(Revised October 1, 2010)

Council/Board of Fisheries Joint Protocol Committee

Updated: 8/10/07

Council: Board:
Dave Benson Vince Webster
Ed Dersham John Jensen
Eric Olson Mel Morris

Council Coordination Committee

[Designated and renamed by Magnuson Act reauthorization April 2007]

Appointed: 4/05 CFMC: NPFMC: Updated: 7/23/09 C: Eugenio Pinerio C: Eric Olson ED: Miguel Rolon ED: Chris Oliver **GMFMC**: PFMC: C: Dave Ortmann C: Robert Shipp ED: Steve Bortone ED: Don McIsaac MAFMC: SAFMC: C: David Cupka C: Richard Robins ED: Chris Moore ED: Bob Mahood NEFMC: WPFMC: C: John Pappalardo C: Stephen Haleck Staff: Chris Oliver **ED: Paul Howard ED: Kitty Simonds**

Council Executive/Finance Committee

Updated: 8/10/07

Status: Meet as necessary

Staff: Chris Oliver/Dave Witherell/Gail Bendixen

Eric Olson (Chair)

Jim Balsiger (NMFS) Alt. Sue Salveson

Dave Hanson (PSMFC)

Denby Lloyd (ADFG) Alt. Cora Campbell

Roy Hyder (ODFW)

Bill Tweit (WDFW)

Bering Sea Crab Advisory Committee

Appointed 4/25/07	Sam Cotten (Chair)	Lenny Herzog
1	Jerry Bongen	Kevin Kaldestad
Revised 11/15/07	Steve Branson	Frank Kelty
	Florence Colburn	John Moller
	Linda Freed	Rob Rogers
	Dave Hambleton	Simeon Swetzof
	Phil Hanson	Ernest Weiss
Staff: Mark Fina	Tim Henkel	

(Revised October 1, 2010)

BS/AI Pacific Cod Split Committee

Pending appointment

Staff: Nicole Kimball

Bering Sea Salmon Bycatch Workgroup

Appointed: 3/07	Stephanie Madsen (Co-chair) Eric Olson (Co-chair) Becca Robbins Gisclair John Gruver	Jennifer Hooper Paul Peyton Mike Smith Vincent Webster (BOF)
Staff: Diana Stram	Karl Haflinger	(201)

Comprehensive Economic Data Collection Committee

Appointed: 12/07	John Henderschedt (Chair)	Brett Reasor
Updated: 2/9/09	Bruce Berg Michael Catsi	Glenn Reed Ed Richardson
	Dave Colpo	Mike Szymanski
Staff: Jeannie Heltzel	Paula Cullenberg	Gale Vick

Crab Interim Action Committee

[Required under BSAI Crab FMP]

Jim Balsiger, NMFS Denby Lloyd, ADF&G Phil Anderson, WDF

Ecosystem Committee

Updated: 10/22/07	Stephanie Madsen (Chair) Jim Ayers
	Dave Benton
Status: Active	Doug DeMaster/Bill Karp
	Dave Fluharty
	John Iani
Staff: Diana Evans	Jon Kurland
	Caleb Pungowiyi

(Revised October 1, 2010)

Enforcement Committee

Updated: 7/03	Roy Hyder (Chair)
	CAPT Mike Cerne, USCG Jon Streigel, AK F&W Protection
Status: Active	Martin Loefflad, NMFS
	Stefanie Moreland, ADF&G
	Lisa Lindeman/Garland Walker, NOAA-GC
Staffe Jan McCracken	Sherrie Meyers/Ken Hansen, NMFS-Enforcement
Staff: Jon McCracken	Sue Salveson, NMFS

Fur Seal Committee

Updated: 8/10/07	David Benson (Chair)
	Larry Cotter
Status: Active	Aquilina Lestenkof
	Paul MacGregor
	Heather McCarty
Staff: Jeannie Heltzel	Anthony Merculief

GOA Groundfish Rationalization Community Committee

Appointed: 11/04	Hazel Nelson (Chair)	Patrick Norman
	Julie Bonney	Joe Sullivan
	Duncan Fields	Chuck Totemoff
Staff: Nicole Kimball	Chuck McCallum	Ernie Weiss

Halibut Charter Stakeholder Committee

Appointed: 1/06	Dave Hanson (Chair)	Larry McQuarrie
Revised: 3/29/10	Seth Bone	Scott Meyer
Status: Idle, pending direction	Robert Candopoulos	Stephanie Moreland
	Ricky Gease	Rex Murphy
	John Goodhand	Peggy Parker
	Kathy Hansen	Charles "Chaco" Pearman
Staff: Jane DiCosimo	Dan Hull	Greg Sutter
	Chuck McCallum	-
	Chuck McCanain	

IFQ Implementation Committee

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Tit	ulianne Curry im Henkel on Iverson	Paul Peyton Jeff Stephan Phil Wyman

(Revised October 1, 2010)

Non-Target Species Committee

Appointed: 7/03 Updated: 8/10/07	Dave Benson (Chair) Julie Bonney John Gauvin Ken Goldman	Janet Smoker Paul Spencer Lori Swanson Anne Vanderhoeven
Staff: Jane DiCosimo, NPFMC/ Olav Ormseth, AFSC	Karl Haflinger Michelle Ridgway	Jon Warrenchuk

Observer Advisory Committee

Reconstituted: 6/09 Updated: 7/09	Cora Campbell (co-Chair) Bill Tweit (co-Chair)	Michael Lake Todd Loomis
Status: Active	Bob Alverson	Paul MacGregor
	Christian Asay	Tracey Mayhew
	Jerry Bongen	Brent Paine
	Julie Bonney	Theresa Peterson
Staff: Chris Oliver/	Kenny Down	Kathy Robinson
Nicole Kimball	Matt Hegge	Ann Vanderhoeven
		Richie Davis

Pacific Northwest Crab Industry Advisory Committee

Appointed: 2/07	Steve Minor (Chair) Keith Colburn Lance Farr Phil Hanson Kevin Kaldestad Garry Loncon	Rob Rogers Vic Sheibert Gary Stewart Tom Suryan Arni Thomson, Secretary (non-voting)
Staff: Diana Stram	Gary Painter	, G

Rural Outreach Committee

Appointed: 6/09	Eric Olson (Chair) Paula Cullenberg Duncan Fields Jennifer Hooper Tom Okleasik
Staff: Nicole Kimball	Ole Olsen Pete Probasco

(Revised October 1, 2010)

Steller Sea Lion Mitigation Committee

Appointed: 2/01	Larry Cotter (Chair)	Steve MacLean
Updated: 11/09	Jerry Bongen	Stephanie Madsen
•	Julie Bonney	Max Malavansky, Jr
[formerly SSL RPA Committee;	Kenny Down	Gerry Merrigan
renamed February 2002]	John Gauvin	Mel Morris
	Pat Hardina	Art Nelson
Staff: Jeannie Heltzel	Sue Hills	Glenn Reed
Advisor: Dan Hennen	Frank Kelty	Beth Stewart

VMS Committee

Appointed: 6/02	Roy Hyder (Chair)
	Al Burch
Status: Idle, pending direction	Guy Holt
	Ed Page
	LCDR Lisa Ragone
Staff: Jane DiCosimo	Lori Swanson

Groundfis Workplan

Priority actions revised in February 2007, status updated to current

General Priority (in no particular order)	Specific prio	rity actions	Related to management objective:	Status (updated 11-30-10)	Dec Dec	2011
Prevent Overfishing	a. continue to develop managensure sustainable yields of minimize impacts on population caught species	of target species and	5	Aggregate ABC/OFL for GOA 'other species' in Apr 08 BSAI skates TAC breakout in Oct 2009 remaining other species mgmt addressed under ACLs; final action in Apr 10		
	 evaluate effectiveness of s Tier 5 and 6 approaches, f species 		4	AFSC responding to CIE reviews as part of harvest specifications process		
	 c. continue to develop a syst and splitting that takes into and management consider 	account both biological	5	BSAI Pcod split discussion in Feb 11 report from non-target species committee in Dec 09		
Preserve Food Web	encourage and participate ecosystem indicators		10	ecosystem SAFE presented annually; AI FEP identified/refined indicators for the Aleutians (report 2011); EBS indicator synthesis for 2010		
	 Reconcile procedures to a ecosystem considerations limits, for rockfish and other 	in establishing harvest	11	report from non-target species committee in Dec 09		
	c. develop pilot Fishery Ecos	system Plan for the Al	13	FEP brochure published Dec 07 FEP updates, Al report for 2011		• ("
Manage Incidental Catch and	 explore incentive-based by in GOA and BSAI fisheries 		15	partially addressed in BSAI salmon bycatch EIS, Tanner crab area closures around Kodiak (Council action Oct 2010) also GOA Chinook discussion paper in Dec 10		
Reduce Bycatch and	 explore mortality rate-base PSC limits in GOA and BS 		20	partially addressed in BSAI salmon bycatch EIS analysis of BSAI crab bycatch limits in 2011		
Waste	 consider new managemen incidental rockfish bycatch 	and discards	17			
	 develop statistically rigorous bycatch in line with national 	al initiatives	14, 19	National Bycatch Report update in Dec 07		
	e. encourage research progre estimates for non-target sp		16	Part of research priorities, adopted in June 2007		
	 f. develop incentive-based a based trigger limits and are salmon bycatch reduction, available 	ea closures for BSAI	14, 15, 20	bycatch limit for Chinook adopted Apr 09; preliminary chum bycatch analysis in Feb 2011		
	g. assess impact of manager regulatory discards and co where practicable	ment measures on onsider measures to reduce	17	partially addressed by arrowtooth MRA analyses (Council action: GOA - Oct 07, BSAI - Oct 10)		

Groundfish Workplan
Priority actions revised in February 2007, status updated to current

General Priority (in no particular order)		Specific priority actions	Related to management objective:	Status (updated 11-30-10)	Dec 2010	2011 Feb Apr Jun Oct Dec
Reduce and Avoid Impacts to Seabirds and	a.	continue to participate in development of mitigation measures to protect SSL through the MSA process including participation in the FMP-level consultation under the ESA	23	RPA from final NMFS Biological Opinion to be implemented by Secretarial action for Jan 2011; Council to review RPA in Dec 2010		
Marine Mammals		recommend to NOAA Fisheries and participate in reconsideration of SSL critical habitat monitor fur seal status and management issues, and	23			
		convene committee as appropriate adaptively manage seabird avoidance measures program	24, 25 22	Council action, seabird avoidance measures in 4E in Jun 08	·	
Reduce and Avoid		evaluate effectiveness of existing closures consider Bering Sea EFH mitigation measures	26	NMFS researching GOA closed areas (Sanak & Albatross). Council review in 2011		
Impacts to Habitat	D.	consider being sea Ern miligation measures	27	Council action on measures in June 07 BS flatfish trawl sweep mods required in Oct 09 EFH 5-year review completed Apr 2010, amds and discussion on crab and sablefish initial review Feb 11 develop Northern BS Research Plan for 2011		
	C.	consider call for HAPC proposals on 3-year cycle	27	HAPC proposals for skate nurseries under review Council amendment to change cycle to 5 years		
	d.	request NMFS to develop and implement a research design on the effects of trawling in previously untrawled areas	27	Part of research priorities, adopted in June 2007		
Promote Equitable and Efficient Use	a.	explore eliminating latent licenses in BSAI and GOA	32	Council action on trawl LLP recency in Apr 08 GOA fixed gear latent licenses in Apr 09		
of Fishery Resources		consider sector allocations in GOA fisheries	32, 34	Final action GOA Pcod sector allocations Dec 09 Reauthorization of GOA rockfish program, Jun 2010		
Increase Alaska Native and	a.	Develop a protocol or strategy for improving the Alaska Native and community consultation process	37	protocol presented in Jun 08 annual review of protocol		
Community Consultation	b.	Develop a method for systematic documentation of Alaska Native and community participation in the development of management actions	37	outreach plan for chum salmon, meetings planned for Feb- Mar 2011 Workshop for NBSRA research plan, Mar 2011		
Improve Data Quality, Monitoring	a.	expand or modify observer coverage and sampling methods based on scientific data and compliance needs	38, 39	Council action in Apr 08 to improve program, Oct 10 to restructure program next phase of electronic monitoring EFP 2010		
and	b.	explore development programs for economic data collection that aggregate data	40	final action, salmon bycatch data collection Dec 09 partially addressed in BSAI Amd 80		

Groundfis. Jorkplan
Priority actions revised in February 2007, status updated to current

General Priority (in no particular	Priority Specific priority actions		Status (updated 11-30-10)		2011
order)				Dec	Feb Apr Jun Oct Dec
Lillorcement	 modify VMS to incorporate new technology and system providers 	41	Council action, VMS exemption for dinglebar gear, Jun 08		

December 6, 2010 Anchorage, AK Hilton Hotel	January 31, 2011 Seattle, WA Renaissance Hotel	March 28, 2011 Anchorage, AK
	BSAI FLL Catch Accounting: <i>Discuss and action as necessary</i> GOA Rockfish regulations: Update (T)	Halibut mortality; salmon excluder EFPs: Review and Approve (T)
SSL RPA/BiOp Review: Discuss	BS&AI P.cod Split: Discussion paper/action as necessary (T)	
Four new CQE eligible communities: Initial/Final Action CQE area 3A D class purchase: Initial Review CQE in Area 4B: Review Discussion paper Area 4B D shares on C vessels: Initial Review/Final Action	Halibut/Sablefish Hired Skipper: <i>Initial Review</i> CQE area 3A D class purchase: <i>Final Action</i>	Halibut/Sablefish Hired Skipper: Final Action (T)
Halibut Charter Permit Leasing: Discussion paper	Electronic Monitoring: Review White Paper	
Am 80 GRS Program Changes: <i>Initial Review</i>	Am 80 Replacement Vessel Sideboards: <i>Discussion Paper</i> Am 80 GRS Program Changes: <i>Final Action</i>	Octopus Management Alternatives: Initial Review
BSAI Crab ROFR: Initial Review BSAI Crab Rationalization 5-year review: Receive report BSAI Crab Emergency Relief: Initial Review / Final Action	BSAI Crab ROFR: Final Action	Economic Data Collection (Crab EDR): Preliminary Review (T)
GOA Halibut PSC Discussion Paper: Review disc. Paper and provide direction	Al P.cod Processing Sideboards: Initial Review (T)	Al P.cod Processing Sideboards: Final Action (T)
GOA Chinook Salmon Bycatch: Discussion paper	BSAI Chum Salmon Bycatch: Preliminary Review	BSAI Chum Salmon Bycatch: Review as necessary
Salmon FMP: <i>Discussion paper</i>	BBRKC Spawning Area/fishing effects: Discussion paper (T.)	
Pribilof BKC Rebuilding Plan: Initial Review	Sablefish Recruitment Factors: <i>Discussion Paper (T)</i> MPA Nomination Discussion Paper: <i>Review (T)</i>	Pribilof BKC Rebuilding Plan: Final Action BS Tanner Crab Rebuilding: Finalize Alternatives
Hagemeister Island: <i>Initial Review</i>	Hagemeister Island: Final Action	
Groundfish Specifications: PT reports; Approve SAFE report; Adopt Final Catch Limits	GOA Trawl Sweep Modifications: Discussion Paper	
,	HAPC - Skate sites: Disc paper/ finalize alternatives EFH Amendment: Initial Review (T)	HAPC - Skates sites: Initial Review (T) EFH Amendment: Final Action (T)

ACL - Annual Catch Limit	PSC - Prohibited Species Catch	
AI - Aleutian Islands	TAC - Total Allowable Catch	Future Meeting Dates and Locations
GOA - Gulf of Alaska	BSAI - Bering Sea and Aleutian Islands	Dec 6- 2010 in Anchorage Hilton
SSL - Steller Sea Lion	IFQ - Individual Fishing Quota	January 31-February 8, 2011-Seattle
BKC - Blue King Crab	ROFR - Right of First Refusal	March 28-April 5, 2011-Anchorage
BOF - Board of Fisheries	GHL - Guideline Harvest Level	June 6, 2011 - Nome
FEP - Fishery Ecosystem Plan	EIS - Environmental Impact Statement	September 26-, 2011 in Unalaska
CDQ - Community Development Quota	LLP - License Limitation Program	Dec 5 - 2011 in Anchorage
VMS - Vessel Monitoring System	SAFE - Stock Assessment and Fishery Evaluation	
EFP - Exempted Fishing Permit	MPA - Marine Protected Area	
BiOp - Biological Opinion	EFH - Essential Fish Habitat	(T) Tentatively scheduled

HAPC - Habitat Areas of Particular Concern

MRA - Maximum Retainable Allowance

DRAFT REPORT of the SCIENTIFIC AND STATISTICAL COMMITTEE to the NORTH PACIFIC FISHERY MANAGEMENT COUNCIL December 6-8, 2010

The SSC met during December 6-8, 2010 at the Hilton Hotel, Anchorage, Alaska. Members present were:

Pat Livingston, Chair NOAA Fisheries—AFSC Keith Criddle University of Alaska Fairbanks

Anne Hollowed

NOAA Fisheries—AFSC

Kathy Kuletz

US Fish and Wildlife Service

Doug Woodby

Alaska Department of Fish and Game

Farron Wallace, Vice Chair Wash. Dept. of Fish and Wildlife

Susan Hilber

Oregon Dept. of Fish and Wildlife

George Hunt

University of Washington

Lew Queirolo

NOAA Fisheries—Alaska Region

Robert Clark

Alaska Department of Fish and Game

Sue Hills

University of Alaska Fairbanks

Gordon Kruse

University of Alaska Fairbanks

Terry Quinn

University of Alaska Fairbanks

Members absent were:

Seth Macinko Ray Webster

University of Rhode Island International Halibut Commisson

C-2(c) BSAI crab rationalization 5-year review

Staff presentations were provided by Mark Fina (NPFMC), Mike Downs (AECOM), and Jennifer Lincoln (NIOSH). Public testimony was provided by Simeon Swetzof and Mateo Paz-Soldan (City of St. Paul), Steve Minor (North Pacific Crab Association), and Everette Anderson (APICDA).

The 3-year and 5-year reviews are required in legislation that established the crab rationalization program because the program was highly controversial and contained numerous novel design features. There was a desire to understand the consequences of these design features on the magnitude of net benefits to the Nation, and the distribution of benefits and impacts across communities and between sectors, harvesters, processors, and crew.

The 5-year review document and appendices provide extensive tabulation of aggregated data and a thorough discussion of those data, accompanied by anecdotal observations. It is regrettable that the review and appendices lack formal analysis of specific hypotheses. While the document briefly discusses the potential influence of concomitant changes in crab stock abundance, catch limits, input and output prices, market processes, and the cost of capital, there is no formal modeling of the relative influence of these changes on revenues to vessels, employment, compensation to crew, the regional distribution of these impacts or net benefits to the Nation.

In October, 2008, in reference to the 3-year review, the SSC remarked (emphasis in the original):

"Without quantitative estimates of these changes, it is not possible to determine if implementation of crab rationalization has resulted in improvements or losses of net benefits to the Nation or if it has resulted in changes in the distribution of net benefits that have resulted in unintended harm to particular regions, communities,

or segments of the fishery. Certainly by the time the Council's 5-year program review is prepared, the SSC anticipates that rigorous quantitative estimates of these outcomes will be available. At that time, analyses that compare the impacts predicted in the Crab Rationalization EIS to actual impacts would be very useful."

The SSC notes that the 5-year review does not materially address our criticism of the 3-year review. While we find that the 5-year review document and appendices provide useful information, we view the lack of formal quantitative modeling and statistical analysis as a missed opportunity to better understand the causal effects of design features included in the crab rationalization program. Better understanding of these consequences would help inform the analysis of future catch share programs that might be contemplated by the Council, as well as the likely consequences of possible modifications to the existing crab rationalization program.

In addition, the social impact assessment could benefit from additional discussion of circumstances surrounding the consequences of storm damage to St. George Island's harbor, its effects on processing in St. George, and the associated tax revenue impacts to the community.

C-2(d) Initial Review Pribilof BKC Rebuilding Plan

The EA/RIR/IRFA for the Pribilof Islands Rebuilding Plan was presented by Diana Stram (NPFMC), Bob Foy (NMFS-AFSC), and Scott Miller (NMFS-AKR). Public testimony was provided by Arni Thomson (Alaska Crab Coalition).

The analysts are to be commended for the significant improvements in the document since the SSC's last review in April 2010. Most of the SSC's comments from April have been addressed in the updated document. During the staff presentation, it was indicated that several remaining additions are planned. These include consideration about whether it is better to take a parametric or non-parametric approach to randomly sample recruitment for future projection (to be resolved after a crab modeling workshop in February 2011), as well as standardization of catch units in the tables.

