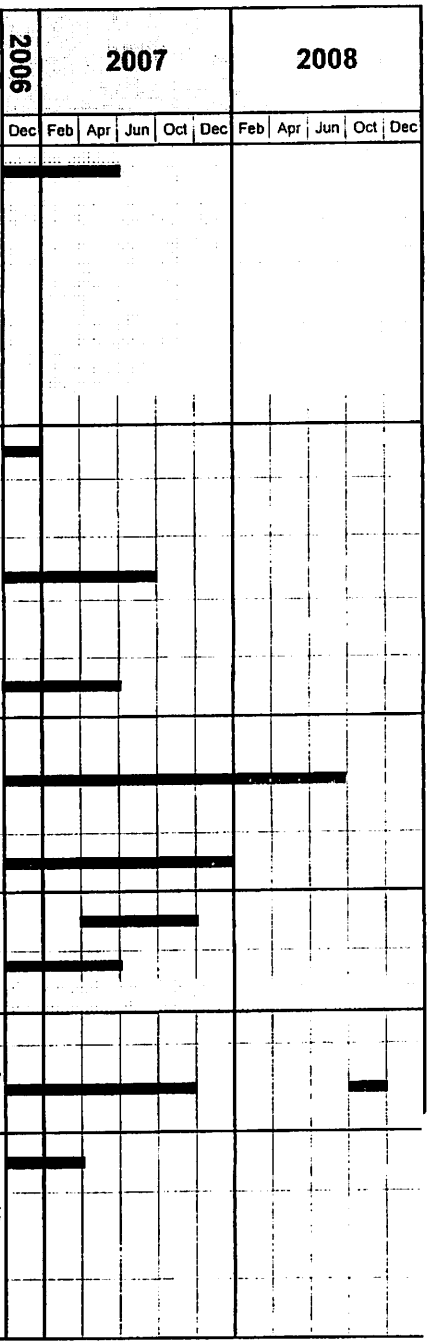


Map courtesy of Marcus Geist, The Nature Conservancy (pers. comm.).

Figure 2. Regulatory areas of the Bering Sea/Aleutian Islands area.



General Priority (in no particular order)	Specific priority actions	Related to management objective:	Status *(updated 11-17-06)*
Protection of Habitat	a. complete EFH action as scheduled	27	**Amendment approved by Council;** BS mitigation measures discussion Dec 06
	b. recommend to NOAA Fisheries increased mapping of benthic environment	29	**part of Council's research priorities, approved in April 06**
	c. develop and adopt definitions of MPAs, marine reserves, etc.	30	Marine Fisheries Review paper in press
	d. review all existing closures to see if these areas qualify for MPAs under established criteria	30	Marine Fisheries Review paper in press
	e. evaluate effectiveness of existing closures	26	Marine Fisheries Review paper in press
Bycatch Reduction	a. complete rationalization of GOA fisheries	17 (32)	rockfish demonstration program approved; analysis ongoing for broader rationalization
	b. complete rationalization of BSAI non-pollock fisheries	17 (32)	partially addressed through IRIU Amd 80 and P cod sector allocations (approved)
	c. explore incentive-based bycatch reduction programs	15	partially addressed through GOA rationalization and BSAI salmon vessel bycatch accountability analyses
	d. explore mortality rate-based approach to setting PSC limits	20	
	e. consider new management strategies to reduce incidental rockfish bycatch and discards	17	revised ranking system for species of concern
Protection of Steller Sea Lions	a. continue to participate in development of mitigation measures to protect SSL including development of an EIS and participation in the ESA jeopardy consultation process	23	SSL committee reviewing proposals on revised mitigation measures; NMFS is preparing a Biological Opinion, revising SSL recovery plan
	b. recommend to NOAA Fisheries and participate in reconsideration of SSL critical habitat	23	Council to submit comments on Final Recovery Plan
Prevent Overfishing	a. continue to participate in the development of "lumping and splitting" criteria	5	GOA 'other species' amd approved; 'other species' breakout analysis initiated
	b. consider new harvest strategies for rockfish	4	response to CIE review of rockfish harvest strategy
	c. set TAC at or < ABC	1	**Amendment approved by Council**
Ecosystem Management	a. revisit calculation of OY caps	11, 4	research paper presented to SSC Feb 05
	b. recommend to NOAA Fisheries and participate in the development and implementation of ecosystem indicators as part of stock assessment process	10	ecosystem SAFE presented annually; AI FEP to identify ecosystem indicators for the Aleutians
Improve Data Quality and Management	a. expand or modify observer coverage and sampling methods based on scientific data and compliance	38, 39	discussion in Feb 07
	b. develop programs for economic data collection that aggregate data	40	socioeconomic data collection workgroup report Apr 07; partially addressed in BSAI Amd 80 and GOA rationalization
	c. modify VMS to incorporate new technology and system providers	41	global VMS analysis initial review in Feb 07



Progress on Implementing the Groundfish Programmatic Workplan and Staff Notes for Revisions to the Workplan

June 2004-October 2006

REVISED for December 2006

The current Groundfish Workplan is attachment D-5(f) in this packet. The full list of management objectives in the FMPs are excerpted on pages 6-9 of this document. The staff notes for revisions to the workplan are also represented in the strawman revisions to the workplan, Item D-5(h).