The SSC recommends sending the EA/RIR/IRFA out for public review after the following comments have been addressed.

EA

- 1. The document should articulate that the challenge to rebuild the Pribilof Islands (PI) blue king crab stock is a difficult one. The fishery has been closed since 1999 and bycatch appears to be very low, yet the stock continues to decline. There is no apparent stock-recruit relationship, but one needs to be assumed to evaluate the alternatives. It is not clear whether the current B_{msy} estimate is a reasonable expectation for future stock status given prevailing environmental conditions. Even for the optimistic recruitment outlook under the Ricker or Beverton-Holt relationships, which do not fit the observed data, stock rebuilding would occur over approximately a 50-year time frame. In reality, recovery likely depends on chance and fortuitous environmental conditions leading to several strong year classes, which are not predictable. Nevertheless, the Magnuson-Stevens Fishery Conservation and Management Act requires a new rebuilding plan.
- 2. The document should clarify that the areas covering the distribution of blue king crabs identified under Alternative 4 based on trawl survey catches (Fig. 3) differ from the distributions of blue king crabs observed as bycatch in groundfish fisheries (Fig. 22-24). Also, to help evaluate the tradeoffs between the two area designations under Alternative 4, an estimate of the number of

- crabs existing in the portion of the area shown in Figure 3A that fall outside of the area shown in Figure 3B should be provided; that is, an estimate of the numbers of crabs falling in the area shown in Figure 3A, minus the number of crabs falling within the area shown in Figure 3B.
- 3. On p. 7, under options 5a, b, and c, the authors state that "The fisheries to which this closure would apply are listed in Table 1." However, this same statement does not appear under Option 5d. Is this an oversight?
- 4. In Section 4.4 (p. 17), the document should better clarify how additional observer coverage would be implemented for vessels entering the PI area. When and where would these vessels acquire the observers, especially if they are participating in other fisheries outside the PI area, either beforehand or afterward? Alternatively, the document should specify that such details would need to be resolved, should the Council select this option.
- 5. In Section 5.3 (p. 19), it was indicated that a detailed analysis of crab fisheries on habitats was provided in the final EIS for EFH identification and so it is not repeated in this analysis. Consider briefly describing similar analyses of the effects of other gear types on habitat. For instance, consider citing the Rose and Fujioka model and gear impact studies by Bob McConnaughey (e.g., RKC Savings Area).
- 6. In Tables 4 and 5, please clarify that the reported estimates apply only to Area 513. Also, clarify in the table headings that bycatch mortality (not bycatch) is being reported. Finally, the label for the right-most column in Table 5 should have the same heading as in Table 4, namely "Total Mortality."
- 7. Consider reporting crab bycatch numbers and stock size (numbers) using the same units or at least report the bycatch as a percentage of the estimated stock size, so that the magnitude of the estimated bycatch is more readily apparent to the reader. For instance, some tables report crabs in biomass units. The reader should be able to easily understand what percentage of the crab stock is taken as bycatch. It appears to be a very small percentage.
- 8. Consider estimating the number of crabs eaten by groundfish predators compared to the number of crabs taken as bycatch. Comparisons between the Pribilof Islands and St. Matthew Island may be informative. The question is whether the proposed closures have a chance to achieve a positive effect on crab stocks, relative to natural processes.
- 9. On p. 12, third paragraph under 4.1, first sentence, please cite the correct intended figure. Figure 10 is a stock-recruit plot, not a map of the high-density area. Other figures appear to be misnumbered. Please carefully check all figure numbers.
- 10. On p. 16, the numbered list of reductions from none to 100% doesn't match the descriptions in the text that follows, which goes from status quo to 80% to 50% to 0%. Also, check for consistency of this labeling in the figures. Should catch reduction scenario #4 read as "100% reduction" in text and in figures?
- 11. The reference section is not complete. Many references cited in the document are not included in the references (e.g., Chilton 2009, Chilton in press, Zheng and Kruse 2000, Vining and Zheng 2008, NMFS 2005). Also, there are some other useful references that should be cited. These include Somerton and MacIntosh (1983) concerning size of maturity of blue king crab, Otto and Cummiskey (1990) concerning blue king crab growth, and Collie et al. (2005) concerning three-stage CSA modeling of the PI and St. Matthew Island blue king crab stocks, with some discussion on molting probability, molt increment, and size of maturity among the two areas.
- 12. The SSC appreciates the information provided in the consideration of stock separation (Table 15). The SSC has provided some suggestions about references that may help fill some data gaps. Gaps in the table should be considered in future research priorities.
- 13. The document requires careful editing.
- 14. The document should include new information from genetics studies in the stock structure table if it becomes available.

RIR/IRFA

- 1. The RIR clearly suffers (at no fault of the analysts) from the constraints imposed by "confidentiality" rules (i.e., the narrower the focus of an action, the fewer the data that can be reported). While very sparing in its narrative treatment of the implications of the action alternatives, the RIR appears to address each of the requisite elements prescribed by Executive Order 12866.
- 2. Use of "revenue-at-risk" analysis, while not ideal, offers a crude bounding of the gross operational and revenue effects of competing area closure alternatives. The SSC recommends that the nature and interpretation of these estimates be clearly and carefully described in the draft.
- 3. The SSC further points out that there is no expectation that the gross "revenues-at-risk" estimates necessarily reflect the expected impacts on catch and revenues. Indeed, one would anticipate that industry would examine all available options to minimize these adverse impacts (e.g., redeployment of effort). It should be explicitly acknowledged in the RIR that reported changes in "gross receipts" may, in fact, reveal no meaningful insights into "net" economic implications of the alternatives.
- 4. The SSC notes a frequently cited expectation in recent management actions that "... losses of displaced target catches attributable to an action alternative, will be made up in whole or in part by redeploying effort into the remaining open areas of the Bering Sea ..." This blanket assertion needs to be considered comprehensively. At some point, one would conclude that target species resources in the "... remaining open areas" will not be a viable option to absorb additional displaced fishing effort.
- 5. The draft IRFA would benefit from a number of editorial corrections that will be provided to the author. Upon completion of these, the SSC recommends release of the draft. Public review may identify additional information and insights that will strengthen the analysis, as it undergoes revision in the next stage of development.

C-2(e) NOAA/BSFRF survey snow crab selectivity analysis

The SSC received a presentation from Dave Somerton (NMFS-AFSC) and Steve Hughes (BSFRF) on a new study this year to obtain more information on the selectivity of the NMFS survey trawl to snow crab. The study methods and the field portion of the work were summarized and progress on analysis of the results was given. The SSC requests an update following Crab Plan Team review.

C-7 (a,b) BSAI and GOA specifications and SAFE report

General SAFE Comments

Diana Stram (NPFMC) and Jim Ianelli (NMFS-AFSC) presented the GOA Plan Team report and ABC and OFL recommendations for GOA. Grant Thompson (NMFS-AFSC staff) presented the BSAI Plan Team report and ABC and OFL recommendations for BSAI.

For assessments with multiple models, the SSC requests that status determination criteria (Tier, two-year biomass projections, ABC's, and OFL's) be arrayed by stock assessment authors in a table in the

assessment chapter so that the Plan Team and SSC can consider choosing alternative models. If the number of models being presented is very large, the authors may use their discretion to select a subset of desirable models for this summary.

For greater consistency in the way the terminal year catch is specified, the SSC requests that authors incorporate their best estimate of total landings that will occur for the entire year. This information will be used to generate projections and should be incorporated into BSAI and GOA specification tables.

BSAI and GOA Pacific cod

The SSC commends the authors for their thorough and conscientious responses to public, Plan Team, and SSC recommendations. Kenny Down (Freezer Longliner Coalition) provided public testimony on BSAI Pacific cod. He supports the authors preferred model and model estimates and commented that the process was good and many improvements were made such as constant growth. Julie Bonney (Alaska Groundfish Databank) expressed concerns about an increased ABC this year and then declining thereafter.

The Pacific cod assessments and data that went into the assessment have received a great deal of scrutiny over the last few years. There continues to be concern on the accuracy of age readings. Other issues include the natural mortality rate, the trawl survey catchability coefficient, the modeling of commercial selectivity (variable or not, asymptotic or not, fishery by fishery), modeling of survey selectivity, and the modeling of growth (constant, cohort-specific, year-specific).

Since last year, many changes have been considered or made, based on recommendations from the public, the Plan Teams and the SSC. To streamline the model evaluation process, a set of six models were presented in this year's preliminary assessment, as requested by the Plan Teams in May, and reviewed by the SSC in June of this year. Following Plan Team review in September and SSC review in October a final set of three models were requested to be included for final evaluation. The three candidate models (A, B, and C) were considered in developing the 2011 and 2012 OFL/ABC specifications. Model A is identical to the model accepted for use by the BSAI Plan Team and SSC in 2009 and the only model from the preliminary assessment to be carried forward.

Current Models

Model A was the 2009 preferred model. Main features of model A included: 1) natural mortality M = 0.34 fixed externally, 2) length-specific commercial selectivities, estimated in blocks of years, some forced to be asymptotic, 3) age-specific trawl survey selectivity with annually varying left limb, 4) the average product of catchability and selectivity of 60-80 cm fish required to be 0.47, 5) cohort-specific growth parameters, with the standard deviation of length at age estimated externally, 6) Aging bias of +0.4 years at ages 2+ estimated by profiling, 7) Input standard deviations of a number of parameters estimated iteratively so as to match output standard deviations.

Model B was the same as Model A with some incremental modifications including: 1) smaller length bins (1 cm instead of 3 and 5) to make full use of the length data, 2) five fishery seasons were modeled instead of 3, 3) a single growth schedule was fitted, 4) the few fishery length-at-age data and age composition data were left out, 5) IPHC survey length data were left out, 6) values estimated iteratively in the 2009 assessment were carried over to Model B.

Model C was the same as Model B but all age composition and length-at-age data were left out, because of concern about aging bias.

Model Evaluation

The authors used four criteria to evaluate and select the final model. The criteria include: 1) does the model make full use of the information in the size composition data, 2) has the seasonal structure of the model been justified statistically, 3) is the model sufficiently parsimonious, and 4) does the model estimate plausible lengths at age?

SSC Comments and Recommendations

There will be a CIE review of Pacific cod models in early 2011 and information from this review will be used to produce another suite of models that will be considered for PT and SSC review in the spring.

The SSC has a number of model suggestions that may be considered through the next assessment cycle by the author as time permits:

- Evaluate reduced catch season and size bin structures that are more parsimonious, but do not diminish the information content.
- Trawl survey catchability used in the assessment and model sensitivity to model estimates or plausible alternatives should be evaluated.
- Simplifying trawl survey selectivity should be investigated and model fit to data components evaluated.
- Re-tune aging bias to try to better match the observed age modes
- Evaluate estimating aging bias within the model.
- Evaluate Richards growth curve alternative
- Continued research that would provide information on age-determination errors and potential biases.
- Given the divergence in population abundance between the AI and BS the SSC recommends that an AI assessment be brought forward for evaluation (only) during the next assessment cycle. Biomass distribution is currently estimated at 91% EBS and 9% AI compared to previous proportions of 84% and 16%, respectively.
- For the GOA, apply a simple Kalman filter approach, as adopted by the SSC in 2004 for BSAI for estimation of current biomass distribution.
- Constant growth should be brought forward in future models (run times reduced back to 2-3 minutes).

The SSC offers the following modeling issues that could be considered during the CIE review:

- The process of iteratively estimating input standard deviations to match output standard deviations.
- Convergence continues to be an issue for most models and this should be examined.
- Ways to reduce the number of parameters that may help address issues of convergence.

BSAI Pacific cod

There were a number of data changes and updates in this year's assessment that included; 1) catch data for 2004-2009 were updated, and preliminary catch data for 2010 were incorporated, 2) commercial fishery size composition data for 2009 and 2010 were updated, 3) age and mean length at age data from the 2009, size composition and numeric abundance information from the 2010 EBS shelf bottom trawl survey were incorporated, 4) seasonal catch per unit effort (CPUE) data for the trawl, longline, and pot fisheries from 2009 were updated, as was the 2010 preliminary catch.

The numeric abundance estimate from the 2010 EBS bottom trawl survey was up 24% from 2009. The IPHC survey 2009 estimate was down 35% from 2008 and was the second lowest point in the time series. The 2010 AI biomass estimate, used to compute the current ratio of BSAI biomass to EBS biomass, was down 26% from the 2006 estimate and was the low point of the time series. Applying a simple Kalman filter approach, adopted by the SSC in 2004, the current biomass distribution is 91% EBS and 9% AI compared to previous proportions of 84% and 16%, respectively.

All model fits to EBS survey abundance were good and produced similar estimates of EBS trawl survey selectivity at age, although the estimates from Model C appeared to be shifted by one year relative to Models A and B. Model A produced the most plausible lengths. Model C matched the modes very closely, but at ages that were higher by a year because the fitted growth schedule was unconstrained.

Model B is thought to have a better defined bin and season structure and was more parsimonious than model A. Model C was disqualified partly due to anomalous length-at-age in the EBS. The SSC agrees with author's and Plan Team's rationale, choice of Model B and Tier 3b designation for calculating the ABC and OFL recommendations, shown below in metric tons. The 2006 and 2008 year classes appear to be strong, and stock abundance is expected to increase substantially in the near term.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Pacific cod	BSAI	272,000	235,000	329,000	281,000

GOA Pacific cod

There were a number of data changes and updates that included; 1) catch data for 2004-2009 were updated, and preliminary catch data for 2010 were incorporated, 2) commercial fishery size composition data for 2009 were updated, and preliminary size composition data from the 2010 commercial fisheries were incorporated, 3) age composition and mean-length-at-age data from the 2009 bottom trawl survey were incorporated into models A and B, 4) age composition and mean length at age data from the 2008 January-May longline fishery were removed from models B and C, 5) seasonal catch per unit effort (CPUE) data for the trawl, longline, and pot fisheries from 2009 were updated, and preliminary catch rates for the trawl, longline, and pot fisheries from 2010 were incorporated, and 6) size composition data from the State-managed Pacific cod fishery for 1997-2009 were updated and 2010 incorporated.

In terms of population numbers and biomass, a record high of 752,651 t was observed by the 2009 bottom trawl survey, when the population was estimated to include over 573 million fish. This followed the lowest observed survey biomass in 2007 of 233,310 t and a 2005 model estimate that was the low point at 140 million fish. The 2009 biomass estimate represented a 223% increase over the 2007 estimate.

All three models fit the GOA survey abundance time series relatively well throughout the time series, with the exception of 2009. In 2009 all model estimates were well below the highest survey abundance in the time series. Models A and B produced similar historical abundance time series; whereas Model C produced a very high historical abundance, implying that spawning biomass was five times B35% for the better part of the first decade. The latter was deemed implausible by the authors. There is little difference in fishery selectivity as estimated by all three models. In general, selectivities that are not forced to be asymptotic tend to show decreasing selectivity at large size.

Model A produces the best fit between observed and expected values for size at age, although the root-mean-squared-errors are about the same for all three models. Model B estimates for age 1 size appears to be about 2 cm high on average (which may be the result of the assumed aging bias) and Model C estimates an age 1 size that is very close to the observed average. Model B is thought to have a better

defined bin and season structure and was more parsimonious than model A. Model C was disqualified partly due to impossibly high abundance estimates generated in the GOA model.

Based on Model B results, there is a slight decline in the estimated 2011 spawning biomass of 124,100 t, or 48% of unfished spawning biomass compared to the last assessment. Model B results also indicate a slight decline in subsequent years. This is in contrast to last year's assessment which projected an increase in biomass. Recent year classes (2006 - 2008) are also estimated to be substantially lower than in last year's assessment.

The SSC accepts the Plan Team's and the author's preferred model (Model B), Tier 3a designation, and the 2011/12 ABC and OFLs shown in metric tons below. The probability of the stock being below B20% was estimated to be less than 1% in 2011 and subsequent years.

Stock/ Assemblage	Area	OFL	2011 ABC	OFL	2012 ABC
	W	_	30,380		27,370
Design Cod	C		53,816		48,484
Pacific Cod	Е		2,604		2,346
	Total	102,600	86,800	92,300	78,200

GOA - BSAI Sablefish

Relative to last year's assessment, the stock assessment authors added new data and explored different model configurations. The new assessment included: relative abundance and length data from 2010 longline surveys, relative abundance and length from the 2009 longline and trawl fisheries, age data from the 2009 longline survey and 2009 longline fishery, updated 2009 catch and estimate 2010 catch. As recommended by the CIE reviewers, the authors explored the implications of eliminating the relative population weight (RPW) indices from the model. Given that the RPWs were eliminated from the assessment, the authors rebalanced data weights. They used the standard deviation of the normalized residuals (SDNR) as a criterion to reweight the compositional likelihoods. The authors recommend that this reweighting scheme remain in place for the next few years. The SSC agrees with the authors and the BSAI and GOA Plan Teams that the assessment should use the updated data, and approves the use of the revised model configuration.

Results of the revised stock assessment show that the stock is expected to decline slightly in 2011 and 2012. The 1997 and 2000 year classes are entering into the spawning population.

Projected female spawning biomass was 102,139 t, which is 37% of $B_{100\%}$. The stock is slightly below the estimate of $B_{40\%}$ (110,108 t), placing this stock in Tier 3b. The authors' recommended ABC and OFL are set at the maximum permissible levels under the NPFMC harvest strategy. The SSC agrees that this stock falls in Tier 3b and accepts the Plan Team recommendations for ABC and OFL in 2011 and 2012. The GOA and BSAI Plan Teams accepted the author's recommendation for 2011 area apportionments based on a 5-year exponential weighting of the survey and fishery abundance indices. The SSC also agrees with this approach and recommends the following area apportionments expressed in metric tons below.

Sablefish GOA

Stock/ Assemblage	Area	OFL	2011 ABC	OFL	2012 ABC
	W		1,620		1,484
	C		4,740		4,343
Sabletish	WYAK		1,990		1,818
	SEO		2,940		2,700
	Total	13,340	11,290	12,232	10,345

Sablefish BSAI

Stock/		2011		2012	
Assemblage	Area	OFL	ABC	OFL	ABC
Sablefish	BS	3,360	2,850	3,080	2,610
Saticisii	AI	2,250	1,900	2,060	1,740
	Total	5,600	4,800	5,140	4,350

The SSC appreciates the responsiveness of the author to our recommendations. The SSC notes that two issues remain a concern. First, while the author initiated the development of a statistical model for estimation of sperm whale and killer whale predation, they did not finalize this model. The SSC requests that the author continues to explore methods to model whale depredation. Second, the author acknowledges that work is underway to develop a migration model for use in apportioning the ABC and OFL by region. We encourage the author to continue to work on this type of model.

GOA SAFE and Harvest Specifications for 2011/12

The SSC reviewed the information presented below in Table 1 and determined that none of these stocks/assemblages were subjected to overfishing in 2009. Also, in reviewing the status of stocks with reliable biomass reference points (all Tier 3 and above stocks and rex sole) and the 2010/2011 ABC/OFL recommendations for these stocks, SSC determined that these stocks are not considered overfished or approaching an overfished condition.

Table 1. GOA Groundfish Catch and OFL amounts (t) for 2009 for overfishing determinations.

			2009	% of OFL
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Stock/Assemblage	Area/District	OFL	Catch	Caught
Pollock	W/C/WYK	58,590	42,770	73%
	SEO (650)	11,040	0	0%
	Total	69,630	42,770	61%
Pacific cod	GOA	66,600	52,751	79%
Flatfish (deep-water)	GOA	11,578	467	4%
Rex sole	GOA	11,756	4,753	40%
Flathead sole	GOA	57,911	3,663	6%
Flatfish (shallow-water)	GOA	74,364	8,484	11%
Arrowtooth flounder	GOA	261,022	25,057	10%
Sablefish	GOA	13,190	11,105	84%
Pacific ocean perch	Western	4,409	3,806	86%
	Central	9,790	8,032	82%
	Eastern	3,741	1,149	31%
·	Total	17,940	12,987	72%
Shortraker rockfish	GOA	1,197	588	49%
Rougheye rockfish	GOA	1,545	282	18%
Other rockfish	GOA	5,624	895	16%
Northern rockfish	GOA	5,204	3,952	76%
Pelagic shelf rockfish	GOA	5,803	3,067	53%
Thornyhead rockfish	GOA	2,540	659	26%
Big skates	GOA	4,439	1,970	44%
Longnose skates	GOA	3,849	1,316	34%
Other skates	GOA	2,806	1,321	47%
Demersal shelf rockfish	SEO	580	138	24%
Atka mackerel	GOA	6,200	2,223	36%
Other species	GOA	8,720	2,804	32%
Total		632,498	181,252	29%

Table 2. SSC recommendations for GOA Groundfish 2011- 2012 OFLs and ABCs shown with the 2010 OFL, ABC, TAC, and Catch amounts (catches reported through November 6th, 2009 from AKR Catch accounting). Bold numbers indicates where SSC recommendations differ from the Plan Team recommendations.