Protection of Habitat

- relates to FMP policy objectives 26-30, Reduce and Avoid Impacts to Habitat

2004 workplan priority actions

Achieved:
- EFH action is completed
- Increased benthic habitat mapping is a Council's research priority
- Review of existing closures and MPA definitions, paper in press

Ongoing:
- Effectiveness of existing crab and salmon closures continues to be reviewed
- Bering Sea analysis of mitigation measures to protect habitat ongoing

FMP policy objectives

The 2004 workplan largely captured the action items in the FMP policy objectives.

Staff notes on revisions to workplan

- The Council may wish to remove the all the priority actions except for 'review effectiveness of existing closures', as these items have been achieved
- Ideas for new actions:
  - consider Bering Sea EFH mitigation measures
  - call for habitat areas of particular concern proposals on 3-year cycle

Bycatch Reduction

- relates to FMP policy objectives 14-21, Manage Incidental Catch and Reduce Bycatch and Waste

2004 workplan priority actions

Achieved:
- Fishery rationalization programs in the BSAI and GOA: BSAI multispecies trawl flatfish fishery, BSAI Pacific cod sector allocations, GOA rockfish demonstration program

Ongoing:
- Council is working on rationalization of the GOA fisheries
- Incentive-based bycatch reduction programs being explored through GOA rationalization and salmon bycatch analyses, also mortality-based approaches to setting bycatch limits
- new management strategies to reduce rockfish bycatch

FMP policy objectives

The workplan priority actions draw on FMP policy objectives 15, 17, and 20. The FMP policy objectives also address other issues.

- The FMP policy objectives (14, 18, 20) include a number of objectives to continue and improve bycatch management through spatial, seasonal, and gear restrictions, and PSC limits. In the PSEIS, the Council identified the GOA as a target area for new PSC controls, and the Council is addressing this action as part of the GOA rationalization analysis.
- Objectives 16 and 19 address improving bycatch mortality accounting for all species, and improving population estimates for non-target species.

Staff notes on revisions to workplan

- The Council may wish to continue to identify GOA rationalization as a priority action for bycatch reduction, also incentive-based bycatch reduction programs.
- The Council may wish to remove BSAI rationalization (as much of action has been achieved), and mortality-rate based PSC limits (adapted below).
- Ideas for new priority actions:
  - Explore need for biomass-based PSC limits in GOA fisheries as part of GOA rationalization (objective 20)
  - Continue and improve rigorous statistical approach to determining bycatch of all species (objective 19)
  - Encourage research programs to evaluate population estimates for non-target species (objective 16)

Protection of Steller Sea Lions

- relates to FMP policy objectives 22-25, Avoid Impacts to Seabirds and Marine Mammals

2004 workplan priority actions

Ongoing:
- NMFS is preparing a Biological Opinion and revising the SSL Recovery Plan
- Council is re-evaluating mitigation measures to protect SSL and participating in the ESA jeopardy consultation process

FMP policy objectives

The workplan priority actions draw on FMP policy objectives 23-25 with specific reference to SSLs. Other FMP policy objectives call for cooperation with NMFS and USFWS to protect ESA-listed species, and review of fishery interactions with marine mammals as appropriate.

Staff notes on revisions to workplan

- The Council may wish to continue priority action to participate in development of mitigation measures
- NMFS is preparing a biological opinion, and revising the SSL recovery plan. The Council may wish to consider whether it wants the agency to also recommend reconsideration of SSL critical habitat; if not, the Council may wish to remove this item.

Prevent Overfishing

- relates to FMP policy objectives 1-5, Prevent Overfishing

2004 workplan priority actions

Achieved:
- Set TAC at or < ABC

Ongoing:
- continue to develop "lumping and splitting" criteria
- consider new harvest strategies for rockfish

FMP policy objectives

The 2004 workplan largely captured the action items in the FMP policy objectives.

Staff notes on revisions to workplan

- The Council may wish to remove action to set upper limit for TAC (achieved).
- The Council may wish to continue priority action to develop new management strategies to manage target species and protect incidental catch species ("lumping and splitting").
- The Council may wish to revise rockfish priority action based on recent CIE review of rockfish harvest strategies: evaluate effectiveness of setting ABC levels using Tier 5 and 6 approaches.