Stock/					2010		2011		2012
Assemblage	Area	OFL	ABC	TAC	Catch	OFL	ABC	OFL	ABC
	W (61)		26,256	26,256	26,047		27,031		34,932
1	C (62)		28,095	28,095	28,269		37,365		48,293
	C (63)		19,118	19,118	19,236		20,235		26,155
Pollock	WYAK		2,031	2,031	1,637		2,339		3,024
	Subtotal	103,210	75,500	75,500	75,189	118,030	86,970	151,030	112,404
	EYAK/SEO	12,326	9,245	9,245		12,326	9,245	12,326	9,245
	Total	115,536	84,745	84,745	75,189	130,356	96,215	163,356	121,649
	W		27,685	20,764	20,971		30,380		27,370
	С		49,042	36,782	36,808		53,816		48,484
Pacific Cod	E		2,373	2,017	881		2,604		2,346
	Total	94,100	79,100	59,563	58,660	102,600	86,800	92,300	78,200
	W		1,660	1,660	1,329		1,620		1,484
	С		4,510	4,510	4,434		4,740		4,343
Sablefish	WYAK		1,620	1,620	1,561		1,990		1,818
	SEO		2,580	2,580	2,674		2,940		2,700
	Total	12,270	10,370	10,370	9,998	13,340	11,290	12,232	10,345
Shallow-	W		23,681	4,500	75		23,681		23,681
water	С		29,999	13,000	5,333		29,999		29,999
flatfish	WYAK		1,228	1,228	1		1,228		1,228
	EYAK/SEO		1,334	1,334	1		1,334		1,334
	Total	67,768	56,242	20,062	5,410	67,768	56,242	67,768	56,242
Deep-	W		521	521	2		529		541
water	С		2,865	2,865	490		2,919		3,004
Flatfish	WYAK		2,044	2,044	7		2,083		2,144
:	EYAK/SEO		760	760	3		774		797
	Total	7,680	6,190	6,190	502	7,823	6,305	8,046	6,486
Rex sole	W		1,543	1,543	101		1,517		1,490
	С		6,403	6,403	3,284		6,294		6,184
	WYAK		883	883	2		868		853
	EYAK/SEO		900	900		10 100	886	10.000	869
	Total	12,714	9,729	9,729	3,387	12,499	9,565	12,279	9,396
Arrowtooth	W		34,773	8,000	2,270	}	34,317		33,975
Flounder	C		146,407	30,000	20,532		144,559		143,119
	WYAK EYAK/SEO		22,835 11,867	2,500	140 73		22,551 11,723		22,327 11,606
		254 271		2,500		251.069		249 576	
Plater	Total W	254,271	215,882	43,000 2,000	23,015	251,068	213,150	248,576	211,027 17,960
Flathead	w C		16,857 27,124	5,000	317		17,442 28,104		28,938
Sole	WYAK		1,990	1,990	3,141		2,064		2,125
	EYAK/SEO		1,451	1,451		J	1,523		1,568
	Total	59,295	47,422	10,441	3,458	61,412	49,133	63,202	50,591
	TOTAL	27,473	41,422	10,441	2,420	01,412	77,133	02,202	20,271

Table 2. continued

Stock/		-	20	10		20	11	201	12
Assemblage	Area	OFL	ABC	TAC	Catch	OFL	ABC	OFL	ABC
Pacific	W	3,332	2,895	2,895	3,133	3,221	2,798	3,068	2,665
ocean	C	12,361	10,737	10,737	10,461	11,948	10,379	11,379	9,884
perch	WYAK		2,004	2,004	1,926		1,937		1,845
	SEO		1,948	1,948			1,883		1,793
	E(subtotal)	4,550	3,952	3,952	1,926	4,397	3,820	4,188	3,638
	Total	20,243	17,584	17,584	15,520	19,566	16,997	18,635	16,187
Northern	W		2,703	2,703	2,033		2,573		2,446
rockfish ³	C E		2,395	2,395	1,838		2,281		2,168
	Total	6.070	5,098	5,098	3,871	5 704	1 951	5.400	4.614
	W	6,070				5,784	4,854	5,498	4,614
			134	134	64		134		134
Shortraker	C		325	325	136		325		325
	E	1010	455	455	257	1.010	455	1.010	455
0.1	Total	1,219	914	914	457	1,219	914	1,219	914
Other	W		212	212	362 275		212		212
slope ³	C WYAK		507 273	507 273	275 128		507 273		507 273
	EYAK/SEO		2,757	200	33		2,757		2,757
	Total	4,881	3,749	1,192	798	4,881	3,749	4,881	3,749
Pelagic	W	4,001	650	650	530	7,001	611	4,001	570
Shelf	l "c		3,249	3,249	2,481		3,052		2,850
rockfish	WYAK		434	434	75		407		380
•••••	EYAK/SEO		726	726	11		684		638
	Total	6,142	5,059	5,059	3,097	5,570	4,754	5,387	4,438
	W	<u> </u>	80	80	91		81		81
Rougheye and	l c		862	862	217		868		868
blackspotted rockfish	E		360	360	139		363		363
•	Total	1,568	1,302	1,302	447	1,579	1,312	1,579	1,312
Demersal rockfish	Total	472	295	295	127	479	300	479	300
Thornyhead	W		425	425	129		425		425
Rockfish	C		637	637	275		637	1	637
	E		708	708	149		708		708
	Total	2,360	1,770	1,770	553	2,360	1,770	2,360	1,770
Atka mackerel	Total	6,200	4,700	2,000	2,409	6,200	4,700	6,200	4,700
Big	w		598	598	140		598		598
Skate -	C		2,049	2,049	2,155		2,049		2,049
	E		681	681	142		681		681
	Total	4,438	3,328	3,328	2,437	4,438	3,328	4,438	3,328
Longnose	W		81	81	103	1	81	{	81
Skate	C		2,009	2,009	816	1	2,009	i	2,009
	E	2.000	762	762	124	2 222	762		762
	Total	3,803	2,852	2,852	1,043	3,803	2,852	3,803	2,852
Other skates	Total	2,791	2,093	2,093	1,464	2,791	2,093	2,791	2,093
Squid	GOA-wide				131	1,530	1,148	1,530	1,148
Sharks	GOA-wide				603	8,262	6,197	8,262	6,197
Octopus	GOA-wide				324	1,272	954	1,272	954
Sculpins	GOA-wide				735	7,328	5,496	7,328	5,496
Other spp total	Total	9,432	7,075	4,500	1,793	18,393	11,205	18,393	11,205
Grand Total	l	693,253	565,499	292,087	213,635	723,929	587,528	743,422	601,398

GOA Pollock

The authors responded to four SSC comments from December 2009. The first two (evaluate data input sample sizes, include age 1 in the model) could not be accomplished this year but remain on their list of potential model enhancements. The authors acknowledged that the third comment (reexamine the setting of catchability to 1 for precaution) was important but thought that this should be accomplished within the context of future actions to formally incorporate uncertainty into harvest recommendations. The authors addressed the fourth comment (examine temporal changes in average weight at age) directly. Their examination showed that average weights at age increased, particularly for older ages; for ages 6 and greater, they have doubled. Further work is needed to determine if this is a density-dependent or environmental effect.

This assessment is a straightforward update of last year's assessment with new fisheries and survey data from 2009 and 2010. Recent bottom trawl and EIT survey biomasses have increased and the ADF&G survey has decreased, but all three are near their long-term averages. The same model from last year's assessment was updated with the new data. Results from the model indicate that estimated and projected biomass is increasing from 2009 to 2011, with 2011 spawning biomass at about 29% of unfished spawning biomass.

The SSC continues to believe that the model provides an appropriate basis for determining reference points for management. As in previous assessments, catchability for the NMFS bottom trawl survey was fixed at 1 as a precautionary measure. For added precaution, the SSC has previously endorsed the constant buffer approach recommended by the authors and Plan Team, which reduces ABC from the maximum permissible.

Because spawning biomass is below $B_{40\%}$, the SSC places the stock in Tier 3b. Therefore the SSC agrees with the projected ABC and OFL levels in metric tons by area as summarized below (after subtracting 1,650t pollock GHL in Prince William Sound). This results in a 16% increase in the 2011 ABC compared to last year. For area EYAK/SEO, the calculations are done using Tier 5 methodology using natural mortality and survey biomass from the last available bottom trawl survey in 2009.

Stock/			2011		2012
Assemblage	Area	OFL_	ABC	OFL	ABC
	W (61)		27,031		34,932
	C (62)		37,365		48,293
	C (63)		20,235		26,155
Pollock	WYAK		2,339		3,024
	Subtotal	118,030	86,970	151,030	112,404
	EYAK/SEO	12,326	9,245	12,326	9,245
	Total	130,356	96,215	163,356	121,649

GOA Atka mackerel

Atka mackerel are largely taken incidentally in the GOA, with most of the catch occurring in the rockfish trawl fisheries. While some of the catch is retained, the majority of the catch is discarded. The Council has set TAC so as to allow for bycatch needs of the Gulf fisheries; however, catches have exceeded TAC (but not ABC) since 2008.

The SSC agrees with the Plan Team and stock assessment authors to continue managing GOA Atka mackerel in Tier 6 with OFL and ABC for both 2011 and 2012, as shown below in metric tons.

Stock/		20	11	20	12
Assemblage	Area	OFL	ABC	OFL	ABC
Atka mackerel	Total	6,200	4,700	6,200	4,700

GOA Flatfish

All of these stocks are on a biennial cycle in which an assessment is conducted in survey (odd) years and a routine projection (accounting for commercial catches, growth, natural mortality, etc.) is done in off (even) years. The current assessment represents a simple projection from the 2009 assessment. The SSC concurs with the authors' and Plan Team's recommended 2011/2012 ABCs, OFLs, and area apportionments (in metric tons) in the table below. The SSC also supports the following Tier designations: Tiers 4 and 5 for shallow water flatfish, Tiers 3a and 5 for deep water flatfish, Tier 5 for rex sole, Tier 3a for arrowtooth flounder, and Tier 3a for flathead sole.

SSC recommendations for GOA flatfish ABC and OFL for 2011 and 2012 (t)

Stock/			2011		2012
Assemblage	Area	OFL	ABC	OFL	ABC
Shallow-	W		23,681		23,681
water	С		29,999		29,999
flatfish	WYAK		1,228		1,228
	EYAK/SEO		1,334		1,334
	Total	67,768	56,242	67,768	56,242
Deep-	W	···-	529		541
water	С		2,919		3,004
Flatfish	WYAK		2,083		2,144
	EYAK/SEO		774		797
	Total	7,823	6,305	8,046	6,486
Rex sole	W		1,517		1,490
	С		6,294		6,184
	WYAK		868		853
	EYAK/SEO		886		869
	Total	12,499	9,565	12,279	9,396
Arrowtooth	W		34,317		33,975
Flounder	С		144,559		143,119
	WYAK		22,551		22,327
	EYAK/SEO		11,723		11,606
	Total	251,068	213,150	248,576	211,027
Flathead	W		17,442		17,960
Sole	С		28,104		28,938
	WYAK		2,064		2,125
	EYAK/SEO		1,523		1,568
	Total	61,412	49,133	63,202	50,591

As in past assessments of rex sole, the Plan Team and SSC note that a reliable estimate of biomass is available from the assessment model, but reliable estimates of $F_{40\%}$ and $F_{35\%}$ are not. The calculations for OFL and ABC for rex sole use the Tier 5 formulae applied to the estimate of biomass from the assessment model. Stock assessment authors developed a draft split stock assessment for northern and southern rock sole. The SSC commented on this model in October and anticipates that this model will be considered for use in setting ABC and OFL next year.

GOA Pacific ocean perch

Gulf of Alaska Pacific ocean perch are on a biennial survey schedule, with no survey data collected this year. Given this, the assessment authors projected biomass for 2011 and 2012 using updated (2009) and best available (2010) catch information.

The SSC supports continued management under Tier 3a. We agree with the recommendations for ABC and OFL, the area apportionments of ABC and OFL for both years to the western, central, and eastern areas, as well as the eastern GOA split of the ABCs to the West Yakutat and Southeast Outside areas as given in the table below (amounts are metric tons).

Stock/		20	11	2012		
Assemblage	Area	OFL	ABC	OFL	ABC	
Pacific	W	3,221	2,798	3,068	2,665	
ocean	С	11,948	10,379	11,379	9,884	
perch	WYAK		1,937		1,845	
•	SEO		1,883		1,793	
	E(subtotal)	4,397	3,820	4,188	3,638	
	Total	19,566	16,997	18,635	16,187	

GOA Northern Rockfish

Northern rockfish in the Gulf of Alaska are on a biennial survey schedule with surveys conducted in oddnumbered years. Lacking new survey information this year, no new assessment was conducted. Updated catch information for 2009 and the best available catch estimate for 2010 were used to project population levels for 2009 and 2010.

The SSC agrees with continued management under Tier 3a. We agree with the recommendations for OFL and ABC for 2011 and 2012 (expressed in metric tons below), as well as the geographic apportionment of the ABC levels to the Central and Western Gulf areas for those years, as well as the small Eastern Gulf apportionment, which is to be combined with the ABC for other slope rockfish in both years (so does not appear in the table below).

Stock/	2011			2012		
Assemblage	Area	OFL	ABC	OFL	ABC	
Northern	W		2,573		2,446	
rockfish	С		2,281		2,168	
1	Е		_			
	Total	5,784	4,854	5,498	4,614	

GOA - Shortraker and other slope rockfish

Rockfish are assessed on a biennial stock assessment schedule to coincide with the availability of new survey data. For this off-cycle year, the 2009 catch data was updated and a new catch estimate for 2010 was added to the other slope rockfish species assessments. The SSC agrees with the author and the GOA Plan Team that the assessment should use the updated data. Shortraker rockfish are managed as a Tier 5 species. The remaining other slope rockfish are managed as a complex comprised of sharpchin rockfish, redstripe rockfish, harlequin rockfish, silvergrey rockfish, redbanded rockfish and other minor rockfish. While managed as a complex, the information content for the individual members of the other slope complex allows estimation of biological reference points for sharpchin rockfish as a Tier 4 species while all other estimates are based on Tier 5 criteria. The individual estimates are summed for the other slope complex. SSC agrees with the author and the Plan Team on this approach to estimating biological reference points. SSC accepts the Plan Team recommendations for ABC and OFL in 2011 and 2012, expressed below in metric tons.

GOA Shortraker

Stock/		20	11	20	12
Assemblage	Area	OFL	ABC	OFL	ABC
	W		134		134
G	С		325		325
Shortraker	Е		455		455
	Total	1,219	914	1,219	914

GOA Other Slope Rockfish

Stock/		2011		2012	
Assemblage	Area	_OFL	ABC	OFL	ABC
Other	W		212		212
slope ³	С		507		507
	WYAK		273		273
	EYAK/SEO		2,757		2,757
	Total	4,881	3,749	4,881	3,749

The SSC appreciates the responsiveness of the author to our comments and suggestions. The SSC agrees with the Plan Team that the author should explore an option for breaking shortraker out of the other slope species chapter and adding yellowtail and widow rockfish to the remaining "other slope" species.

GOA - Pelagic shelf rockfish

The pelagic shelf rockfish (PSR) complex consists of two Tier 5 species, widow and yellowtail rockfish, and one Tier 3a species, dusky rockfish. Rockfish are assessed on a biennial stock assessment schedule to coincide with the availability of new survey data. For this off-cycle year, there is no new survey information for widow and yellowtail rockfish; therefore, the recommended ABC and OFL are identical to those presented in the 2009 assessment. For dusky rockfish, the 2009 projection model was updated with revised catch data from 2009 and a new catch estimate for 2010. The SSC agrees with the author and the GOA Plan Team that the dusky rockfish assessment model should use the updated data. The projected female spawning biomass in 2011 is 25,099 t which is above B40% (19,159 t) and would place this stock in Tier 3a if it was managed as a single stock. SSC agrees with the Plan Team and the author regarding the tier designations described above and recommendations for ABC and OFL in 2011 and 2012, shown below in metric tons.

GOA Pelagic Shelf Rockfish

Stock/	2011			2012		
Assemblage	Area	OFL	ABC	OFL	ABC	
Pelagic	W		611		570	
Shelf	l c		3,052		2,850	
rockfish	WYAK		407		380	
	EYAK/SEO		684		638	
	Total	5,570	4,754	5,387	4,438	

The SSC appreciates the responsiveness of the author to our comments and suggestions. In particular, the work of the author to address unobserved incidental catch in the IFQ halibut fishery will improve the assessment. The SSC looks forward to hearing more about the activities of the non-target catch estimation working group.

The SSC notes that the author plans to address our request for options regarding reorganization of the PSR assessment and management. The GOA Plan Team minutes described a suggestion to break dusky rockfish from the pelagic shelf rockfish complex. The SSC agrees that this alternative should be explored.

GOA Rougheye and Blackspotted Rockfish

Rockfish are assessed on a biennial stock assessment schedule to coincide with the availability of new survey data. For this off-cycle year, the assessment authors updated the 2009 projection model estimates with revised catch data for 2009 and a new catch estimate for 2010. The SSC agrees with the author and the GOA Plan Team that the assessment should use the updated data.

Rougheye and blackspotted rockfish are modeled as a complex because of difficulties in at-sea field identification between the two species. The projected female spawning biomass in 2011 is 13,720 t, which is above $B_{40\%}$ (10,185 t), which places this stock in Tier 3a. SSC agrees that this stock falls in Tier 3a and accepts the Plan Team recommendations for ABC and OFL in 2011 and 2012 shown below in metric tons.

Stock/		20	11	20	12
Assemblage	Area	OFL	ABC	OFL	ABC
	W	_	81		81
Rougheye and	С		868		868
blackspotted rockfish	Е		363		363
	Total	1,579	1,312	1,579	1,312

The SSC appreciates the responsiveness of the author to our comments and suggestions. In particular the SSC appreciates the work of the authors to fill out the stock structure template and to initiate special projects to improve species identification. The SSC agrees that this should continue to be a high priority activity for this species.

GOA Demersal Shelf Rockfish (DSR)

Demersal shelf rockfish biomass is estimated from a habitat-based stock assessment focused on yelloweye rockfish densities derived from visual line transects conducted from submersibles. New information for the biomass projections are average weights and catches from the Southeast Outside Subdistrict (SEO). Exploitable biomass for 2011 (14,395 mt) increased slightly from 2010 (14,321 mt).

As in previous assessments, the SSC agrees with the authors and Plan Team to apply precautionary measures in establishing allowable harvests, including: 1) using the 90% lower confidence bound, and 2) using a harvest rate lower than maximum under Tier 4 by applying F=M=0.02 to survey biomass. The SSC agrees with the resulting OFL and ABC for 2011 and 2012, expressed in metric tons in the table below.

Stock/	2011		20	12	
Assemblage	Area	a OFL ABC		OFL	ABC
Demersal rockfish	Total	479	300	479	300

The SSC wishes to thank the stock assessment authors for the additional information provided in this year's SAFE regarding the bootstrap estimates of precision for catches in the recreational fisheries, and looks forward to estimates of confidence intervals in the next assessment.

Although a density survey may not be funded in 2011, the SSC is encouraged to hear that a new survey is planned in 2012, and expresses its concern that adequate resources be devoted to assessing the stock on an ongoing basis so as to maintain a consistent stream of revised densities in future years. We also look forward to reviewing the age structured assessment model in the next assessment cycle.

SSC recommendations to stock assessment authors

We recommend exploring the use of alternative survey indices (e.g., IPHC longline survey) in the age structured assessment model.

GOA Thornyhead Rockfish

The SSC supports the rollover of last year's Tier 5 calculations for thornyheads in the Gulf of Alaska, using the most recent trawl survey biomass estimate from 2009, as well as longline survey data from 2010. The SSC agrees with the Plan Team's recommendation for the Gulf-wide OFL and ABC for 2011 and 2012, and the area apportionments of the ABC for both years, expressed in metric tons in the table below.

Stock/	2011			20	12
Assemblage	Area	OFL	ABC	OFL	ABC
Thornyhead	W		425		425
Rockfish	С		637		637
	Е		708		708
	Total	2,360	1,770	2,360	1,770

GOA Sharks

The Gulf of Alaska shark assessment has been updated for total catch from 2003-2010 (slight changes in the catch accounting system, plus updated catches through October 10, 2010) and recent NMFS longline and IPHC longline survey data. Owing to changes in the Catch Accounting System, there have been slight downward adjustments to shark catches over 1997-2007. The assessment also includes an examination of spatial distribution of incidental catches and survey catches and an examination of alternatives to average catch history for Tier 6 determinations. The assessment authors have provided thoughtful responses to SSC comments from the December 2009 Council meeting.