Ecosystem Management

- relates to FMP policy objectives 10-13, Preserve Food Web

2004 workplan priority actions

Achieved:
- Annual presentation of ecosystem indicators as part of stock assessment process
- Research paper on calculation of OY caps

Ongoing:
- Development of a subset of key indicators for each ecosystem area

FMP policy objectives

The FMP policy objectives also address other issues.

- FMP policy objective 11 seeks to improve the procedure to account for uncertainty and ecosystem considerations in estimating ABC. Amendments 56/56 to the BSAI/GOA FMPs addressed uncertainty in establishing the overfishing definitions for groundfish species; the PSEIS proposed a different procedure, and the expected revisions to National Standard 1 guidelines may differ from either of these.
- Objective 13 seeks generally to incorporate ecosystem-based considerations into fishery management decisions. A recently initiated Council action to develop a FEP for the AI aims to provide an interface between ecosystem science and Council decision-making.

Staff notes on revisions to workplan

- The Council may wish to remove action to review calculation of OY caps (achieved).
- The Council may wish to revise ecosystem indicator action to: encourage and participate in development of key ecosystem indicators for Council ecosystem areas.
- Ideas for new priority actions:
  - Reconcile procedures to account for uncertainty and ecosystem considerations in establishing harvest limits.
  - Develop Fishery Ecosystem Plan for the Aleutian Islands.

Improve Data Quality and Management

- relates to FMP policy objectives 38-45, Improve Data Quality, Monitoring, and Enforcement

2004 workplan priority actions

Ongoing:
- Modify observer program
- Develop programs for economic data collection
- Modify VMS program

FMP policy objectives

A number of FMP policy objectives promote cooperation with partner agencies, coordinated research programs, and improvements in monitoring and enforceability that are taken into account with each Council action.

Staff notes on revisions to workplan

- The Council may wish to continue progress on all priority actions in this category.

FMP policy categories not included in the workplan

Promote Sustainable Fisheries and Communities

FMP policy objectives

FMP policy objectives in this category promote considerations such as safety, stability, and fairness, which are taken into account by the Council during each management action.

Staff notes on revisions to workplan

- No priority actions are required.

Promote Equitable and Efficient Use of Fishery Resources

FMP policy objectives

In addition to echoing principles of fairness and efficiency, the FMP policy objectives in this category promote the elimination of latent licenses, and extending community- or rights-based management programs. Also, objective 33 calls for periodic review of rationalization programs.

Staff notes on revisions to workplan

- Idea for new priority action:
  - Continue rationalization of GOA fisheries, while accounting for community provisions and review requirements.

Increase Alaska Native Consultation

In October 2006, the Council requested further information on the Council and NMFS' activities relating to the FMP policy goal, **Increase Alaska Native Consultation**.

FMP policy objectives

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

Council/NMFS progress

Consultation with tribes: Executive Order 13175, Consultation and Coordination with Indian Tribal Governments, requires NMFS to consult and collaborate with tribal officials in the development of Federal policies that have tribal implications, and to strengthen government-to-government relationships with Indian tribes. NMFS regularly informs tribal governments of major fishery management actions as they are being scoped or when drafts are available for review, and often provides public hearing opportunities in addition to encouraging written comments. On subsistence halibut issues, NMFS supports the Alaska Native Subsistence Halibut Working Group which provides advice and comment to the Council and NMFS on the management of the subsistence halibut fishery.

Community conferences: The Council and NMFS have co-sponsored two Alaska coastal community conferences in the last 2 years. These conferences are designed for coastal Alaska community residents, including fishermen, municipal and tribal government representatives, and other coastal residents involved in the fishing economy. Development and marketing of the conference included specific outreach to Native villages in all coastal regions.

Support for community collaborations: NMFS provides financial support to the Pribilof Islands Collaborative (PIC). The PIC brings together fishing industry leaders, local fishermen, CDQ groups, local entities (Native corporation, city government, tribe) from St. Paul and St. George, conservation interests, and federal resource managers to lay the foundation for a new collaborative rather than a confrontational approach to resolving issues in fisheries and wildlife management.

Community research: The Council and NMFS evaluate impacts of fishery management actions on fishing engaged and dependent communities as part of every proposed action. Where appropriate, field research may be funded to fully understand the impacts of an action on a community or set of communities in an expanded social impact assessment.

Community profiles: NMFS Alaska Fisheries Science Center recently completed community profiles for 136 communities in Alaska with involvement in North Pacific fisheries, in order to provide a consolidated source of baseline information for assessing community impacts in Alaska. The Alaska region is the first to complete this nation-wide project, providing a model for other regions.