The Plan Team and assessment authors disagreed on the approach to estimate ABC and OFL. The assessment authors recommended leaving sharks in Tier 6, with OFL based on average catch between 1997 and 2007, and ABC set to 75% of OFL. The authors noted that Tier 6 estimates based on historical catch, may underestimate total catch because the current assessment does not include shark bycatch in the IFQ halibut fishery, nor bycatch in the state-managed fisheries for salmon (gillnet and seine), longline cod and sablefish, which are thought to be substantial.

The authors considered two alternative biomass estimates. The first was an estimate in Rice's (2007) Master's thesis, which was nearly 2 million metric tons, comparable to arrowtooth flounder biomass. This estimate was based on longline data only. The authors thought that this estimate was unreasonably high. The authors also considered the use of biomass from the biennial NMFS trawl survey. However, they did not recommend use of these estimates, because the estimates are highly variable and likely greatly underestimate shark biomass. They were concerned that the trawl survey gear may be inappropriate for some species, as salmon sharks are pelagic, with major differences in distribution by sex from the Northeast to Northwest Pacific, and because sleeper sharks may avoid trawl gear. For spiny dogfish, the efficiency of trawl gear is, at best, unknown. Spiny dogfish can be found throughout the water column, and undergo offshore-inshore seasonal migrations, and are sometimes found in high abundance nearshore.

The Plan Team recommended a pseudo Tier 5 approach using the three-year running average of survey biomass estimates for spiny dogfish as a representative "minimum" estimate as the best use of available information, and a Tier 6 approach for other shark species. For spiny dogfish, the Plan Team recommended calculating OFL as M * Biomass, where M = 0.097 and ABC as F * Biomass, where F = 0.04. The value M = 0.097 was estimated by Tribuzio and Kruse (in review); it compares favorably to an estimate of 0.094 developed for British Columbia. The value of F that is derived from Tribuzio and Kruse (in review), who developed an age-based demographic model to examine intrinsic rebound potential (r). It was estimated that F = 0.04 resulted in r = 0, such that F > 0.04 is not sustainable. Further, because of the increase in ABC and OFL, the Plan Team recommended that all sharks should be placed on bycatch only status to acknowledge uncertainty in total bycatch from unobserved fisheries.

The SSC discussed these issues and concluded that the use of Tier 6 calculations for GOA shark management is problematic, because of the quality of catch data. Catch estimates are certainly underestimated, because of high at-sea discards in unobserved fisheries and bycatch in the IFQ halibut fishery and several state-managed fisheries. For instance, the assessment authors expect that estimated dogfish catch could increase by ~50%, based on the IFQ halibut fishery alone. Until these sources of uncertainty are addressed, the SSC does not recommended using average catch for GOA shark management.

The SSC agrees with the Plan Team's recommendation that the bottom trawl survey provides reasonable minimum biomass estimates of spiny dogfish in the GOA. The CVs are similar to those for rockfish and interannual variability in biomass estimates is similar to rockfish. However, the SSC wishes to emphasize that these bottom trawl estimates represent minimum biomass, because dogfish are known to be off bottom during summer. To address variability in the survey estimates of this long-lived species, the SSC agrees with the Plan Team's recommendation to use an average of the 3 most recent survey biomass estimates, as more reasonable than annual estimates.

For spiny dogfish, the SSC agrees with the Plan Team's recommendation to calculate OFL as M * Biomass, where M = 0.097. However, the SSC disagrees with the Plan Team's recommendation to use $F_{abc} = 0.04$ for two reasons. First, this estimate is based on a paper in pre-publication review, which has not been reviewed by either the Plan Team or the SSC. Second, Tribuzio and Kruse found that an F greater than 0.04 was not sustainable; this suggests that F = 0.04 might be interpreted as a limit reference point instead of a target reference point. So, for purposes of this year's assessment, the SSC recommends ABC = 0.75 M * Biomass.

For other sharks, the SSC agrees with the authors' and Plan Teams recommendations to set ABC and OFL using Tier 6 criteria.

SSC recommended 2011 and 2012 ABC and OFL for sharks (tons)

Stock/		20	20	12	
Assemblage	Area	OFL	ABC	OFL	ABC
Sharks	GOA-wide	8,262	6,197	8,262	6,197

The SSC offers the following advice to the assessment authors. The SSC regards this year's catch specification procedures as provisional, pending further analysis. For the next assessment, the choice and use of reference points (M, F) should be carefully reconsidered and evaluated to determine the most appropriate rate for use in setting OFL and ABC. The demographic modeling approach and its implications on F_{ofl} and F_{abc} should be fully described in the assessment, along with the basis for the authors' recommendation. The SSC also encourages the authors to continue to make progress toward

estimating and incorporating shark bycatch from IFQ halibut and state-managed salmon, sablefish and cod fisheries. Clearly, a more complete accounting of total fishing mortality is a central problem with the current assessment. By making this request, the SSC acknowledges the difficulty in doing so, given lack of observer data. Creative use of ADF&G longline survey data, fishermen interviews or logbooks, or other novel approaches may be needed to make progress. While the SSC believes that this year's use of trawl survey data to develop minimum biomass estimates is a step forward for spiny dogfish, methods to estimate the off bottom fraction of the population should be explored and evaluated. Finally, gaps in knowledge needed to improve the shark stock assessment should be developed and incorporated into lists of future research needs. Areas in need of research include evaluation of net efficiency for spiny dogfish, shark distribution, seasonal movements, and estimation of natural mortality for sleeper sharks, and other species.

GOA Skates

Catches of skates in the Gulf of Alaska have been relatively stable in recent years, averaging slightly less than 4,000 t since 2003, taken mainly in target fishery for Pacific cod, rex sole, arrowtooth flounder, and shallow flatfish. Catches in the halibut fisheries are not accounted for. The skate biomass in the Gulf is comprised mostly of two species in the genus *Raja*, big skates and longnose skates. Retention rates for these two species were estimated as 74% and 62%, respectively, for 2010, indicating that there continue to be markets for these large species. Retention rates for the smaller species (mostly genus *Bathyraja*) were considerably less, averaging 11% in 2010.

The SSC agrees that the biomass estimates are sufficiently reliable to support continued management of GOA skates in Tier 5, and concurs with using the average of the most recent 4 surveys. We concur with the Plan Team determinations of separate Gulf-wide OFLs for big skates, longnose skates, and other skates based on an estimate of natural mortality equal to 0.10 for all skates. The SSC agrees with ABC determinations equal to 75% of the OFL, and with the area apportionments of ABCs to the western, central, and eastern Gulf areas for big and longnose skates. These OFLs and ABCs are presented in the table below expressed in metric tons.

The SSC supports the Plan Team recommendation for future development of stock assessment models for big and longnose skates, and we recommend that research be initiated on identifying the location of skate nurseries in the Gulf, recognizing the value that resulted from the identification of nursery locations in the Bering Sea.

The SSC notes that the estimate of M is a precautionary estimate, taken as the minimum of a variety of estimates based on life history data from the Bering Sea and elsewhere, and we look forward to hearing plans by the Plan Team for implementing risk neutral estimates, as appropriate, for determinations of OFL.

Stock/	2011			20	12
Assemblage	Area	OFL	ABC	OFL	ABC
Big	W		598		598
Skate	С		2,049		2,049
	E		681		681
	Total	4,438	3,328	4,438	3,328
Longnose	W		81		81
Skate	С		2,009		2,009
	E		762		762
	Total	3,803	2,852	3,803	2,852
Other skates	Grand Total	2,791	2,093	2,791	2,093

GOA Squid

With passage of Amendment 87 to the GOA FMP this year, which separated the "other species" complex into constituent groups, the Plan Team presented recommendations to the SSC for OFLs and ABCs specific to GOA squids. The team recommended a Tier 6 approach, noting that there is not a reliable biomass estimate. The team also recommended basing the OFL on maximum catch, rather than average catch, with a rationale that fishing pressure on squids is low and that average catch may not be a good indicator of squid productivity.

The SSC agrees with the recommendation for a Tier 6 approach, with OFL for 2011 and 2012 based on maximum catch in the time period 1997-2007, and with ABC = 75% of the OFLs in each year, as shown in the table below in metric tons.

In the Ecosystem considerations section, the authors note that squid are important prey for some birds, particularly Procellarids, but seabirds are not included in the table summarizing fishery effects on the ecosystem via squid bycatch (p.670).

Stock/		20	20	12	
Assemblage	Area	OFL	ABC	OFL	ABC
Squid	GOA-wide	1,530	1,148	1,530	1,148

GOA Octopus

With passage of Amendment 87 to the GOA FMP this year, which separated the "other species" complex into constituent groups, the Plan Team presented recommendations to the SSC for OFLs and ABCs specific to GOA octopus. The Plan Team recommended management under Tier 6, but with an approach similar to Tier 5, using the average of the three most recent survey estimates of biomass as a minimum estimate, and applying a conservative natural mortality rate of 0.53. This approach recognizes that the catch history is not appropriate for tier 6 management, and that the biomass estimates and M estimates are not sufficient for a Tier 5 approach.

The SSC accepts the Plan Team recommendation for a modified Tier 6 approach with OFL in both 2011 and 2012, and ABC = 75% of that value, applied Gulf-wide as shown in the table below in metric tons.

Stock/		20	20	12	
Assemblage	Area	OFL	OFL	ABC	
Octopus	GOA-wide	1,272	954	1,272	954

GOA Sculpins

Following passage of Amendment 87 to the GOA FMP this year, which separated the "other species" complex into constituent groups, the Plan Team presented recommendations to the SSC for OFLs and ABCs specific to GOA sculpins. The SSC agrees with the Plan Team that reliable biomass estimates are available for the GOA sculpin complex, and supports the recommendation for Tier 5 management. The SSC agrees with the use of the 4 most recent survey biomass estimates, and the calculation of a weighted average M (= 0.22) based on the 4 most abundant sculpin species captured in the NMFS bottom trawl survey, for which M estimates are borrowed estimates for those 4 species in the BSAI. As a result, the SSC supports the OFL and ABC recommendations for 2011 and 2012, applied Gulf-wide for sculpins, as given in the table below in metric tons.

The SSC recommends that natural mortality estimates for sculpins be derived from GOA specific studies when possible.

Stock/		20	20	12	
Assemblage	Area	_OFL	ABC	OFL	ABC
Sculpins	GOA-wide	7,328	5,496	7,328	5,496

BSAI SAFE and Harvest Specifications for 2010/11

The SSC reviewed the information presented in Table 3 and determined that none of these species were subjected to overfishing in 2008. Also, in reviewing the status of stocks with reliable biomass reference points (all Tier 3 and above stocks) and the 2010/2011 ABC and OFL recommendations for those stocks, the SSC determined that these stocks are not considered overfished and are not approaching an overfished condition.

Table 3. BSAI Groundfish Catch and OFL amounts (t) for 2009 for overfishing determinations (includes State managed Pacific cod fisheries).

			2009	% of OFL
Stock/Assemblage	Area/District	OFL	Catch	Caught
Pollock	BS	977,000	810,743	83%
	AI	32,600	1,779	5%
	Bogoslof	58,400	73	0%
	Total	1,068,000	812,595	76%
Pacific cod	BSAI	212,000	175,746	83%
Sablefish	BS	3,210	891	28%
	_AI	2,600	1,096	42%
	Total	5,810	1,986	34%
Atka mackerel	BSAI	99,400	72,807	73%
Yellowfin sole	BSAI	224,000	107,513	48%
Rock sole	BSAI	301,000	48,716	16%
Greenland turbot	BSAI	14,800	4,512	30%
Arrowtooth flounder	BSAI	190,000	30,419	16%
Flathead sole	BSAI	83,800	19,558	23%
Other flatfish	BSAI	23,100	2,177	9%
Alaska plaice	BSAI	298,000	13,944	5%
Pacific ocean perch	BSAI	22,300	15,347	69%
Northern rockfish	BSAI	8,540	3,111	36%
Shortraker rockfish	BSAI	516	205	40%
Rougheye rockfish	BSAI	660	209	32%
Other rockfish	BSAI	1,380	609	44%
Squid	BSAI	2,620	360	14%
Other species	BSAI	80,800	27,853	34%
Total		2,636,726	1,337,667	58%

Table 4. SSC recommendations for BSAI Groundfish 2011-2012 OFLs and ABCs shown with the 2010 OFL, ABC, TAC, and Catch amounts (t) (2010 catches through November 6 from AKR Catch Accounting including CDQ). SSC recommendations did not differ from the BSAI Plan Team recommendations.

Stock/		2010				2011		2012	
Assemblage	Area	OFL	ABC	TAC	Catch	OFL	ABC	OFL	ABC
,	EBS	918,000	813,000	813,000	809,238	2,450,000	1,270,000	3,170,000	1,600,000
Pollock	AI	40,000	33,100	19,000	1,266	44,500	36,700	50,400	41,600
	Bogoslof	22,000	156	50	131	22,000	156	22,000	156
	Total	980,000	846,256	810,635	810,635	2,516,500	1,306,856	3,242,400	1,641,756
Pacific cod	BSAI	205,000	174,000	168,780	159,012	272,000	235,000	329,000	281,000
	BS	3,310	2,790	2,790	721	3,360	2,850	3,080	2,610
Sablefish	AI	2,450	2,070	2,070	1,049	2,250	1,900	2,060	1,740
	Total	5,760	4,860	4,860	1,770	5,610	4,750	5,140	4,350
Yellowfin sole	BSAI	234,000	219,000	219,000	114,600	262,000	239,000	266,000	242,000
Greenland	BS	n/a	4,220	4,220	1,706	n/a	4,590	n/a	4,300
Turbot	AI	n/a	1,900	1,900	1,883	n/a	1,550	n/a	1,450
	Total	7,460	6,120	6,120	3,589	7,220	6,140	6,760	5,750
Arrowtooth	1.000	1,,	0,120	7,.20	3,307	1.,220	3,110	3,700	3,730
flounder	BSAI	191,000	156,000	75,000	38,098	186,000	153,000	191,000	157,000
Kamchatka	1	1,	,	1		1		1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	,
flounder	BSAI	n/a	n/a	n/a	n/a	23,600	17,700	23,600	17,700
Northern							- 		,
rock sole	BSAI	243,000	240,000	90,000	53,111	248,000	224,000	243,000	219,000
Flathead sole	BSAI	83,100	69,200	60,000	19,863	83,300	69,300	82,100	68,300
Alaska plaice	BSAI	278,000	224,000	50,000	15,771	79,100	65,100	83,800	69,100
Other flatfish	BSAI	23,000	17,300	17,300	2,179	19,500	14,500	19,500	14,500
D 'C	BS	n/a	3,830	3,830	2,267	n/a	5,710	n/a	5,710
Pacific	EAI	n/a	4,220	4,220	4,033	n/a	5,660	n/a	5,660
ocean	CAI	n/a	4,270	4,270	4,033	n/a	4,960	n/a	4,960
perch	WAI	n/a	6,540	6,540	6,234	n/a	8,370	n/a	8,370
	Total	22,400	18,860	18,860	16,567	36,300	24,700	34,300	24,700
Northern rockfish	BSAI	8,640	7,240	7,240	4,039	10,600	8,670	10,400	8,330
Blackspotted/	EBS/EAI	n/a	n/a	n/a	n/a	n/a	234	n/a	240
Rougheye	CAI/WAI	n/a	n/a	n/a	n/a	n/a	220	n/a	225
	Total	669	547	547	232	549	454	563	465
Shortraker									
rockfish	BSAI	516	387	387	252	524	393	524	393
Other rockfish	BS	n/a	485	485	179	n/a	710	n/a	710
Other rockrish	AI	n/a	555	555	497	n/a	570	n/a	570
	Total	1,380	1,040	1,040	676	1,700	1,280	1,700	1,280
	EAI/BS	n/a	23,800	23,800	23,599	n/a	40,300	n/a	36,800
Atka mackerel	CAI	n/a	29,600	29,600	26,387	n/a	24,000	n/a	21,900
	WAI	n/a	20,600	20,600	18,657	n/a	21,000	n/a	19,200
<u> </u>	Total	88,200	74,000	74,000	68,643	101,000	85,300	92,200	77,900
Squid	BSAI	2,620	1,970	1,970	402	2,620	1,970	2,620	1,970
Other species	BSAI	88,200	61,100	50,000	21,783	n/a	n/a	n/a	n/a
Skate	BSAI	n/a	n/a	n/a	16,419	37,800	31,500	37,200	31,000
Shark	BSAI	n/a	n/a	n/a	47	1,360	1,020	1,360	1,020
Octopus	BSAI	n/a	n/a	n/a	149	528	396	528	396 43.700
Sculpin Tatal	BSAI	n/a	n/a	n/a	5,168	58,300	43,700	58,300	43,700
Total	BSAI	2,402,943	2,121,880	1,655,739	1,353,005	3,954,111	2,534,729	4,731,995	2,911,610

Notes: New in 2011: 1) Kamchatka flounder category, 2) subarea specifications for Blackspotted/Rougheye rockfishes, and 3) separate Skate, Shark, Octopus, and Sculpin assemblage specifications replaces "Other Species" category; 2010 catches through November 6, 2010 from AKR Catch Accounting.

EBS Pollock

Public testimony was received from Ed Richardson (Pollock Conservation Cooperative). He supported the author's model and the author and Plan Team recommended ABC, noted that this year's data reinforced his comment from last year that the 2009 survey underestimated the strength of incoming year classes, and supported the Plan Team and SSC recommendation that a workshop be held to investigate the spawner-recruit relationship.

Survey and fishery information from this year showed a dramatic improvement in the condition of the population. The biomass estimate from the bottom trawl survey increased 64% from last year, and the biomass estimate from the acoustic trawl (previously EIT) survey increased 151%. Catch, age composition, weight-at-age, and an age-length key were also updated.

The stock assessment model was the same one that has been used for several years with the updated data added sequentially to show the effect of each data source on the assessment, an approach that the SSC appreciates. Alternative model configurations were also considered: (1) excluding the two most recent recruitment estimates in fitting the Ricker spawner-recruit model, (2) including an ageing error matrix, and (3) using a new acoustic index (AVO) from recordings of vessels conducting the bottom trawl survey.

The author's final recommended model excluded the two most recent recruitment estimates, because the author did not consider the increase in fishing mortality at MSY that resulted when the two estimates were included. The ageing error matrix was not included because it degraded the fit to the data. The new acoustic index was not included because the model could not fit it very well, raising the concern about its utility as an abundance index.

Recent biomass estimates and projected biomass values have increased substantially, reversing the declines in biomass that resulted from poor year classes in the early 2000's. Revised estimates of the population in 2009, 2010 and the 2011 projected biomass were much higher than last year. The strength of the 2006 year class was confirmed, and indications of strong year classes in 2008 and 2009 were observed, although this latter result is highly uncertain. Tier status has changed from 1b to 1a, because estimated biomass is above B_{msy} . The resulting maximum permissible ABC for 2011 of 2.15 million tons increased 164% from the 2010 ABC and 94% from the 2011 projected ABC last year. The author's recommended 2011 ABC of 1.27 million t is much lower than the maximum permissible. The adjustment was made because age composition is dominated by a single year class (2006) such that about half the catch will come from this cohort. Until a more robust age composition exists, it is prudent to be cautious. The recommended ABC keeps the harvest rate at the average of the last five years and hedges against poor environmental conditions that could occur in the future.

The Plan Team accepted the author's final model to make management recommendations but only for this assessment. The Plan Team expressed concern about deletion of the most recent two recruitment estimates in fitting the spawner recruit curve. A strong scientific rationale for the deletion should have been provided. Alternative ABC estimates were not in the document, and the Plan Team was reluctant to request them at its meeting. The Plan Team also surmised that the recommendations would not be much different if an alternative was selected.

The SSC accepted the recommendations of the authors regarding tier level, the model used, and the resulting ABC and OFL values (shown in the metric tons in the Table below) for this assessment. But it shares the Plan Team's concern about deleting estimates when fitting the spawner-recruit curve. In the future, a strong scientific rationale should be given. The SSC also repeats the recommendation from last year that a workshop should be held to provide guidance on criteria for choosing Tier 1, including evaluation of the fit of a spawner-recruit relationship. It would be natural to consider the topic of deleting data points at the workshop.