Staff notes on revisions to workplan

Idea for new priority actions:

- Develop a protocol or strategy for improving the Alaska Native and community consultation process.
- Develop a method for systematic documentation of Alaska Native and community participation in the development of management actions.

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

2.2 Management Approach for the BSAI [GOA] Groundfish Fisheries

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

As part of its policy, the Council intends to consider and adopt, as appropriate, measures that accelerate the Council's precautionary, adaptive management approach through community-based or rights-based management, ecosystem-based management principles that protect managed species from overfishing, and where appropriate and practicable, increase habitat protection and bycatch constraints. All management measures will be based on the best scientific information available. Given this intent, the fishery management goal is to provide sound conservation of the living marine resources; provide socially and economically viable fisheries for the well-being of fishing communities; minimize human-caused threats to protected species; maintain a healthy marine resource habitat; and incorporate ecosystem-based considerations into management decisions.

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

2.2.1 Management Objectives

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

To meet the goals of this overall management approach, the Council and NMFS will use the Alaska Groundfish Fisheries Programmatic Supplemental Environmental Impact Statement (PSEIS) (NMFS 2004) as a planning document. To help focus consideration of potential management measures, the Council and NMFS will use the following objectives as guideposts, to be re-evaluated, as amendments to the FMP are considered over the life of the PSEIS.

Prevent Overfishing:

1. Adopt conservative harvest levels for multi-species and single species fisheries and specify optimum yield.
2. Continue to use the 2 million mt optimum yield cap for the BSAI groundfish fisheries. [Continue to use the existing optimum yield cap for the GOA groundfish fisheries.]
3. Provide for adaptive management by continuing to specify optimum yield as a range.
4. Provide for periodic reviews of the adequacy of F_{40} and adopt improvements, as appropriate.
5. Continue to improve the management of species through species categories.

Promote Sustainable Fisheries and Communities:

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

Preserve Food Web:

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

Manage Incidental Catch and Reduce Bycatch and Waste:

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

20. Control the bycatch of prohibited species through prohibited species catch limits or other appropriate measures.
21. Reduce waste to biologically and socially acceptable levels.

Avoid Impacts to Seabirds and Marine Mammals:

22. Continue to cooperate with U.S. Fish and Wildlife Service (USFWS) to protect ESA-listed species, and if appropriate and practicable, other seabird species.
23. Maintain or adjust current protection measures as appropriate to avoid jeopardy of extinction or adverse modification to critical habitat for ESA-listed Steller sea lions.
24. Encourage programs to review status of endangered or threatened marine mammal stocks and fishing interactions and develop fishery management measures as appropriate.
25. Continue to cooperate with NMFS and USFWS to protect ESA-listed marine mammal species, and if appropriate and practicable, other marine mammal species.

Reduce and Avoid Impacts to Habitat:

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

Promote Equitable and Efficient Use of Fishery Resources:

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

Increase Alaska Native Consultation:

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

Improve Data Quality, Monitoring and Enforcement:

38. Increase the utility of groundfish fishery observer data for the conservation and management of living marine resources.
39. Develop funding mechanisms that achieve equitable costs to the industry for implementation of the North Pacific Groundfish Observer Program.
40. Improve community and regional economic impact costs and benefits through increased data reporting requirements.
41. Increase the quality of monitoring and enforcement data through improved technology.
42. Encourage a coordinated, long-term ecosystem monitoring program to collect baseline information and compile existing information from a variety of ongoing research initiatives, subject to funding and staff availability.
43. Cooperate with research institutions such as the North Pacific Research Board in identifying research needs to address pressing fishery issues.
44. Promote enhanced enforceability.
45. Continue to cooperate and coordinate management and enforcement programs with the Alaska Board of Fish, Alaska Department of Fish and Game, and Alaska Fish and Wildlife Protection, the U.S. Coast Guard, NMFS Enforcement, International Pacific Halibut Commission, Federal agencies, and other organizations to meet conservation requirements; promote economically healthy and sustainable fisheries and fishing communities; and maximize efficiencies in management and enforcement programs through continued consultation, coordination, and cooperation.