Stock/		2011	2011		
Assemblage	Area	OFL	ABC	OFL	ABC
EBS Pollock	EBS	2,450,000	1,270,000	3,170,000	1,600,000

SSC recommendations to the assessment authors

- 1. Continue work on incorporating an ageing error matrix into the model. This would make the model more consistent with the Aleutian Islands and GOA assessments.
- 2. Conduct a retrospective analysis on average fishing mortality to understand how actual harvest rates correspond to the harvest control rule. Current average fishing mortality is relatively high compared to previous time periods. This will also help in future decisions to reduce ABC from the maximum permissible value.
- 3. Determine if it is possible to determine at what age year class strength is set. Sometimes year classes appear strong but then fail to materialize at older ages. A retrospective analysis of patterns in the apparent availability of age-2 and age-3 pollock to the bottom trawl and acoustic surveys may help inform the model about the strength of incoming year classes.
- 4. Continue evaluation of the AVO index. Recent work showing the index is compatible with the AT index is encouraging, even though it has not improved the stock assessment model yet.

Aleutian Islands Walleye Pollock

The SSC's concern last year about a lack of recent surveys in the Aleutians has been assuaged, because a bottom trawl survey was conducted this summer. It showed a 46% increase from 2006 to 2010 and that the population was unevenly distribution across the area, with much higher densities in the Eastern subarea than in the Western and Central areas.

This assessment includes an update of last year's preferred age-structured model with updated total catch and catch-age information. Because there have been concerns about ageing accuracy, a model that includes ageing error was also developed. Because the model with ageing error fit the data better, the author and Plan Team recommended use of the model with ageing error. Results from this model show that biomass has increased from $B_{22\%}$ to $B_{33\%}$.

The SSC concurs with the Plan Team to use this model for setting ABC. The SSC agrees that this stock is in Tier 3b and concurs with the recommended ABC's and OFL's recommended by the author and Plan Team (shown in the table below in metric tons).

1		2011			
Assemblage	Area	OFL	ABC	OFL	ABC
AI Pollock	AI	44,500	36,700	50,400	41,600

Bogoslof Walleye Pollock

Because there is no new information, this assessment is a rollover with updated catch data. The stock is in Tier 5 but the ABC is calculated with a more conservative quasi-Tier-3b approach as explained in the document. The SSC approved the ABC and OFL values in the table below.

Stock/		2011		2012	
Assemblage	Area	OFL	ABC	OFL	ABC
Bogoslof Pollock	Bogoslof	22,000	156	22,000	156

BSAI Atka mackerel

Stock assessment for BSAI Atka mackerel has been hampered by infrequent trawl surveys in the Aleutian Islands area, including a hiatus in the biennial survey schedule in 2008. The successfully completed survey in 2010 was therefore a welcome source of new data. There were minor changes to the model used previously, including a 1 year shift in the change points for the years of constant fishery selectivity. This led to a drop in F rates that was offset by increases in biomass.

The SSC agrees with management under Tier 3a, and supports the OFL and ABC recommendations for 2011 and 2012 with area apportionments of the ABCs as shown metric tons in the table below. The apportionment calculations have been updated, such that the survey biomass for area 541 now includes the southern Bering Sea area.

The SSC requests that in the next assessment stock assessment address the lack of fit of model estimates to survey biomass as shown in the past 4 survey data points in Figure 16.18.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Atka mackerel	Total	101,000	85,300	92,200	77,900
	EAI/BS	n/a	40,300	n/a	36,800
	CAI	n/a	24,000	n/a	21,900
	WAI	n/a	21,000	n/a	19,200
	Total	101,000	85,300	92,200	77,900

BSAI Flatfish

Yellowfin Sole

Improvements in this year's stock assessment model include sex-specific and time-varying selectivities, as well as some changes in input data. Sex-specific selectivities are appropriate because females achieve larger sizes than males. The assessment included maps showing monthly changes in catch locations of the fishery. The SSC appreciates the authors' responses to previous SSC recommendations.

The SSC commends the authors for exploring stock-recruit relationships over different time periods. The author chose to use data over 1978-2003 to estimate the stock-recruit relationship, because it yielded a more conservative estimate of B_{msy} and MSY, given uncertainty in recruitment at low stock sizes. As in other recent assessments, bottom temperature is used in the estimation of catchability (q).

There was much discussion at the Plan Team about the estimation of time-varying selectivities, such as whether it should be estimated annually, in four-year blocks of time, or other approaches. The SSC appreciates this discussion and recommends that the authors continue to evaluate the best method to estimate changes in selectivity over time.

The author and Plan Team recommended use of the 2010 base model in which M=0.12 and q is estimated based on bottom temperature. The Plan Team also supported the author's recommended OFL and ABC under Tier 1. The SSC agrees with both the authors' and Plan Team's recommended OFLs and ABCs expressed in metric tons below.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Yellowfin sole	BSAI	262,000	239,000	266,000	242,000

Greenland Turbot

Greenland turbot biomass trends differ from many other flatfishes. Estimated biomass has generally been declining since the mid1970s. Survey catches have recently increased for the shelf trawl survey (2010 estimate was more than double the 2009 estimate), but declined in the slope trawl survey and longline survey. The increase in biomass on the shelf survey appears to be largely due to an apparent large increase in recruitment of young fish, which is encouraging.

For this year's assessment, last year's stock synthesis 3 model was used, updated with catch and survey data. The author and Plan Team both recommend setting ABC and OFL using Tier 3a (same as endorsed by the SSC last year). The Plan Team agreed with the authors' recommendations for OFL and ABC for 2011 and 2012 expressed in metric tons below. The SSC agrees with this approach.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Greenland Turbot	Total BS	7,220 n/a	6,140 4,590	6,760 n/a	5,750 4,300
	AI	n/a	1,550	n/a	1,450
	Total	7,220	12,280	6,760	11,500

Arrowtooth Flounder

This is the first assessment for arrowtooth flounder as a single species. In previous assessments, arrowtooth and Kamchatka flounders were assessed together as a complex. The model is identical to last year's, but the input data are confined to only arrowtooth flounder. In last year's assessment, the SSC expressed concern about a very small separation between ABC and OFL. This is no longer the case for this year's assessment. As with yellowfin sole, survey catchability is estimated as a function of bottom temperature; arrowtooth are less catchable in cold years. The current model assesses arrowtooth flounder in three areas with biomass apportioned on the Bering Sea shelf (76%), and slope (10%), and Aleutian Islands (14%). For 2010, age 1+ biomass and female spawning biomass was estimated to be the highest on record. In the future, it will be interesting to see if this increasing biomass causes density dependence in the stock-recruit relationship.

The authors and Plan Team recommended Tier 3a for catch specifications, the same as last year. The SSC supports the authors' and Plan Team's recommended ABC and OFL for 2011 and 2012 expressed in metric tons below.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Arrowtooth					
flounder	BSAI	186,000	153,000	191,000	157,000

Kamchatka Flounder

This is the first assessment model for Kamchatka flounder. In previous assessments, arrowtooth and Kamchatka flounder were assessed together as a complex. The emergence of a directed fishery for Kamchatka flounder necessitated the separate assessment. The assessment author recommended management under Tier 5 status as there is no age-structured model for this stock. Varying periods for averaging of biomass estimates were considered for the Tier 5 calculations. A 7-year moving average was recommended, because it has the most resilience to trawl survey variability, while providing consistency with alternative periods of averaging.

The SSC agrees with the authors' and Plan Team's recommended OFL and ABC expressed in metric tons below.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Kamchatka					
flounder	BSAI	23,600	17,700	23,600	17,700

A preponderance of Kamchatka flounder catches occur in the eastern AI. The SSC supports the Plan Team's recommendation that the authors should report catches and exploitation rates separately for the EBS and AI, and analyze options for area apportionment for next year's assessment. Also, the SSC asks the assessment authors to more thoroughly evaluate alternative methods for estimation of M. Longevity is 33 years for both sexes; the preliminary estimate of M = 0.2 may be high. Finally, the justification for using a 7-year period of averaging should be reviewed periodically.

Northern Rock Sole

The main change for this year's assessment is the inclusion of time-varying, sex-specific fishery selectivity. Catch and survey data were updated, with a noteworthy 34% increase in survey biomass from last year.

The author's preferred model is the base model from last year, which separates the sexes. An attempt was made to estimate bottom temperature effects on survey catchability, but results were inconsistent with experimental results. Therefore, the survey catchability coefficient was estimated and constrained by the results of trawl herding experiments; this same approach was used in past assessments.

The authors and Plan Team recommended management under Tier 1a, the same as last year. The SSC endorses the authors' and Plan Team's recommendations for OFL and ABC expressed in metric tons.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Northern rock sole	BSAI	248,000	224,000	243,000	219,000

Flathead Sole

The base model for this year's assessment remains unchanged from last year, except for the updating of catch, survey, and sex-specific age composition data. This is another flatfish assessment in which survey catchability varies as a function of bottom temperature. Three alternative models were explored but not adopted. The SSC wishes to thank the authors for exploring stock-recruit curves plotted with the replacement lines.

The authors and Plan Team both recommended management using Tier 3a, the same as last year. The SSC supports this approach as well as the ABCs and OFLs for 2011 and 2012 expressed in metric tons.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Flathead sole	BSAI	83,300	69,300	82,100	68,300

Alaska Plaice

This year's assessment was updated with catch and survey biomass and age composition data. Interestingly, expanded surveys found 38% of the biomass of Alaska plaice in the northern Bering Sea. The model is a split-sex model, which was introduced in 2009. In response to an SSC request last year, the assessment authors re-estimated M with three alternative methods. The assessment model was run

with alternative M values to determine which parameterization resulted in the best fit. As a result, the author recommended use of M = 0.13 for both sexes in this year's assessment, compared to M = 0.25 in last year's assessment. The SSC appreciates the authors' analyses of M and the SSC supports use of the new estimates in this year's assessment. The new M estimate is more in line with other Bering Sea flatfishes with similar life history characteristics. However, this change in M resulted in significantly lower estimates of spawning biomass and biological reference points used to manage the fishery. Interestingly, last year's recommended OFL is nearly as large as this year's estimated spawning biomass.

The SSC supports the authors' and Plan Team's ABC and OFL recommendations using the model with the new estimate of M under Tier 3a. Owing to the change in M, the resultant ABCs and OFLs (expressed in metric tons) are significantly lower than levels recommended for 2010.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Alaska plaice	BSAI	79,100	65,100	83,800	69,100

The SSC discussed the observation that expanded surveys found 38% of the biomass of Alaska plaice in the northern Bering Sea and revisited the Plan Team's discussion about whether Alaska Plaice constitute one or more stocks and how best to handle occasional surveys in the north. The SSC encourages the assessment authors to consider how best to handle biomass data from the northern Bering Sea, particularly if future northern Bering Sea surveys are planned.

Other Flatfish

For this year, the assessment was updated with new catch and biomass data, and the M for flatfish other than Dover and rex sole was revised from 0.2 to 0.15, owing to the revisions to Alaska plaice. The reduction in M results in lower estimates of OFL and ABC. The SSC supports the proposed ABC and OFL determinations of the authors and Plan Team expressed in metric tons below.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Other flatfish	BSAI	19,500	14,500	19,500	14,500

BSAI Rockfish

Pacific Ocean Perch (POP)

New data incorporated into current assessment include: 1) 2010 AI survey biomass estimate and length composition; 2) 2006, 2007, and 2008 fishery age compositions; and 3) 2009 fishery length composition. In 2010 there was a 46% survey biomass increase in the AI and in EBS, and survey age compositions indicate signs of fairly strong recruitment in recent years.

There were a number of important model changes since the last assessment in 2008. Model changes include: fishery selectivity was set to vary between 4-year blocks of time; growth parameters and the agelength conversion matrix were re-estimated; and years in which recruitment for recent year classes is not estimated was reduced from 7 to 3. Results indicate a substantial increase in biomass that seems implausible for a long-lived rockfish species like POP. Changes in the model, and incorporation of the 2010 trawl survey biomass and compositional data, resulted in a substantial shift in the estimate of catchability. This resulted in an upward scale change for the entire historical time series of biomass and recruitment. Because of the four-year gap between the 2006 and 2010 trawl survey, it is difficult to properly assess the rapid change in trawl survey abundance. The SSC shares the Plan Team's concerns

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and rationale for a stair-step approach, where the ABC would be increased halfway to the authors' recommended 2011 ABC until a new Aleutian Islands survey is conducted in 2012, after which a new assessment would be conducted. The SSC agrees with Plan Team OFL and ABC recommendations. This stock qualifies for management under Tier 3a and the 2011 and 2012 ABCs and OFLs are below in metric tons.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
D 10	BS	n/a	5,710	n/a	5,710
Pacific	EAI	n/a	5,660	n/a	5,660
ocean	CAI	n/a	4,960	n/a	4,960
perch	WAI	n/a	8,370	n/a	8,370
	Total	36,300	24,700	34,300	24,700

SSC recommendations to the author:

- Explore alternative selectivity patterns for the fishery.
- Evaluate alternate selectivity time periods and state the rationale
- Consider increasing the number of age bins and evaluate model sensitivities

Northern Rockfish

The 2010 AI bottom trawl survey was the first new survey since 2006. These data and the final 2009 catch and preliminary estimate of 2010 catch were incorporated into this assessment. Age 3+ biomass and spawning biomass has been increasing slowly and almost continuously since 1977.

Changes to assessment methodology consisted of removing the constraining parameters on fishery selectivity, re-estimation of growth parameters, and reducing the number of years in which recruitment for recent year classes is not estimated from 7 to 3.

The SSC agrees with Plan Team OFL and ABC recommendation. This stock qualifies for management under Tier 3a and the resulting ABCs and OFLs are below in metric tons.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Northern rockfish	BSAI	10,600	8,670	10,400	8,330

SSC recommendations to the author:

- The model consistently underestimates the early fishery age composition and overestimates the recent fishery age compositions. This should be evaluated and model improvements should be explored to resolve this pattern and/or attempt to better fit age composition data.
- Consider alternative selectivity patterns for the fishery.
- Consider alternate selectivity time periods and state the rationale.
- Explore increasing the number of age bins and evaluate model fit to the data.

Shortraker Rockfish

New data incorporated into the current assessment include: 1) final 2009 catch and preliminary estimate of 2010 catch; 2) 2010 Aleutian Islands survey data; and 3) 2010 EBS slope trawl survey data. There were no changes to the current model. The survey biomass has increased 50% since 2006.

The SSC agrees with Plan Team OFL and ABC recommendation. This stock qualifies for management under Tier 3a and the resulting ABCs and OFLs are tabled below in metric tons.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Shortraker					-
rockfish	BSAI	524	393	524	393

Blackspotted and Rougheye Rockfish Complex

New data incorporated into the current assessment include: 1) biomass estimate from the 2010 AI survey; 2) 2008 fishery age composition; 3) 2009 fishery length composition; 4) 1983 and 2010 survey length compositions; and 5) final 2009 catch and preliminary estimate of 2010 catch.

The Plan Team recommends allocating the BSAI ABC into two areas that include the Western and Central AI area and an Eastern AI and EBS area. The SSC agrees with the Plan Team's rationale and ABC area splits for ABC. The SSC agrees with Plan Team OFL and ABC recommendation. This stock qualifies for management under Tier 3a and the resulting ABCs and OFLs are below in metric tons.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Blackspotted/	EBS/EAI	n/a	234	n/a	240
Rougheye	CAI/WAI	n/a	220	n/a	225
	Total	549	454	563	465

Other Rockfish Complex

New data incorporated into current assessment include: 1) 2010 AI survey; 2010 EBS slope trawl survey; and 3) final 2009 catch and preliminary estimate of 2010 catch. Trends in spawning biomass are unknown. Stock biomass, as measured by trawl surveys of the Aleutian Islands and the EBS slope, has increased since the 2008 assessment.

The author presented a revised area apportionment using a weighting of 4:6:9 of the last three surveys, similar to area apportionment for other BSAI rockfish species. The SSC agrees with the approach that was recommended by the Authors' and Plan Team. It was thought as an appropriate compromise between smoothing variability and emphasizing the most recent information.

The SSC agrees with Plan Team OFL and ABC recommendations that this stock qualifies for management under Tier 3a, the resulting ABCs and OFLs are shown below in metric tons.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
O4h 1.6' h	BS	n/a	710	n/a	710
Other rockfish	AI	n/a	570	n/a	570
	Total	1,700	1,280	1,700	1,280

BSAI Sharks

Changes to the BSAI shark assessment include updated catch and longline and trawl survey data. Also, the analysts presented an analysis of spatial patterns in observed catch and considered alternative procedures for Tier 6 specifications. The SSC appreciates the authors' responsiveness to previous recommendations.

Most sharks caught in the BSAI area are Pacific sleeper sharks (68%), followed by other/unidentified sharks (20%), many of which may be sleeper sharks. Salmon shark (9%) and spiny dogfish (2%) make up small percentages of the catch. Survey estimates of sleeper sharks vary widely, but appear to be declining in surveys conducted on the EBS slope, Aleutian Islands and perhaps the EBS shelf.

Management of the BSAI shark complex is complicated by the fact that EBS shelf, slope, and Aleutian Islands survey data do not provide reliable abundance estimates of sharks. Moreover, there are no estimates of M for the primary species, Pacific sleeper shark, and the mortality rate for dogfish, used for the GOA shark complex, would not be appropriate. So, it is not possible to manage sharks as Tier 5 at this time.

The authors recommend continued management of the shark complex under Tier 6, based on average catch over 1997-2007. However, the Plan Team recommended management under Tier 6 based on maximum catch. The Plan Team's rationale for using maximum, rather than average, catch is two-fold. First, sharks were formerly in an "Other Species" category that had a very large OFL, but now are managed separately under a much smaller OFL that affords greater conservation. Nonetheless it is based on catch records that are known to be underestimates. Second, sharks are relegated to bycatch only, so there is no possibility for a new fishery to target sharks. For these reasons, the SSC endorses the Plan Team's recommended OFLs and ABCs for BSAI sharks based on Tier 6 using maximum catch expressed below in metric tons.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Shark	BSAI	1,360	1,020	1,360	1,020

The SSC provides the following advice to the assessment authors. A priority need for improvement in the shark assessment is the development of improved estimates of shark catches. This is a difficult task, owing to the probable large amount of dogfish bycatch in un-observed fisheries. The SSC appreciates the formation of a working group to develop methods to estimate shark bycatch in the unobserved halibut IFQ fleet and looks forward to inclusion of this important information into catch estimates in next year's assessment. As with the GOA shark assessment, the SSC also encourages approaches to attempt to estimate shark removals in other unobserved fisheries that may have substantial shark catches. Research priorities for BSAI shark research should also include priorities identified by the SSC for sharks in the GOA.

BSAI Squid

The Plan Team reported no change in the assessment approach for BSAI squids. The SSC agrees with continuation of Tier 6 management for this complex, with OFL set equal to the average catch from 1978-1995, with ABC set equal to 75% of the OFL, as shown in the table below in metric tons.

The new figures and maps for squid bycatch and trawl surveys were helpful and informative. The SSC requests that seabirds be added to the un-numbered table under Ecosystem Considerations that summarizies fishery effects on the ecosystem via squid bycatch; while the report notes that squid are important prey for some birds, particularly Procellarids, seabirds are not included in this table. Additionally, Figure 18, showing seabird diet, is labeled as GOA seabird diet. It would be helpful if this figure used the same colors as the GOA Figure 11 for respective species.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Squid	BSAI	2,620	1,970	2,620	1,970

BSAI Skates

With passage of Amendment 96 to the BSAI Fishery Management Plan this year, which separated the "other species" complex into constituent groups, the plan team presented recommendations to the SSC for OFLs and ABCs specific to BSAI skates. The SSC agrees with the BSAI plan team that biomass estimates are reliable for skates in the BSAI, and notes that the biomass trends for BSAI skates has been fairly stable. The SSC agrees with the combined estimate of OFLs and ABCs for Alaska skates under Tier 3a combined with all other skates under Tier 5 for combined skate specifications as shown in the table below. The SSC supports the change of using the last 3 survey years to determine average biomass for the "other skates" group, as opposed to using the prior 9 surveys.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Skate	BSAI	37,800	31,500	37,200	31,000

BSAI Sculpins

With passage of Amendment 96 to the BSAI Fishery Management Plan this year, which separated the "other species" complex into constituent groups, the Plan Team presented recommendations to the SSC for OFLs and ABCs specific to BSAI sculpins. The SSC agrees with the BSAI Plan Team that biomass estimates are reliable for sculpins in the BSAI, and supports the estimate of OFLs and ABCs for under Tier 5, as shown in the table below (metric tons), based on an estimate of M that is a weighted average for 6 species.

The SSC seeks clarification from the stock assessment author of the zero values in Table 6a as to whether those values represent true zeroes or missing values.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Sculpin	BSAI	58,300	43,700	58,300	43,700

BSAI Octopus

With passage of Amendment 96 to the BSAI Fishery Management Plan this year, which separated the "other species" complex into constituent groups, the plan team presented recommendations to the SSC for OFLs and ABCs specific to BSAI octopus. The SSC agrees with the plan team recommendation to base the OFL in 2011 and 2012 on the maximum catch in the 1997-2007 period, with the ABC = 75% of the OFL, as shown in the table below in metric tons.