STRAWMAN revisions to workplan - based on staff notes in progress report

General Priority (in no particular order)		Specific priority actions	Related to management objective:	Status (updated 11-17-06)	Comments on STRAWMAN revisions
Prevent Overfishing	a.	continue to ~~participate in the~~ development ~~of "lumping and splitting" criteria~~ *management strategies that ensure sustainable yields of target species and minimize impacts on populations of incidentally-caught species*	5	GOA 'other species' and approved 'other species' break-out analysis initiated	**rewording of priority action**
	b.	~~consider new harvest strategies for rockfish~~ *evaluate effectiveness of setting ABC levels using Tier 5 and 6 approaches*	4	response to CIE review of rockfish harvest strategy	**revised priority action for rockfish reflects CIE review's comments on rockfish harvest strategy**
	c.	~~set TAC at or < ABC~~	~~1~~	Amendment approved by Council	**REMOVE: action completed**
Preserve Food Web	a.	~~revisit calculation of OY caps~~	~~11, 4~~	research paper presented to SSC Feb 06	**REMOVE: action completed**
	b.	*encourage* ~~recommend to NOAA Fisheries~~ and participate in the development ~~and implementation of~~ *key* ecosystem indicators ~~as part of stock assessment process~~	10	ecosystem SAFE presented annually. AI FEP to identify ecosystem indicators for the Aleutians	**simplify wording; also, indicators may have broader utility than just stock assessment process**
	*	*Reconcile procedures to account for uncertainty and ecosystem considerations in establishing harvest limits*	11		***IDEA FOR NEW ACTION***
	*	*develop pilot Fishery Ecosystem Plan*	13		***IDEA FOR NEW ACTION***
Manage Incidental Catch and Reduce Bycatch and Waste	a.	~~complete rationalization of GOA fisheries~~	17 (32)	rockfish demonstration program approved, analysis ongoing for broader rationalization	**REMOVE: moved to fishery resource section below, also combined with bycatch action 'c'**
	b.	~~complete rationalization of BSAI non-pollock fisheries~~	17 (32)	partially addressed through IRIU Amd 80 and P cod sector allocations (approved)	**REMOVE: actions taken to assist in bycatch reduction**
	c.	explore incentive-based bycatch reduction programs *in GOA fisheries (e.g., rationalization)*	15	partially addressed through GOA rationalization and BSAI salmon vessel bycatch accountability analyses	**rewording of priority action to combine with bycatch action 'a' above**
	d.	explore mortality rate-based approach to setting PSC limits *in GOA fisheries*	20		**rewording to focus on PSC limits in GOA fisheries**
	e.	consider new management strategies to reduce incidental rockfish bycatch and discards	17	revised ranking system for species of concern	**no change proposed**
	*	*develop statistically rigorous approaches to estimating bycatch in line with national initiatives*	14, 19		***IDEA FOR NEW ACTION***
	*	*encourage research programs to evaluate population estimates for non-target species*	16		***IDEA FOR NEW ACTION***
Reduce and Avoid Impacts to Seabirds and Marine Mammals	a.	continue to participate in development of mitigation measures to protect SSL including ~~development of an EIS and~~ participation in the *FMP-level* ~~ESA jeopardy~~ consultation process *under the ESA*	23	SSL committee reviewing proposals on revised mitigation measures. NMFS is preparing a Biological Opinion revising SSL recovery plan	**rewording for increased accuracy**
	b.	recommend to NOAA Fisheries and participate in reconsideration of SSL critical habitat	23	Council to submit comments on Final Recovery Plan	**if new BiOp and reevaluation of recovery plan are sufficient, remove; if Council wants reconsideration of CH, retain**

STRAWMAN revisions to workplan - based on staff notes in progress report

General Priority (in no particular order)		Specific priority actions	Related to management objective:	Status *(updated 11-17-06)*	Comments on STRAWMAN revisions
Reduce and Avoid Impacts to Habitat	a.	~~complete EFH action as scheduled~~	27	Amendment approved by Council; BS mitigation measures discussion Dec 06	**REMOVE: action completed**
	b.	~~recommend to NOAA Fisheries increased mapping of benthic environment~~	29	part of Council's research priorities, approved in April 06	**REMOVE: action completed**
	c.	~~develop and adopt definitions of MPAs, marine reserves, etc.~~	30	Marine Fisheries Review paper in press	**REMOVE: national committee is developing definitions**
	d.	~~review all existing closures to see if these areas qualify for MPAs under established criteria~~	30	Marine Fisheries Review paper in press	**REMOVE: review completed**
	e.	evaluate effectiveness of existing closures	26	Marine Fisheries Review paper in press; salmon bycatch analysis ongoing	**no change proposed**
	*	*consider Bering Sea EFH mitigation measures*	27		***IDEA FOR NEW ACTION***
	*	*call for HAPC proposals on 3-year cycle*	27		***IDEA FOR NEW ACTION***
Promote Equitable and Efficient Use of Fishery Resources	*	*continue rationalization of GOA fisheries, while accounting for community provisions and review requirements*	32, 34		***IDEA FOR NEW ACTION***
Increase Alaska Native and Community Consultation	*	*Develop a protocol or strategy for improving the Alaska Native and community consultation process*	37		***IDEA FOR NEW ACTION***
	*	*Develop a method for systematic documentation of Alaska Native and community participation in the development of management actions*	37		***IDEA FOR NEW ACTION***
Improve Data Quality, Monitoring and Enforcement	a.	expand or modify observer coverage and sampling methods based on scientific data and compliance	38, 39	discussion in Feb 07	**no change proposed**
	b.	develop programs for economic data collection that aggregate data	40	socioeconomic data collection workgroup report Apr 07, partially addressed in BSAI Amd 80 and GOA rationalization	**no change proposed**
	c.	modify VMS to incorporate new technology and system providers	41	global VMS analysis initial review in Feb 07	**no change proposed**