Stock/ Assemblage	Area	2011 OFL	ABC	2012 OFL	ABC
Octopus	BSAI	528	396	528	396

Groundfish SAFE Appendices

GOA – BSAI Grenadiers

Grenadiers were discussed in appendices to the BSAI and GOA SAFEs. Grenadiers were not included in the recent ACL amendments that addressed non-target species management. Therefore, grenadier are not in the NPFMC GOA or BSAI Fishery Mangement Plans (FMPs). Of the seven species of grenadier that have been captured in waters off Alaska, the giant grenadier is the dominant species. The author and the SSC recommend placing grenadier into the FMPs. The high biomass and notable catch of grenadier, coupled with its role in the BSAI and GOA ecosystems, justify management of this species within the FMPs. Jane DiCosimo noted that the NPFMC has agreed to develop a plan amendment to address grenadier management in the BSAI and GOA. The SSC considers this an important issue and looks forward to reviewing management options for this species group.

The authors provided information for estimation of biological reference points for the BSAI and GOA if the NPFMC elects to manage this complex in the fishery. The SSC agrees with the proposed methods for estimation of reference points in the GOA and BS. However, the estimation method proposed for the AI requires further work. The SSC requests that the author considers the uncertainty associated with the proposed Tier 5 expansion method for the AI.

GOA - BSAI Forage fish

There was no BSAI forage fish summary. Beginning in 2011, forage fish are designated as Ecosystem Components in the GOA and BSAI FMP, thus they are outside the stock specification process. The last full report on forage fish was in 2008 and no new data were presented, thus this report consists only of an executive summary.

The authors acknowledge the lack of good survey data for forage fish, and suggested the GOA Integrated Ecosystem Research Project (IERP) may enhance our understanding of GOA forage fish abundance, distribution, and ecology. Given the high variability of forage fish abundance indices and the limited GOA-IERP field seasons (2011 and 2013), it seems imperative that related studies be used to advance long-term survey capabilities as they relate to forage fish. The lack of useful data remains a hindrance to meaningful integration of forage fish into ecosystem management. Hopeful developments include refinement of NOAA acoustic surveys that could provide regular abundance and distribution data of species such as capelin, juvenile pollock, and euphausiids.

The authors note the listing of the southern Distinct Population Segment (DPS) of eulachon (British Columbia to California) as threatened under the Endangered Species Act, in May 2010. Two key issues in the listing assessment of the southern DPS were the effects of climate change and the lack of data leading to an inability to assess population status and trends, both of which also apply to the Alaska population. The SSC encourages close tracking of developments in the southern DPS population that might inform management actions for eulachon and other key forage species in Alaska.

Ecosystem Considerations

Kerim Aydin (NMFS-AFSC) presented updates for the Ecosystem Considerations report to the SSC. The SSC commends the Ecosystem editors and contributors for continued improvement and for their responsiveness to SSC comments. The Eastern Bering Sea Report Card is a particularly useful addition. Regarding other sections, the Ecosystem Trends succinctly put recent trends in context of long-term trends and environmental conditions, and the section on gaps and needs for future EBS assessments identified potential analyses or research goals. New indices include the use of late summer and fall large zooplankton abundance in EBS, fall YOY condition index for age-1 EBS pollock recruitment, a combined juvenile salmon growth and temperature change index for GOA and EBS groundfish. To the extent that predictive models are being developed, they should be moved into each species' assessment.

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Some key Plan Team findings include: 1) Bering Sea ecosystem indices for pollock recruitment are up, (ie, copepods, euphausiids, forage fish are all up, predation by arrowtooth flounder is low); 2) Al 2010 surveys indicated ecosystem shifts since 2006 (P.cod and Atka mackerel in particular); 3) the GOA team is looking forward to a synthesis workshop, and the team has identified three hot topics: Chinook salmon bycatch, Cook Inet Belugas, and the listing of the southern Distinct Population Segment of eulachon (British Columbia to California).

For ecosystem indicators, the SSC finds the format helpful with 1) the description of the index, 2) description of the trends, 3) possible explanations of the trend and 4) thier implications. However, not all sections conformed to the format, (e.g., the marine mammal section combined 2-4 and did not discuss sections 3 and 4). The figures with time series of indicators are particularly helpful and the legends of the 5 year mean \pm s.d. and trend is appreciated. However, it may be useful to also highlight the historical trend, which often is orthogonal to the 5 year trend, so as not to lose sight of major historical changes

The Early Warnings and Hot Topics sections highlight interesting changes and could ultimately be quite useful. The early warning section could be improved by linking the observation to potential management implications. For example, the apparent incursion of GOA skates and spiny dogfish into the Bering Sea was reported but not examined further. In the Hot Topics section the text clearly refers only to the Eastern Bering Sea, but this is not clear in the table of contents; it would be helpful to mention that the Western Aleutian area is the area of major decline for Steller sea lions.

The SSC looks forward to the planned spatial investigation of key indices and how distributions of prey species might affect central place foragers such as birds and mammals. The suggested development of these indices by shelf domain is also encouraged.

The selected indicators are often unique for different regions, but it may be useful to identify a few indicators that are common to all regions (e.g. temperature) that will allow cross-region comparisons. That being said, each region also has distinct features, and some region-specific indicators, e.g. freshwater influx in GOA, would be useful and should be included if possible. A 2009 request from the SSC was that indices be tied to thresholds that might indicate regime shifts. Towards this end, the editors plan a workshop in Spring 2011 to address such links. The SSC encourages the establishment of an Ecosystem Synthesis Team for each of the three major regions (AI, BS, GOA). The SSC also recommends that the team make an effort to diversify and include more expert opinions in the workshops.

In the Summary Statement section, the SSC encourages a guild approach for seabirds, similar to fish guilds: For seabirds, the authors rely on a diving species and a surface foraging species, but both are primarily piscivorous, and inclusion of a planktivorous guild could be informative. The number of seabird indicators under 'Ecosystem Status and Management Indices (p.172), might, however, be reduced or altered. For example, planktivores are represented by least auklets and northern fulmars, but the latter are not primarily planktivorous nor are they regularly monitored. The proposed addition of sea ducks would contribute a benthic foraging bird guild. On p.61, the authors suggest that for seabirds it would be ideal to have a single multivariate index representing all birds. Any such analysis should consider that piscivore and planktivore seabird species often show opposite trends and a single value might be misleading.

The sections on Steller sea lions and Pribilof Island seabirds are informative and thorough, but other sections on seabirds and marine mammals are still lacking recent indices beyond 2008; in particular, the section on seabird incidental take was last updated in 2006. This gap is not due to lack of data and should be rectified. Similarly, the time trend in incidental take of prohibited species under Ecosystem Goal: Maintain Diversity (p.189) was last updated in 2007.

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Some guilds used as EBS indicators are dominated by a single species and should probably be split. For example, the pelagic foragers guild is dominated by walleye pollock, primarily because it is the only species with reliable data and with time series data. The forage fish, salmon, and squid lumped into this guild become inconsequential and conclusions could be misleading for the data-poor species. If a major component is > x (i.e., 40%), run the index with and without that species to test for sensitivity to the dominant species. Similarly, guilds like the mobile benthic epifauna, are dominated by non-target fish and invertebrates. The SSC again suggests that Ecosystem Teams strive to be consistent in fish foraging guilds in the GOA and EBS.

The section on Fishing and Fisheries Trends was a nice summary of key issues. Related to the trawl data, it might be useful to have a measure of HAPC biota caught as a function of the length of time since that exact location was last trawled, in order to get a sense of regeneration rates.

In several sections, and particularly for forage species, the authors note that indices are of limited value to managers because sampling is inadequate, and they look towards the GOA Integrated Ecosystem Research Program (IERP) to improve these abundance estimates. However, the authors also acknowledge the high variance in indices of forage abundance, and the GOA-IERP will be limited to two field seasons. The GOA-IERP and related studies will ideally lead to improved long-term monitoring of forage species.

Where indicator data are acknowledged to be unreliable, that conclusion is often buried at the end of the species' section. The SSC suggests that deficiencies in data be stated up front or consolidated into a single section. Many indicators have not been updated for several years, and if there are no plans to update a specific indicator, perhaps it should be dropped from the main text body and incorporated into a table that lists indicators that are out of date. The SSC recognizes that the chapter editors depend on people to contribute to the updates, and there may not be any data available. Where data are available, the editors need to remind contributors that these updates are critical to incorporating all components into the Ecosystem Assessment. The SSC recognizes that the Stock Assessment Reports (SARs) for Alaska marine mammals are updated on a schedule, except for endangered species, which are updated annually. Perhaps a sentence or two about this system would be helpful in explaining the lack of updates for marine mammals.

The SSC requests that the authors be clear about what the data say and what the interpretation is of those data. For example, the authors state that "predation is low" for pollock, but further discussion revealed that this conclusion was not based on diet data, but rather on low spatial overlap of adults and young Pollock.

The northern fur seal (NFS) pup number time series is the longest term continuing data set for pinnipeds in the EBS, however, it may not be an appropriate index of pinniped status in the EBS. The rationale for choosing this measure is that females on St. Paul feed primarily on the shelf, but that is during lactation when the pup is on the breeding beaches at St. Paul. Although lack of food early in gestation might reduce the number of pups born the following year, food and condition during the winter and spring when they are not feeding on the EBS shelf may be the causative factor. The SSC suggests that authors investigate a recent study showing a significant relationship between the number of arrowtooth flounder and number of NFS pups the following year.

In general, the report could be improved by consolidating key statements or reducing repetitions, such as the repeated statement that the usefulness (or lack thereof) of data for a species for management applications is limited. Throughout, there are also comments about planned changes or ideas for new analyses. These could be consolidated into one section, perhaps as a preface.

Some statements require clarification, such as:

- What is meant by easterly winds (p. 4)? From the east or to the east? Different disciplines designate direction differently.
- Area disturbed by bottom trawls (p. 63): What is considered a bottom trawl? Only true bottom trawls, or also mid-water trawls that come up with crabs?
- The variability in the miscellaneous category is dismissed as an artifact of standardized survey sampling methodology, but such patterns are accepted elsewhere in the document.
- Are the trends in fish numbers (p. 154) caused by differences in production or movements and resulting distributions? What are the time lags between primary production and availability of food for fish?

Economic SAFE

The SSC did not receive a formal report on the Economic SAFE. We will request a more formal presentation in February.

D-1(c) Initial review of Hagemeister Is. Closures for walrus

The SSC received the presentation from Jeannie Heltzel (NPFMC) and Jonathan Snyder (USFWS). Public testimony was received from Jason Anderson (Alaska Seafood Cooperative).

A draft EA/RIR/IRFA was discussed with respect to release for public review. This document is based on the staff discussion paper from December 2009, on the new walrus haulout area and options for designating a protection zone around it. The motivation for this action is to provide consistent protection for the walrus haulouts in the Bristol Bay haulout complex. After the changes requested below are made, the SSC recommends the draft be released for public review.

In SSC discussion with the presenters and public testimony, several other possible transit corridors were identified that might be added to the analysis at a later date. The SSC notes that the majority of the vessel traffic in northern Bristol Bay would not be regulated or controlled by the proposed closure. Snyder noted that USFWS plans to establish a transit corridor for federally licensed vessels, and to encourage use by other vessels as well.

In the presentation, the possibility of the ESA listing of Pacific walruses was discussed first, but this discussion in the document was toward the back. The SSC suggests making that discussion more prominent and expanding it, including text that explains walruses are managed by USFWS under the MMPA and that Hagemeister Island is part of the Togiak National Wildlife Refuge. Figures and tables require improvement. As mentioned in the presentation, the SSC noted some problems with document figures of state and federal waters and table numbers. These should be rectified before public release. The SSC suggests that the Hagemeister Roadstead be included on the figures of closures. Inclusion of some explanation of the precision of the counts in Table 3-14 would be helpful. Note also alignment problems in this table.

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Clarifications and corrections of text should also be included. On page 4, the last two paragraphs describe different scenarios under various alternatives and options. It would be helpful to include a table summarizing these options and possible actions. The mismatch on pages iv in the executive summary, p.51 under Target Species, and p. 52 under Ecosystems considerations should be examined. The latter concludes that Alternative 2 is not expected to change effort or harvest levels of groundfish fisheries in the NBBTA, but the executive summary and other sections note the potential for reducing participation in the yellowfin sole fishery, imposition of greater costs to affected fisheries, and potential shift of fishing effort to other sites. Section 4.3 on page 51 should mention SSL as a marine mammal potentially impacted by this action.

Further, the document could be improved with more information on how foraging behavior and success might be impacted by fishing boats off Hagemeister Island, especially considering Option 4, which provides a narrow transit corridor and a maximum 3nm buffer directly to the west of the haulout site. This is addressed somewhat in section 4.3 Environmental Effects: Marine Mammals (pg. 51-52), however no citations were provided.

In Section 3.3.7 (pg. 43), a 95% CI is given for the Allen and Angliss (2010) data, but not for the Angliss and Outlaw (2008) data on mortality related to fisheries interactions. An error term for the Angliss and Outlaw data, if it exists, would be useful.

Charter Halibut Moratorium Leasing Limitations Provisions

Council Motion April 2010 AGENDA D-2(e)(1) DECEMBER 2010

Motion: Initiate discussion paper of the following elements and options regarding leasing of Halibut Charter Permits.

Problem Statement: Leasing of Halibut Charter Permits could substantially change the character and current primary business practice of the halibut charter fleet and could enable increased acquisition of halibut charter permits by individuals that do not have an investment in the fishery. In addition, leasing provisions are likely to decrease the sale and transfer of permits from existing permit holders and may inhibit entry level opportunities for new halibut charter operators as well as increase the price of entry.

Alternative 1: Status Quo

Alternative 2: Limit Leasing of Halibut Charter Permits

Option 1: Halibut charter permit holders that use their permit onboard a vessel that is identified on an ADF&G saltwater logbook must own at least 20 – 51% interest in the vessel.

Sub option: 12 month rule applies

Option 2: Halibut charter permit holders that use their permit onboard a vessel that is identified on an ADF&G saltwater logbook must log at least 1-5 halibut charter trips in the logbook. For businesses owning halibut charter permits, an individual with a minimum

ownership interest of 10-33% must log the minimum number of trips.

Sub option: Log at least 3-10% of the trips in the logbook

Sub option: Apply only to logbooks that have at least 10-20 trips recorded.

Option 3: Halibut charter permit holders that use their permit onboard a vessel that is identified

on an ADF&G saltwater logbook are limited to requesting 2-3 saltwater logbooks for unique vessels in a 12 month period and no more than 2-3 unique vessels in a 60

month period.

Option 4: Halibut charter permit holders that use their permit onboard a vessel that is identified

on an ADF&G saltwater logbook are required to be present either at the point of departure or at the point of return for the charter trip. For businesses owning halibut charter permits, an individual with a minimum ownership interest of 10%-33% must be present at either the point of departure or at the point of return for the charter trip.

Alternative 3: Halibut charter permit holders or an employee of a halibut charter permit holder that

uses their permit onboard a vessel that is identified on an ADF&G saltwater logbook must be aboard the vessel when their permit is being used. For businesses owning halibut charter permits, an individual with a minimum ownership interest of 10-33%

must be aboard the vessel.

Upon the halibut charter permit holder's request for the issuance of or transfer of a halibut charter permit, or the charter permit holder's request for change of use of the permit to a unique vessel when requesting an ADF&G saltwater logbook, the permit owner is required to sign a sworn affidavit that the permit will not be leased and that the individual or entity does not expect to receive economic compensation from "leased" use of the permit.

Council Motion on Charter Halibut Moratorium in Area 2C and 3A March 31, 2007

The Council recommends the following as the final preferred alternative for the charter halibut moratorium (limited entry) action in IPHC Areas 2C and 3A.

Alternative 2. Implement a moratorium on entry into the charter halibut fisheries in Areas 2C and 3A using a control date of December 9, 2005.

Features of the proposed moratorium (limited entry) program:

- Issue 1. Permits² may be held by U.S. citizens or U.S. businesses with 75 percent U.S. ownership of the business. Businesses³ may receive multiple permits due to charter halibut activity by vessels reported by the businesses in ADF&G logbooks. Initial permit recipients may be "grandfathered" below the U.S. ownership level and above proposed use caps until any change in ownership of the business occurs.⁴
- Issue 2. Permit would be designated for Area 2C or Area 3A. If a business owner qualifies for a permit in both areas based on the history from a single vessel, he/she would be issued a separate permit for both areas. Only one permit could be used on any given trip.
- Issue 3. Permit would be issued to an ADF&G licensed fishing guide business owner.
- Issue 4. Permit applicant would be required to sign an affidavit attesting that all legal requirements were met.⁵
- **Issue 5.** Transfers of permits (permanent) for vessels that qualified at trip levels of 15 and above in Area 2C and Area 3A would be allowed up to use caps. Permits issued below trip levels of 15 in Area 2C and Area 3A would be non-transferable.
- **Issue 6.** Leasing of permits would not be allowed.⁶

Issue 7. Permit Endorsement for Number of Halibut Clients on Board

Highest number on any trip in 2004 or 2005, with minimum endorsement of 4.

Permits issued under the military hardship provision would receive a halibut client endorsement of 6.

¹Military (Morale, Welfare, and Recreational) boats are not required to meet the qualification requirements of the program, but harvests still count against the GHL.

²Through initial issuance and transfers.

³A business means a business licensed by the State of Alaska as a sport fish guide operator.

⁴Transferred permits would not be grandfathered below the U.S. ownership cap, even upon sale of a business, but would be grandfathered above the use cap upon sale of the entire business (see Issue 11).

⁵The only tangible evidence is the ADF&G logbook, which requires meeting all State legal requirements.

⁶Halibut charter permit holders may only use their permit onboard a vessel that is identified on an ADF&G saltwater logbook assigned to the person holding the permit. If the permit holder wishes to use the permit on a different vessel, they must obtain an ADF&G logbook for the new vessel before the permit may be used on that vessel. The permit number must be recorded on the logbook for each trip.

Issue 8. Permits may be stacked up to use caps.⁷

Issue 9. Evidence of participation is ADF&G saltwater logbook entry with bottomfish statistical area, rods, or boat hours.⁸

Issue 10. Qualification period

Option 10.1. Each licensed guide business owner(s) who reported a minimum of 5 bottomfish logbook trips during 2004 or 2005 and year prior to implementation would be issued a permit(s) based on the number of trips summed for all vessels in his best year of the qualification period, unless an unavoidable circumstance occurred. A business would be limited to the number of permits equal to the highest number of vessels used in any one year during the qualifying period. (Staff note: this means businesses are restricted to a maximum number of permits equal to or less than the maximum number of vessels that submitted logbooks in 2004 or 2005).

Example: a business owner operated 3 vessels with 4, 4, and 12 trips, respectively (summed trips = 20) in his best year. He would be issued 3 permits under a 5 trip minimum (20/5 = 4, but the maximum number of vessels in that year is 3).

Issue 11. Use caps, with grandfather¹¹ provision. The AFA 10% ownership rule for affiliation¹² will be applied to determine the number of permits associated with an entity under the use cap.

Option 2. 5 permits

Issue 12. Community provisions for Area 2C and 3A communities previously identified under GOA FMP Amendment 66

A Community Quota Entity (CQE), representing a community in which 10 or fewer active¹³ charter businesses terminated trips in the community in each of the years 2004 and 2005 may request limited entry permits.¹⁴

Area 2C – use cap of 4 requested permits per eligible community.

Area 3A – use cap of 7 requested permits per eligible community.

⁷For example, a business can stack two licenses (each endorsed for 6 clients) on one vessel for a total client endorsement of 12.
⁸Actual halibut statistical area, rods, or boat hours as reported in the ADF&G logbooks are required to demonstrate participation in the year prior to implementation.

⁹"Year prior to implementation" could potentially mean two years prior to implementation, depending on the starting date of the application period for permits. Meaning, the participation threshold would also need to be met in either 2007 or 2008, for implementation in 2009.

¹⁰Acceptable circumstances will be adjudicated on a case by case basis through the NOAA Office of Administrative Appeals, and includes medical emergencies, military exemptions, and constructive losses. These hardship provisions should be implemented using similar criteria used in the groundfish License Limitation Program. The military exemption refers to an individual who was assigned to active military duty during 2004 or 2005, who qualifies as "active" during the year prior to implementation, and who demonstrated an intent to participate in the charter fishery in Area 2C or 3A (prior to the qualifying period).

period).