AGENDA D-5
Supplemental
DECEMBER 2006

MUNDT MACGREGOR LLP
ATTORNEYS AT LAW

999 Third Avenue · Suite 4200
Seattle, Washington · 98104-4082

Telephone (206) 624-5950
Facsimile (206) 624-5469
www.mundtmac.com

Joseph M. Sullivan
(206) 516-0946
jsullivan@mundtmac.com

November 29, 2006

Ms. Stephanie Madsen, Chair
North Pacific Fishery Management Council
605 W 4th Avenue, Suite 306
Anchorage, Alaska 99501

SENT VIA FAX

Re: Crab Rationalization – Processor Rejection of North Region Bairdi Deliveries

Dear Ms. Madsen:

We represent Inter-Cooperative Exchange ("ICE"), an Alaska cooperative whose members are 11 crab harvesting coops that together hold approximately 70% of the catcher vessel owner IFQ issued under the crab rationalization program. We are writing to express our grave concern regarding the decision by Trident Seafoods Corporation, Peter Pan Seafoods, Inc., UniSea, Inc., Icicle Seafoods, Inc. and SnoPac Products, Inc. (the "Processors") to refuse to process any Bairdi crab at St. Paul, Alaska in connection with the upcoming 2007 Opilio crab season. See attached Trident Seafoods letter of November 14, 2006. The members of ICE believe that the Processors' decision will have direct foreseeable consequences that are completely inconsistent with the stock conservation goals of the crab rationalization program, and respectfully request that the Council initiate action to restrain, or at very least discourage, the Processors from rejecting deliveries of incidental Bairdi crab catch in connection with Opilio crab deliveries.

A small amount of Bairdi crab is unavoidably harvested as incidental catch in the Bering Sea Opilio crab fishery. The crab rationalization regulations require that when a vessel initiates an offload of crab, it cannot legally begin fishing again until all crab aboard the vessel have been offloaded. Under this requirement,

MUNDT MACGREGOR LLP
ATTORNEYS AT LAW

when a vessel makes an Opilio crab delivery, it must also deliver any Bairdi crab bycatch on board before returning to fishing.

By refusing to accept <u>any</u> Bairdi in connection with North region Opilio deliveries, the Processors are presenting harvesters with a Hobson's choice; either run their Bairdi bycatch to a South region port before returning to the North Opilio fishery, which is simply not commercially feasible, or discard Bairdi crab taken as bycatch before making their North Opilio deliveries, which is completely inconsistent with the stock conservation goals of the crab rationalization program.

While the ICE Board of Directors realizes that the Council does not have crab rationalization on its agenda for the December meeting, the ICE Board is deeply concerned that the consequences of the Processors' refusal to accept Bairdi bycatch in connection with 2007 North Opilio deliveries could reflect very poorly on the crab rationalization program. The ICE Board therefore requests that the Council take any action it can to restrain or discourage this activity.

Sincerely yours,

MUNDT MACGREGOR L.L.P.

Joseph M. Sullivan

JMS:cap
JMST\LTRS\LMADSEN-ICE RE BAIRDI-DECEMBER 06-3775-002A.DOC
Attachment

Trident SEAFOODS

TRIDENT SEAFOODS CORPORATION
5303 Shilshole Ave NW, Seattle, WA 98107-4000 • (206) 783-3818 • Fax: (206) 782-7195
Domestic Sales: (206) 783-3474 • Fax: (206) 783-7246
Export Sales: (206) 783-3818 • Fax: (206) 782-7195

November 14, 2006

To: All Crab Co-op members
RE: 2007 Northern Opilio Season

For the 2007 northern Opilio crab season, Trident *will not be operating the St Paul Plant.* Arrangements are being made for the M/V Stellar Sea and M/V Independence to do all the Northern Bering Sea Snow Crab IPQ's for Trident, Peter Pan, UniSea, Icicle and Snopac.

The plan is to have the Stellar Sea at St Paul Island around January 17th to begin processing crab. The Independence will arrive in St Paul soon after cod season closes. The Stellar Sea will begin radio schedule as they leave King Cove and will maintain schedule after the Independence arrives. The Independence will take over radio schedule when the Stellar Sea is done processing in St Paul.