11 A business that owns/controls permits in excess of the use cap maintains the grandfather status for those permits that remain in its control after other permits are sold, but the sold permits lose the grandfather status in perpetuity. Grandfathered permits that are sold in total when a business owner sells his entire business/fleet maintain that grandfathered status. Grandfathered status refers to permits, not to vessels.

¹²Any entity in which 10 percent or more of the interest is owned or controlled by another individual or entity shall be considered to be the same entity as the other individual or entity.

¹³"Active" is defined as it is under Issue 10 (i.e., at least 5 bottomfish trips).

¹⁴ Staff notes that the eligible communities resulting from this criteria are as follows: Area 2C - Angoon, Coffman Cove, Edna Bay, Hollis, Hoonah, Hydaburg, Kake, Kassan, Klawock, Metlakatla, Meyers Chuck, Pelican, Point Baker, Port Alexander, Port Protection, Tenakee, Thorne Bay, Whale Pass; Area 3A - Akhiok, Chenega, Halibut Cove, Karluk, Larsen Bay, Nanwalek, Old Harbor, Ouzinkie, Port Graham, Port Lions, Seldovia, Tatitlek, Tyonek, Yakutat.

Overall use caps¹⁵ for all CQEs in a management area are 2 times those selected for the qualifying CQE requested permit use cap for each area. (Staff note: result is overall use cap of 8 permits for each CQE in Area 2C and 14 permits for each CQE in Area 3A).

Provisions for CQE requested permits:

- Designated for the area in which the community represented by the CQE is located.
- Endorsed for 6 clients.
- Not allowed to be sold (i.e., permanently transferred).
- Under reporting requirements, the CQE must identify the recipient of the permit prior to issuance.
- The requested CQE permit must be used in the community represented by the CQE (the trip must originate or terminate in the CQE community).

The Council also recommends that NMFS issue interim permits to licensed fishing guide business owners appealing their permit status. (Staff note: NOAA GC will develop an approach to implement the Council's intent with regard to interim permits and provide these recommendations as an informational report at the June 2007 Council meeting. The Council expressed an interest in limiting the issuance of interim permits only to those claims that have provided legitimate documentation and have a basis for success.)

¹⁵The overall use cap refers to the limit on the number of permits a CQE can hold and use in total. This limit includes both purchased permits and permits requested and issued at no cost under Issue 12.

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measures and incorporated the concept of marine reserves. Dr. Fluharty added that if the analysis showed the Council it needed something like a no-take reserve to accomplish the problem statement or achieve other objectives, it could reach them through this process. Stosh Anderson, speaking on behalf of himself and the EFH Committee, believed the range of alternatives covered all concerns. Specifically, it had closed area concepts, open area concepts, rolling closed-area concepts, and all of the alternatives could be made into experimental models to adapt them to management practices as much as possible. Dennis Austin referenced the SSC report questioning whether the very detailed motion on the table included the concerns of the SSC. His intent was to raise the profile of the SSC's comments so that staff could respond in the analysis. Roy Hyder supported Mr. Austin's concern about the SSC's comments and believed the Council did intend for the SSC's comments to be part of the consideration during analysis. Dr. Balsiger affirmed that the goals were now pretty clear and although they may not be precisely written on paper, he believed their intent was clear. Chairman Benton then remarked he believed the objectives and goals the Council was trying to look at were well accommodated. They are consistent with the rule, with the statute and define what the Council is trying to achieve. The Chairman thanked Stosh Anderson, being Vice-Chair of the EFH Committee, and thanked the Committee for their hard work and closed by stating he believed the Council had really extended their hand to the industry, the public, and the conservation community and made sure everybody had a hand in shaping the suite of alternatives for this issue.

The main motion, as amended, passed unanimously, 10-0. The complete Council motion is attached to these Minutes as Appendix VII.

C-4 AFA Issues

ACTION REQUIRED

- (a) Final review of measures for BSAI winter Pacific cod amendment
- (b) Review initial co-op reports and agreements (full report in February)

BACKGROUND

P. cod Sideboards

In October 2002, staff presented for initial review the EA/RIR/IRFA for Amendment 73 (Pacific cod sideboard provisions). The Council approved the document for public review once additional information addressing weekly participation patterns, latent licenses, and catch history as a percent of TAC have been included. The EA/RIR/IRFA was changed to reflected the Council's request and is presented now for possible final action at this meeting. The Executive Summary is attached as Lem C-4(a)(1).

The purpose of this action is to provide greater protection to non-AFA trawl catcher vessels targeting BSAI Pacific cod during the months of January and February. The concern is over impacts to the non-AFA vessels that have traditionally fished Pacific cod and may have been subject to increased competition as a result of implementation of the AFA. The potential impacts of this increased level of competition include factors such as decreased catch per unit of effort resulting in longer fishing times per trip, reductions in catch, and decreased safety.

Alternatives under consideration include:

- 1. Retain current sideboards measures
- Limiting access to the directed trawl fishery for Pacific cod in January and February in area
 655430 to open access vessels which have a history of economic dependency upon the winter

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Bering Sea Pacific cod fisheries, demonstrated by average January, February deliveries of at least 250,000 lbs for 4 out of the 5 pre-AFA years of 1995-1999 and to the cod exempt AFA vessels.

- 3. Allocate catch to non-AFA vessels based on Alternative 2 under two options:
 - a. a range of 2.5 to 5 million lbs (with no cap)
 - b. historical catch of TAC of Pacific cod
- 4. Require co-ops to limit the fishing impact AFA vessels have on the cod grounds so as not to preempt non-AFA vessels from their historical participation.

At this meeting, the Council is scheduled to review the revised analysis and possibly take final action. An agreement between the AFA and non-AFA vessels, if negotiated this fall, would likely inform the Council's action on this issue.

Initial Co-op Reports

Annually the Council reviews the co-op agreements for the upcoming fishing year, as well as the end-of-year co-op reports for the preceding year. As we did last year, I requested co-op representatives to provide us copies of individual co-op agreements only if there were changes to those agreements since the last version. We are expecting those to be available for review at this meeting, along with the inter-co-op agreements, including those relating to salmon bycatch management. I also expect the preliminary end-of-year reports to be made available for review at this meeting. We were unable to distribute these ahead of the meeting, as the deadline for submission was December 1. Copies are available for review in the AP, SSC, and Council meetings rooms. Final co-op reports are due in February.

Scientific and Statistical Committee Report

The SSC did not address this issue.

Report of the Advisory Panel

The AP recommended the Council adopt the following motion for the winter Pacific cod trawl fishery:

Access to the directed trawl fishery for Pacific cod for the period of January 20th through February 25th in ADF&G Statistical Area 655430 shall be limited to:

- vessels which have a history of economic dependence upon the winter Bering Sea Pacific cod
 fisheries, as demonstrated by average January and February deliveries of at least 250,000 lbs for
 4 out of the 5 previous years of 1995-1999, and
- 2. the cod exempt AFA catcher vessels, and
- 3. AFA non-exempt Bering Sea catcher vessels not to exceed a daily average of 10 vessels for the period of January 20th through February 25th (except for vessels qualifying under item 1 above).

Exceeding this 10-vessel limit in 2003 or any later year by the AFA non-exempt catcher vessels will trigger an area closure to Pacific cod fishing the immediately following year. The closure area, if triggered, is defined as the same area closed for the NMFS Cod Fishery Interaction Study (Cape Sarichef Test Area). The triggered closure would be in effect for the period of January 20th through February 25th, and would apply to all AFA cod non-exempt vessels participating in the BSAI directed cod fishery (except for vessels qualifying under item 1 above).

The 10-vessel limit for AFA non-exempt catcher vessels and trigger mechanism shall not apply for any period from February 1st of any given year until at least two non-AFA vessels that meet the threshold

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standard of at least 250,000 lbs in 4 out of the 5 years of 1995-1999 are fishing for Pacific cod in ADF&G Statistical Area 655430. This regulatory action will terminate upon rationalization of the BSAI Pacific cod fishery.

DISCUSSION/ACTION

Chris Oliver reported that copies of the AFA Coop Reports and updates to those agreements were available to Council members and the public. Mr. Oliver then deferred to Jon McCracken, Council staff, for his report on Pacific cod sideboard review. Stephanie Madsen was not present for this issue due to a previous commitment at another meeting.

John Bundy moved the Council adopt the AP recommendation as the preferred alternative, adding the word "catcher" to the last sentence of the second paragraph (as shown underlined below):

Access to the directed trawl fishery for Pacific cod for the period of January 20th through February 25th in ADF&G Statistical Area 655430 shall be limited to:

- 1. <u>catcher</u> vessels which have a history of economic dependence upon the winter Bering Sea Pacific cod fisheries, as demonstrated by average January and February deliveries of at least 250,000 lbs for 4 out of the 5 previous years of 1995-1999, and
- 2. the cod exempt AFA catcher vessels, and
- 3. AFA non-exempt Bering Sea catcher vessels not to exceed a daily average of 10 vessels for the period of January 20th through February 25th (except for vessels qualifying under item 1 above).

Exceeding this 10-vessel limit in 2003 or any later year by the AFA non-exempt catcher vessels will trigger an area closure to Pacific cod fishing the immediately following year. The closure area, if triggered, is defined as the same area closed for the NMFS Cod Fishery Interaction Study (Cape Sarichef Test Area). The triggered closure would be in effect for the period of January 20th through February 25th, and would apply to all AFA cod non-exempt <u>catcher</u> vessels participating in the BSAI directed cod fishery (except for vessels qualifying under item 1 above).

The 10-vessel limit for AFA non-exempt catcher vessels and trigger mechanism shall not apply for any period from February 1st of any given year until at least two non-AFA vessels that meet the threshold standard of at least 250,000 lbs in 4 out of the 5 years of 1995-1999 are fishing for Pacific cod in ADF&G Statistical Area 655430. This regulatory action will terminate upon rationalization of the BSAI Pacific cod fishery.

The motion was seconded by Stosh Anderson. Chairman Benton thanked the industry for the time and effort it put into making an agreement come together and spoke of being encouraged by the testimony he heard on the Study in that if it's implemented and operates the way it intends it to, such that the trigger never gets reached, it would create more consistency across the years of effort and should enhance the quality of the data.

Sue Salveson moved to clarify that this applies only to catcher vessels by adding the word "catcher" to the beginning of Item 1 in the first paragraph above, shown as underlined. The motion was seconded by Kevin Duffy and carried without objection. The main motion, as amended, then carried without objection (Madsen absent).

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Chairman Benton asked if staff could bring back to the Council the objectives portion in response to the SSC's comments and statements to which David Witherell responded affirmatively. Chairman Benton complimented the staff on working very hard, being professional and doing a good job on a complicated, controversial, contentious issue where emotions are running very high. He went further saying the Council individually and as a body did not intend to come down on staff and that they should be proud of the work they had accomplished as Essential Fish Habitat is a very difficult issue.

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AFA Issues C-5

ACTION REQUIRED

- (a) Review final co-op reports and agreements
- (b) Final action on BSAI Pacific Cod sideboard amendment

BACKGROUND

In December 2002, staff presented for public review the EA/RIR/IRFA for Amendment 73 (Pacific cod sideboard provisions). The purpose of the amendment is to provide greater protection to non-AFA trawl catcher vessels targeting BSAI Pacific cod during the months of January and February. The concern is over impacts to the non-AFA vessels that have traditionally fished Pacific cod and may have been subject to increased competition as a result of implementation of the AFA. The potential impacts of this increased level of competition include factors such as decreased catch per unit of effort (resulting in longer fishing times per trip), reductions in catch, and decreased safety.

At the December meeting, the Council selected as a preferred alternative a joint proposal by AFA and non-AFA trawl catcher vessel participants. The preferred alternative would limit access to the directed trawl catcher vessel fishery for Pacific cod for the period of January 20 through February 25th in area 655430 to qualified non-AFA vessels, cod exempt AFA vessels, and AFA non-exempt vessels not to exceed a daily average of 10 vessels for the period of January 20 to February 25th. Exceeding this 10vessel limit in 2003 or any later year by the AFA non-exempt catcher vessels will trigger an area closure to Pacific cod fishing for AFA non-exempt vessels the following year from January 20 to February 25th. The EA/RIR/IRFA was changed to reflect the Council's preferred alternative and is presented now for final action. The Executive Summary is attached as Item C-5(b)(1).

Also at the December meeting, the Council requested that NMFS assess the 'do ability' opf this approach, and provide draft regulatory language for implementing the preferred alternative. A discussion paper written by NMFS addressing these issues has been submitted for review by the Council. It is included here as Item C-5(b)(2).

In addition, it has come to the attention of NOAA GC that the problem statement for Amendment 73 may not be sufficient to draw a clear connection between the action selected and the authority delegated to the Council by statute. Currently, the problem statement has language that indicates that the problem being addressed is a "claim" that competition has increased considerably, and that increased competition is "thought" to have adversely impact non-AFA vessels. This language could be interpreted that Amendment 73 may not be justified under the AFA as a conservation and management measure determined by the Council to be necessary to protect other fisheries and their participants from adverse impacts caused by the AFA or fishery cooperatives in the directed pollock fishery (pursuant to Section 211 of the AFA) and under the Magnuson-Stevens Act as a limited access measure. The Council may want to revise the problem statement accordingly.

Report of the Scientific and Statistical Committee

The SSC did not address this agenda issue.

EXHIBIT В

NPFMC MEETING MINUTES FEBRUARY 2003

Report of the Advisory Panel

The AP did not address this agenda issue.

DISCUSSION/ACTION

The Council received a staff report by Jon McCracken, Council staff, and Jeff Hartman, ADF&G. Roy Hyder moved to table final action on Additional Sideboards for the BSAI Winter Pacific Cod Fishery indefinitely. The motion was seconded by Stephanie Madsen. Chairman Benton asked if Mr. Hyder intended to table the action for an indefinite period as with similar types of issues in the past, the Council has said to the industry folks "you've got this sort of worked out, but we can't seem to get the management industry worked out." If the industry folks find a different solution, the Council would move to bring the issue back in front of them, but until then it's suspended. The Council expected industry to work it out amongst themselves and if a really large problem became apparent, the Council would bring it back to the table and look at it again. Mr. Hyder agreed this was the intent of his motion.

Dr. Fluharty spoke of the amount of time the Council had invested on this issue and NMFS coming forward with problems about it, but he moved to amend the motion to have the Council request NMFS continue to look at rulemaking possibilities, start looking at a limited access program required to clarify the Council's action and continue to flesh out issues like enforceability and others raised by staff so the Council has an opportunity to come back and work on it as soon as NMFS and others working on it have a workable package. The motion was seconded by Dennis Austin.

Dr. Hanson clarified for Council members that if it's not taken up later in this meeting or at the next meeting, it would automatically die. Therefore, there were two solutions - postpone it indefinitely and kill it, or postpone it to a set time or event. Ms. Madsen stated she wasn't sure if she supported the amendment or not, but thought it better to postpone the issue until evidencing AFA vessels were not complying with the intended effect of monitoring and enforcement outlined in the document. She did not support NMFS researching further solutions. Ms. Madsen moved to amend the amendment by postponing the issue indefinitely. The motion was seconded by Hazel Nelson. Chairman Benton asked Ms. Madsen for clarification of her amendment in that if it passed, and the Council saw a problem of displacement by AFA vessels, it would cause reason for the Council to think about a solution. However, the Council would not ask staff to spend time working on this long and difficult issue in part because the industry agreement is working, and in part because there is limited staff time. The motion passed, as amended, 8-3 with Anderson, Balsiger and Fluharty voting against.

C-6 IR/IU

ACTION REQUIRED

Initial review of Trailing Amendments C and D

BACKGROUND

In October 2002, the Council voted to delay implementation of IR/IU flatfish regulations for the BSAI until June 1, 2004. The Council also initiated analyses of four trailing amendments as a means to accomplish bycatch reductions and facilitate reductions in flatfish discards:

(a) Amendment A (PSC cooperatives) - Establish prohibited species bycatch reduction cooperatives operating in the BSAI.

Table 4.4(a). Weekly Trawl Catcher Vessel Participation and Average Harvest

				he Pacific Cod Fishery for Statisti igh 2002 <i>(see confidentiality foot</i>		
	Non-AF	A Vessels	~~~~~	ssels with P. Cod Exemption		ssels w/o P. Cod Exemption
1995	# of vessels	average P. cod harvest (ibs.)	# of vessels	everage P. cod harvest (ibs.)	# of vessels	average P. cod harvest (ibs.)
week ending 1/22	1	100,893	1	not reportable	0	none reported
week ending 1/29	2	108,754	4	119,671	0	none reported
week ending 2/05	4	222,880	5	334,539	1	not reportable
week ending 2/12	4	162,928	5	337,264	0	none reported
week ending 2/19	3	225,276	6	433,271	0	none reported
week ending 2/26	3	192,522	7	277,027	1	not reportable
week ending 3/05	3	236,407	8	293,574	11	233,332
week ending 3/12	4	78,626	9	136,886	20	154,148
week ending 3/19	1	not reportable	8	119,026	18	121,424
week ending 3/26	3	not reportable	7	62,663	32	90,780
week ending 4/02	3	not reportable	7	123,741	31	189,572
week ending 4/09	3	not reportable	4	157,173	34	228,603
week ending 4/16	2	138,670	5	358,976	34	303,983
week ending 4/23	3	not reportable	4	187,557	30	305,168
week ending 4/30	0	none reported	4	149,623	12	140,297
1995	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (lbs.
week ending 1/21	3	28,640	2	not reportable	1	not reportable
week ending 1/28	3	168,822	4	333,858	2	not reportable
veek ending 2/04	5	123,677	5	224,675	1	not reportable
veek ending 2/11	3	53,330	5	115,439	1	not reportable
veek ending 2/18	5	78,954	. 5	384,868	1	not reportable
veek ending 2/25	3	90,762	5	252,743	1	not reportable
vack ending 3/03	4	109,256	5	306,917	3	not reportable
veek ending 3/10	5	108,533	7	158,922	26	124,389
voek ending 3/17	4	63,263	9	85,424	34	139,229
veek ending 3/24	5	36,910	8	33,457	14	52,373
veek ending 3/31	4	22,296	6	71,093	19	73,384
veek ending 4/07	5	41,775	6	51,077	26	67,260
veek ending 4/14	5	44,345	8	87,390	36	104,904
veek ending 4/21	6	46,890	7	80,618	34	97,178
veck ending 4/28	3	not reportable	6	30,517	25	30,508



Source: Irom NPFMC BSAI Amendment 73 data base, November 2002.

Note: release of confidential data in this table was approved by specific authorization to the NPFMC by the vessel owners and permit holders.

Table 4.4(b), Weekly Trawl Catcher Vessel Participation and Average Harvest

				he Pacific Cod Fishery for Statisti Igh 2002 <i>(see confidentiality foot</i>		
	Non-AF	A Vessels		essels with P. Cod Exemption		ssels w/o P. Cod Exemption
1997	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (lbs.)
week ending 1/26	3	131,525	3	not reportable	1	not reportable
week ending 2/02	3	98,365	3	not reportable	1	not reportable
veek ending 2/9	3	258,121	5	594,155	1	not reportable
week ending 2/16	4	214,458	5	514,255	1	not reportable
veek ending 2/23	3	71,853	5	377,048	6	379,593
veek ending 3/02	4	144,968	5	316,541	30	245,413
veck ending 3/9	5	74,404	4	265,035	41	164,439
week ending 3/16	3	not reportable	5	117,313	40	96,477
week ending 3/23	3	not reportable	5	46,282	32	44,155
week ending 3/30	2	not reportable	4	41,468	28	40,109
veek ending 4/06	3	not reportable	3	nol reportable	22	91,186
week ending 4/13	4	72,697	5	111,701	38	109,191
veek ending 4/20	4	83,916	4	141,394	37	173,437
week ending 4/27	5	25,621	5	52,246	36	69,582
1998	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (lbs.)
week ending 1/25	2	not reportable	5	250,579	3	not reportable
week ending 2/01	1	not reportable	5	412,239	2	not reportable
week ending 2/8	1	nol reportable	5	473,953	4	323,095
week ending 2/15	2	not reportable	7	296,615	5	284,890
week ending 2/22	2	not reportable	. 7	323,872	4	379,236
week ending 3/01	3	not reportable	6	240,857	6	185,611
veek ending 3/8	1	118,071	7	181,278	27	153,719
veek onding 3/15	1	89,416	5	96,731	18	125,925
week ending 3/22	5	14,652	7	27,905	31	49,763
veek ending 3/29	3	not reportable	8	18,197	24	33,476
veek ending 4/05	0	none reported	1	not reportable	15	73,838
veek ending 4/12	3	not reportable	7	86,442	40	99,780
veek ending 4/19	4	53,507	6	74,753	30	55,186
week ending 4/26	2	not reportable	6	31,152	12	31,009

Source: from NPFMC BSAI Amendment 73 data base, November 2002.