Once 75% of our northern IPQ's have been processed, the Independence will announce a departure date. If you plan to start fishing your northern Opilio IFQ later than February, it will be **critical that you stay in close contact with us.**
Please understand we need to consolidate all the northern crab deliveries as much as possible. It is not economically feasible for us to stay in St Paul for a few individual deliveries.
The Stellar Sea and Independence **will not be processing any Bairdi crab**, so please make arrangements with your market to have the Bairdi delivered down south. The Trident fleet can take their Bairdi crab to Akutan.

There will be a limited amount of fuel and bait available on the Independence **(the Stellar Sea will not be dispensing any fuel).** Since the Trident St Paul Plant will be shut down, there will be no dock crew or office staff. Dock services IE: dock space, bait, fuel, water, phones, and cold storage will not be available through Trident.
These services may be available through TDX or the City, please contact them directly to see what services will be available.
Laura Lestenkof, who has done some expediting in St Paul for various boats in the past, may be available. She can be contacted at 907-546-2234 or 907-546-2477 or e mail laurales75@hotmail.com .

It is going to be very important that the Stellar Sea and Independence are able to stay in contact with the fishing fleet during the season, so make sure we have all the vessels updated contact information. Please return the form that was e mailed earlier requesting this information.
Quick note for Southern crab deliveries: During Pollock start up; Trident Akutan will not be accepting any crab deliveries between January 20th-31st.

Regards

Ray Nomura

12/12/06

Public Testimony Sign-Up Sheet

Agenda Item D-5 Staff Tasking

	NAME (PLEASE PRINT)	AFFILIATION
1	Stephen Taufen	FN STORMBIRD / NORTH POINT
2	BUBBA COOK	WWF
3	Dave Fraser	Alaska Fisheries
4	DAVE BENTON	MCA
5	Chris Krenz	Oceana
6	Joe Sullivan	Mundt MacGregor / ICE
7	JOE PLESHA	TRIDENT
8	MIKE STANLEY	ALASKA TRADE FISHERIES
9	Steve BRAUSON	CREWMEN'S ASSOCIATION
10	Dorothy Childers	AMSC
11	Michael Lake / Julie Bonney	NMFS / NGDC
12		AFSC
13	SAM COTTON	
14		
15		
16		
17		
18		
19		
20		
21		
22		
23		
24		
25		

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

Joe Sullivan

December 12, 2006
Agenda Item D-5 - Staff Tasking
Crab Rationalization – Bairdi Incidental Catch Issue
Draft Motion

The Council requests staff to develop a discussion paper regarding a potential amendment to the crab rationalization program regulations requiring processors with available Individual Processing Quota to accept and process Bairdi crab harvested as incidental catch in the Bristol Bay red King crab and Opilio crab fisheries. The Council requests that the discussion paper be delivered to the Council at the April 2007 meeting.

Dave Fraser

Custom Processing Use Cap for Aleutian Island King Crab

Problem Statement:

Aleutian Island King crab species have small TACs, thus the processing Use Caps are constraining relative to the major crab species in the Bering Sea. The resulting Use Caps are lower than the regional landing requirements for the Western region, leading to in-efficiencies that inflate the cost of processing in the Western region. A similar problem for Northern region Opilio was addressed in MSA re-authorization by exempting custom processing by shorebased processors from the Use Caps.

The new MSA has the following language revising the "use caps" for Northern Region Opilio

> **(e) USE CAPS.—**
> **(1) IN GENERAL.—**
> **Not withstanding sections 680.42(b)(ii)(2)and 680.7(a)(ii)(7)of title 50, Code of Federal Regulations, custom processing arrangements shall not count against any use cap for the processing of opilio crab in the Northern Region so long as such crab is processed in the Northern Region by a shore-based crab processor.**
> **(2)SHORE-BASED CRAB PROCESSOR DEFINED.—**
> **In this paragraph, the term "shore-based crab processor " means any person or vessel that receives, purchases, or arranges to purchase unprocessed crab, that is located on shore or moored within the harbor.**

Adak should have at least been "grandfathered" at the level of Golden King crab that it processed prior to final Council action on Crab Rationalization.

Instead, the 30% use cap actually prevents Adak from processing the full 50% of Western AI Golden King crab that is reserved for processing in the Western Region. This results in an inability to spread costs over a larger volume of crab, and increases the per pound cost of custom processing.

One way to address this problem (short of simply eliminating PQ for AI king crab) would be to adopt similar language to the new MSA Northern Region Opilio Use Cap language, as follows:

Proposed Action:

> **USE CAPS.—**
> **(1)IN GENERAL.—Not withstanding sections 680.42(b)(ii)(2)and 680.7(a)(ii)(7)of title 50, Code of Federal Regulations, custom processing arrangements shall not count against any use cap for the processing of *Aleutian Island King* crab in the *Western Region* so long as such crab is processed in the *Western Region* by a on shore crab processor.**
> **(2) ON SHORE CRAB PROCESSOR DEFINED.—In this paragraph, the term "on shore crab processor " means any person ~~or vessel~~ that receives, purchases, or arranges to purchase unprocessed crab, that is located on shore. ~~or moored within the harbor.~~**

Aside from substituting "Aleutian Island King" for "opilio" and "Western" for "Northern", the one substantive change is restricting the definition of "shorebased" processor to those processors actually "on" shore, not simply "adjacent to" shore.

While prior to Crab Rationalization, much of the opilio processing in the Northern Region was done on "floaters," that is not the case with Aleutian Island King crab. Processing of Golden King crab (including custom processing) in the Western Region prior to Crab Rationalization was done on shore.

PETERPAN SEAFOODS, INC.

LATE COMMENT

THE TENTH FLOOR
2200 SIXTH AVENUE
SEATTLE, WA 98121-1620
206.728.6000
OPERATION FAX 206.441.9090
SALES FAX 206.728.1555

December 5, 2006

Ms. Stephanie Madsen, Chair
North Pacific Fishery Management Council
605 W 4th Avenue, Suite 306
Anchorage, Alaska 99501

Sent via FAX to North Pacific Fishery Management Council Meeting, Anchorage.

Dear Ms. Madsen:

This letter is in response to the November 29 letter from the Inter-Cooperative Exchange (ICE) as submitted by Joe Sullivan in regard to processors refusing to accept Bairdi crab at St. Paul, Alaska.

Peter Pan Seafoods, Inc. did accept incidental Bairdi during the 2006 season and will do so again in 2007. Incidental Bairdi will need to be kept separate from the Opilio. This delivery condition is important for properly recording the catch and to allow proper processing. Operating a crab processor in the Pribilof Islands during the winter months presents significant production challenges. In the winter of 2006, fishermen and processors experienced extremely cold operating conditions with temperatures fifty degrees below zero with wind chill at times. If Bairdi crab are mixed in the same vessel hold as Opilio crab, the crab have to be sorted prior to production as the different species of crab require different cook times and must be packaged separately. Deck sorting of crab in extremely cold temperatures would result in severe handling mortality, as there are no live tanks available to hold crab prior to production.

Peter Pan is requesting that targeted Bairdi deliveries be taken to the shore plant at King Cove.

We hope this clears up any questions regarding our plans for Bairdi crab production in the Pribilof area.

Sincerely,

Clyde Sterling
Peter Pan Seafoods, Inc.

D-5

MICHAEL A. D. STANLEY ATTORNEY AT LAW
P.O. BOX 020449, JUNEAU, ALASKA 99802 TELEPHONE: (907) 586-6077 FACSIMILE: (907) 463-2511

December 1, 2006

Stephanie Madsen, Chair
North Pacific Fishery Management Council
605 W. 4th Avenue, Suite 306
Anchorage, Alaska 99501-2252

Re: Western Aleutian Islands Golden King Crab –
LATE COMMENT FOR STAFF TASKING

Dear Ms. Madsen and Council Members:

I am writing on behalf of Alaska Trojan Fisheries (ATF), a member of the Bering Sea Cooperative, to request that you direct staff to prepare appropriate alternatives and analyses to address a the problem with the requirement that half of the quota in the Western Aleutian Islands golden king crab (WAG) fishery be delivered west of 174 ° W. longitude. Our hope is that the Council will include this issue on its agenda for your meeting in April 2007 when you are scheduled to review certain issues associated with the Crab Rationalization Program. We do not advocate wholesale changes to the Program at this time, but support a modest adjustment to correct the current situation.

The problem is that no processor was available this season to receive WAG crab west of 174 ° W. longitude. Neither the shoreside plant on Adak (which has a very small allocation of processor quota share) nor the processors who hold most of the WAG processor quota were willing to take delivery of crab out west. ATF made its last delivery of undesignated quota earlier this week, but then had to shut down operations and bring its vessel south. As a result, ATF had to forego harvesting over 400,000 pounds of WAG individual fishing quota.

ATF brought this problem to the attention of NMFS in mid-October and sought a waiver of the west delivery requirement. Acting Administrator Mecum responded on November 1, advising that we should raise the issue with the Council. We have had further discussions with Council staff regarding this issue, and understand that it will have to come up under staff tasking. We anticipate having someone available to provide testimony and further information at that time. Thank you for considering this comment.

Sincerely,

Michael A. D. Stanley

Cc: Alaska Trojan Fisheries