Note: release of confidential data in this table was approved by specific authorization to the NPFMC by the vessel owners and permit holders.

Table 4.4(c). Weekly Trawl Catcher Vessel Participation and Average Harvest

		- · · · · · · · · · · · · · · · · · · ·	=	•		
			leets 1995 throu	igh 2002 <i>(see confidentiality foot</i>		
		average P. cod harvest (ibs.)	sels w/o P. Cod Exemption			
1999	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (ibs.)	# of vossels	average P. cod harvest (lbs.)
week ending 1/24	2	9,749	6	82,980	5	68,820
week ending 1/31	2	71,397	6	161,027	7	160,442
veek onding 2/7	3	72,154	6	256,525	5	204,483
week ending 2/14	3	126,024	6	312,738	5	277,172
veck ending 2/21	3	136,394	6	396,964	16	222,356
veek ending 2/28	3	107,280	6	260,470	10	190,542
week ending 3/7	3	165,534	6	374,213	32	191,805
week ending 3/14	3	31,265	6	113,679	39	101,227
week ending 3/21	3	19,183	5	33,358	37	51,911
week ending 3/28	0	none reported	3	not reportable	15	25,376
veek ending 4/04	5	38,058	4	76,931	30	62,782
week ending 4/11	5	29,633	5	128,627	27	83,448
week ending 4/18	1	not reportable	3	not reportable	16	107,658
week ending 4/25	0	none reported	0	none reported	0	none reported
2000	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (lbs.)
veek ending1/23	1	86,038	4	91,781	3	not reportable
veek onding1/30	3	85,429	6	249,224	25	184,401
week ending 2/6	3	97,630	7	211,942	20	203,461
week ending 2/13	3	83,703	7	164,566	15	164,182
veek ending 2/20	3	155,974	7	190,610	14	149,587
veek ending 2/27	3	150,210	7	208,793	15	131,528
week ending 3/5	3	64,247	7	150,595	13	120,197
veek ending 3/12	3	76,709	7	103,304	20	94,031
veek ending 3/19	3	33,787	5	43,759	17	24,820
veek ending 3/26	4	29,175	2	not reportable	8	61,887
veek ending 4/02	2		4		11	22,469
reek ending 4/9	3	71,007	6	97,737	22	111,944
veek ending 4/16	3		7	123,746	21	86,166
roek ending 4/23	3	· ·	6	126,631	8	77,339
	2					48,952

Source: Irom NPFMC BSAI Amendment 73 data base, November 2002.

Note: release of confidential data in this table was approved by specific authorization to the NPFMC by the vessel owners and permit holders.

Table 4.4(d). Weekly Trawl Catcher Vessel Participation and Average Harvest

			-	he Pacific Cod Fishery for Statisti		
				igh 2001 (see confidentiality foot		
	~	A Vessels		essels with P. Cod Exemption	AFA Ves	sels w/o P. Cod Exemption
2001	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (lbs.
week ending 1/28	1	49,165	7	38,556	19	38,919
week ending 2/4	1	68,868	7	79,561	5	78,018
week ending 2/11	2	149,565	4	95,012	5	132,396
week ending 2/18	2	180,160	5	144,686	2	not reportable
week ending 2/25	2	122,941	5	155,938	2	not reportable
week ending 3/4	3	149,011	6	85,528	3	not reportable
week ending 3/11	4	55,088	6	67,032	4	73,29 5
week ending 3/18	2	47,167	3	not reportable	3	not reportable
week ending 3/25	1	8,175	2	not reportable	5	36,093
week ending 4/01	0	none reported	4	55,131	5	54,574
week ending 4/8	0	none reported	4	60,521	8	21,832
week ending 4/15	2	25,923	7	99,409	16	41,772
week ending 4/22	2	8,198	6	47,246	7	45,434
week ending 4/29	3	15,650	22	not reportable	0	none reported
2002	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (lbs.)	# of vessels	average P. cod harvest (ibs.)
week ending 1/27	2	not reportable	6	154,818	4	118,593
week ending 2/3	2	not reportable	7	221,959	6	179,689
week ending 2/10	3	not reportable	7	132,415	3	not reportable
week ending 2/17	3	not reportable	8	248,561	5	169,287
week ending 2/24	5	103,959	7	229,182	7	161,312
week ending 3/3	5	113,319	6	158,372	7	203,181
week ending 3/10	3	not reportable	4	69,465	8	50,302
week ending 3/17	3	not reportable	2	not reportable	7	43,734
week ending 3/24	3	not reportable	2	not reportable	2	not reportable
week ending 3/31	1	not reportable	2	not reportable	4	47,400
week ending 4/7	3	not reportable	4	58,938	16	87,574
veek ending 4/14	5	33,696	5	75,475	20	95,621
veek ending 4/21	1	not reportable	3	not reportable	10	95,065
veek ending 4/21		not reportable	3	not reportable	4	69,920

Source: from NPFMC BSAI Amendment 73 data base, November 2002.

Note: release of confidential data in this table was approved by specific authorization to the NPFMC by the vessel owners and permit holders.

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NPFMC/NMFS Action - updated 12/1/10

			Т	imeline			Timelin	е								
				2010						atta a	2011					
Action	Status	Staffing	Nov	Dec	January	February	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Blue = Post Council Action	on, Rulemaking		Law 1													
Halibut Catch sharing plan	Proposed and Final Rule	NMFS 90% Council 10%						Refer t	o NMFS N	Managem	nent repor	t				
BSAI crab arbitration, C- shares, cod sideboards	Preparation of rulemaking packages	NMFS 80% Council 20%				10		Refer t	o NMFS N	Managem	nent repor	t				
Litigation workload	Ongoing	NMFS 90% Council 10%						Refer t	o NMFS N	Managem	nent repor	t				
Am 80 lost vessel replacement	Proposed and Final Rule	NMFS 90% Council 10%				4637		Refer t	o NMFS N	Managem	nent repor	t		7		
BSAI Chinook Salmon EDR	Proposed and Final Rule	NMFS 80% Council 20%				The s		Refer t	o NMFS N	Managem	nent repor	t				
GOA Rockfish Program	Preparation of rulemaking package	NMFS 90% Council 10%						Refer t	o NMFS N	Managem	nent repor	t				
GOA Pcod Sector Split	Preparation of rulemaking package	NMFS 90% Council 10%					4		o NMFS N							
BSAI Fixed Gear Parallel waters	Preparation of rulemaking package	NMFS 90% Council 10%						Refer t	o NMFS N	Managem	nent repor	t				
12 month 20% halibut sablefish QS	Proposed and Final Rule	NMFS 100% Council 0%						Refer t	o NMFS N	Managem	nent repor	t				
Tanner crab bycatch in the GOA	Preparation of rulemaking package	NMFS 90% Council 10%						Refer t	o NMFS N	Managem	nent repor	t				
BSAI Crab ACLs; Snow crab rebuilidng plan	Preparation of amendment package	NMFS 50% Council 50%						Refer t	o NMFS N	Managem	nent repor	t				
Scallop ACL plan amendments	Preparation of amendment package	NMFS 50% Council 50%						Refer	o NMFS N	Managem	nent repor	t				
BSAI Arrowtooth Flounder MRAs	Preparation of rulemaking package	NMFS 90% Council 10%						Refer	o NMFS N	Managem	nent repor	t				
Observer Program restructuring	Preparation of SOC draft and rulemaking package	NMFS 80% Council 20%				5		Refer	o NMFS N	Managem	nent repor	t				
Remove inactive Halibut/Sablefish QS	Final Rule	NMFS 100% Council 0%				4		Refer	o NMFS N	Managem	nent repor	t				

				2010	- Z. C. S. S.		October 1			1000	2011					RIVER.
Action	Status	Staffing	Nov	Dec	January	February	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Green=project underway																
BSAI Crab Emerg relief	Final Action in December	NMFS 10% Council 90%														
BSAI Crab ROFR	Initial Review in December	NMFS 10% Council 90%						1.5								
Outreach activities	Committee meetings; ongoing projects	NMFS 10% Council 90%									No.					
Hagemeister Island walrus	Initial review in December	NMFS 10% Council 90%		YER												
Prib BKC rebuilding	Initial review in Dec	NMFS 50% Council 50%						10								
BSAI Chum Salmon Bycatch	Initial Review in June	NMFS 20% Council 80%					C B									
EFH Amendments	Initial Review in Dec	NMFS 50% Council 50%				No.										
4B D shares on C vessels	Initial/Final in Dec	NMFS 20% Council 80%														
3A D class purchase	Initial Review in Dec	NMFS 10% Council 90%														
4 New CQE communities	Final action in Dec	NMFS 10% Council 90%						A. D								
CQE in Area 4B	Disc paper in Dec	NMFS 10% Council 90%			?				W.)							
Halibut Sablefish hired skipper	Initial Review in April	NMFS 50% Council 50%									day.					
Al processing sideboards	Initial Review in Feb.(T)	NMFS 10% Council 90%														
Halibut PSC limits	Discussion paper in Dec	NMFS 20% Council 80%														
BSAI Crab Economic Data Collection	Prelim Review in April	NMFS 20% Council 80%									100					
Octopus Management	Initial Review in April	NMFS 50% Council 50%								N. T.						
BS Tanner Crab Rebuilding Plan	Finalize alternatives in April	NMFS 90% Council 10%														
BSAI Crab Rationalization	5-year report in December	NMFS 10% Council 90%			?											
GOA Trawl Sweeps	Dicssion paper in Feb.	NMFS 10% Council 90%			?											
Am 80 Vessel replacement sideboards	Discussion paper in Feb	NMFS 50% Council 50%					?									
Am 80 GRS changes	Initial Review in Dec	NMFS 10% Council 90%		MAN					-11 -10							

				2010			100				2011			10 (# 15 <u>.</u>		
Action	Status	Staffing	Nov	Dec	January	February	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Yellow = Project initiated I	but not yet fully underway				K											
Grenadiers, EC category	Future discussion paper	NMFS 30% Council 70%				(4)							20			
Groundfish ACL uncertainty	Discussion paper in Oct	NMFS 80% Council 20%		lla j			14.1									
Salmon FMP Revisions	Disc paper in Dec	NMFS 80% ADF&G 10% Council 10%											SEF !			
MPA nomination process	Discuss in February	NMFS 40% Council 60%					?									
4A halibut retention with sablefish	Discussion paper for future meeting	NMFS 0% Council 100%			?											
Pots for GOA sablefish	Discussion paper for future meeting	NMFS 0% Council 100%			?											
Unharvested halibut in Area 4	Discussion paper for future meeting	NMFS 0% Council 100%			?			v								
Increase use caps for A sablefish	Discussion paper for future meeting	NMFS 0% Council 100%			?											
Crab bycatch limits in groundfish fisheries	Discussion paper for future meeting	NMFS 20% Council 80%			?											
Prohibit leasing of charter LEPs	Discussion paper for December	NMFS 30% Council 70%		-41	?											
Chinook salmon bycatch in the GOA	Review discussion paper in December	NMFS 20% Council 80%			?											
Skate Nurseries as HAPC	Discussion paper, alternatives in February	NMFS 50% Council 50%		all the s		New York		-	r i Davis	14-2		Verifie	1027		21	

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				2010	6888		Telephone I				2011		MIN.	1000		
Action	Status	Staffing	Nov	Dec	January	February	March	April	May	June	July	August	Sept	Oct	Nov	Dec
Purple=Potential new proj	ect		100													
SSL management measures	Report on RPA in Dec.	NMFS 50% Council 50%			?											
BB RKC Spawning Area	Discuss in Feb.	NMFS 50% Council 50%			T KEEP		?									
Sablefish Recruitment Factors	Discuss in Feb.	NMFS 80% Council 20%					?									
P.cod Jig Fishery Mgmt	Discuss in Dec.	NMFS 30% Council 70%														
PSEIS Review	Receive update in 2011	NMFS 30% Council 70%					1000				?					
BSAI crab control rules and uncertainty	Ongoing evaluation	NMFS 33% ADF&G 33% Council 34%								0.001						
BSAI FLL catch accounting	Discuss in Feb.	NMFS 80% Council 20%					?									
BS/AI cod TAC split	Discuss again in Feb - potential major project	NMFS 10% Council 90%					?									

D-2 Supplemental

Discussion Paper on Implementation of Permit Leasing Prohibition in March 2007 Council Motion on Charter Halibut Moratorium in Areas 2C and 3A

NPFMC/NMFS (SF/RAM/OLE/GC)/ADF&G Staffs¹ December 8, 2010

Summary

In March 2010 the Council requested a discussion paper on a range of proposed alternatives to limit leasing of charter halibut limited entry permits (CHPs). In a discussion after the charter halibut Limited Entry Program (LEP) was implemented, Council members commented that the program did not appear to be implemented according to

"Issue 6. Leasing of permits would not be allowed.6

⁶Halibut charter permit holders may only use their permit onboard a vessel that is identified on an ADF&G saltwater logbook assigned to the person holding the permit. If the permit holder wishes to use the permit on a different vessel, they must obtain an ADF&G logbook for the new vessel before the permit may be used on that vessel. The permit number must be recorded on the logbook for each trip.

Council intent. The relevant portion of the Council's March 2007 preferred alternative motion is provided (see box). A limit on leasing was implemented in the final rule, as identified in the Council's preferred alternative motion (footnote 6). NMFS however did not implement a prohibition on leasing because the staff notified the Council (through the analysis and staff presentation) that the Council had not identified the tools to implement such a broad prohibition on leasing CHPs.

The staffs of the Council (and contractors), NMFS, and ADF&G note that, as described in the Council's analysis, the nature of charter businesses makes it extremely difficult to determine the types of leasing agreements that would be prohibited and those that would be allowed. The staffs have identified the following possible business arrangements:

- Single resident or nonresident permit holder, one permit, operator (permit holder is the only licensed guide)
- 2. Single resident or nonresident permit holder, multiple permits, operator + hired guides
- 3. Single resident or nonresident permit holder, one permit, non-operator (permit holder not a licensed guide)
- 4. Single resident or nonresident permit holder, multiple permits, non-operator (all vessels run by hired guides)
- 5. Single resident or nonresident permit holder, one or multiple permits, non-operator not present on site (business and vessel run by employees)
- 6. Multiple owner (partnership, corporation) holding single or multiple permits; any combination of operators and non-operators; none, some, or all may be on site.
- 7. Others?

¹ Participants: Jane DiCosimo (NPFMC), Sue Salveson, Rachel Baker, Peggy Murphy (NMFS SF), Jessie Gharrett, Tracy Buck (NMFS RAM), Ron Antaya (OLE), John Lepore and Susan Auer (NOAA GC), LCDR Lisa Ragone and LT Ray Reichl (USCG), Stefanie Moreland and Scott Meyer (ADF&G).

Given the structure of business arrangements within the charter halibut industry, enforcing a prohibition on leasing would be extremely difficult, at best, and impossible in many situations. NMFS implemented the provisions that the Council adopted to deter leasing (see footnote), knowing the Council did not develop the necessary management measures to prohibit leasing (see main text) per its stated objective.

Staff review of proposed alternatives

In May 2010 the staffs reviewed the Council's March 2010 motion for proposed alternatives to limit leasing and were unable to identify any that would not "substantially change the character and current primary business practice of the halibut charter fleet," which is the language that the Council adopted in the problem statement in its March 2010 motion. Instead, the Council's proposed management solution may, in fact, compound the identified problem of restructuring the charter fleet; data are not available to determine whether substantial numbers would be affected. The staffs identified additional issues and requests for clarifications as noted in the Attachment, in the event the Council wished to proceed with this range of alternatives.

Charter Small Entity Compliance Guide

NMFS is preparing a Charter Small Entity Compliance Guide that will address frequently asked Questions (FAQs), such as transferring permits. The guide will identify that an operator of a vessel in Area 2C or Area 3A with one or more charter vessel anglers on board that are catching and retaining halibut is required have on board the vessel a State of Alaska Department of Fish and Game (ADF&G) Saltwater Charter Logbook issued in the name of the charter halibut permit holder, along with numerous other elements of the program.

Potential Action

In place of the Council's current range of proposed alternatives, the staff has identified a potential action that the Council may wish to consider to further meet its intent to *limit* leasing (see discussion below); however, it is not known if the benefits of the potential action would outweigh the costs of implementation. It may be of limited effectiveness and the Council may wish to confer with enforcement staff before requesting a regulatory amendment be initiated.

Staff Tasking

The Council should consider that any new regulatory amendment should be prioritized for development AFTER the final rule for the catch sharing plan (CSP) is published in the *Federal Register*. Any new tasking WILL jeopardize the 2012 target date for implementation of the CSP, as has already occurred under the Council's higher prioritization of the regulatory amendment to revise issuance of angler endorsements on CHPs (75 FR 56903, September 17, 2010). Note that due to the nature of a potential amendment to address leasing of CHPs, it is likely that NMFS staff would prepare all aspects of analysis and rulemaking.

Status Quo

Relevant regulation: 50 CFR 300.66(v)(1), which will be effective February 1, 2011, is in the form of a prohibition (as follows).

§ 300.66 Prohibitions. In addition to the general prohibitions specified in 50 CFR 300.4, it is unlawful for any person to do any of the following:

(v) Be an operator of a vessel in Area 2C or Area 3A with one or more charter vessel anglers on board that are catching and retaining halibut without having on board the vessel a State of Alaska Department of Fish and Game Saltwater Charter Logbook that specifies the following:

- (1) The person named on the charter halibut permit or permits being used on board the vessel;
- (2) The charter halibut permit or permits number(s) being used on board the vessel; and
- (3) The name and State issued boat registration (AK number) or U.S. Coast Guard documentation number of the vessel.

Section 300.66(v)(1) prohibits an operator who wishes to use a charter halibut permit held by another person from (1) being issued a logbook by ADF&G in their own name and (2) recording the permit holder's name and permit number in the logbook issued to the permit user. The prohibition at §300.66(v)(1) is expected to provide a disincentive to using a charter halibut permit issued to another person because the permit user would be required to record his or her charter activity in a logbook issued to the permit holder rather than a logbook issued to the permit user. Some charter operators may perceive this as undesirable because the permit holder would receive any potential future harvest privilege if logbook records are used to determine eligibility for the privilege.

Additionally, to be issued a logbook, ADF&G requires a business name and ADF&G Business License number. In order to obtain a business license, the operator has to provide (1) a current State of Alaska Occupational Business License Number available from the Dept. of Commerce and Economic Development, Division of Occupational Licensing, and (2) a liability or marine protection insurance policy providing coverage of at least \$100,000 for each incident, and \$300,000 for incidents in a year covering all periods of time when the owner or owner's employees are providing sport fishing services to clients. These requirements may deter permit holders from making arrangements for another operator to use their charter halibut permit if they do not wish to actively participate in charter operations.

March 2010 Motion

The Council may have had State-issued limited entry permits in mind when it adopted its range of alternatives to prohibit leasing. Commercial Fishing Entry Commission (CFEC) permits are issued to individuals who meet specified qualifications, which typically meant that they could prove harvest of a fish species with a particular gear type as holders of gear licenses or interim-use permits. State of Alaska statutes require that the permit holder be on board and operating the gear. Permits are issued for a particular gear type and a particular fishery (http://w3.legis.state.ak.us/pubs/pubs.php). Unlike the charter halibut fishery, it seems there would be little incentive to owning multiple vessels that all fish the same gear type, since the CFEC permit holder can't be on board multiple vessels simultaneously. This is NOT the case with the variety of charter halibut business models.

Note that AS 16.43.150(g) prohibits leasing of CFEC permits. The requirement that the permit holder be on board and involved in operation of the gear would appear to be an effective deterrent to leasing. CFEC staff noted that the term "leasing" is sometimes used but fishermen are usually incorrectly referring to emergency medical transfers.

The charter permit application clearly shows that permits are issued to "the person who held the ADF&G Business Owner License." Note that a person can be an individual, corporation, partnership, or other type of legal entity. When logbooks were checked out, they were associated with a particular business by registering the name of the business and the business license number. The person to whom charter halibut permits are issued was not required to be a licensed guide, and was not required to have been present on the vessel or vessels that were associated with that business in the logbook. So the fundamental difference is that CFEC permits are issued to individuals that participate directly in the fishery and can prove that participation, presumably with signed fish tickets. If the charter halibut program were structured similarly, perhaps permits would have been issued to sport fishing guides that

operated the vessels. The number of hired skippers is unknown. The Stakeholder Committee and Council felt that the people who owned the business should get the permits.

If it is Council intent that a permit holder should either be present on the vessel using the permit or present where the vessel using the permit either leaves or returns (lodges or remote pickup and back to lodge), there are permit holders that own multiple permits that do not operate from a lodge. For example some permit holders may be out on another vessel when their hired skipper returns to port.

Background

The most common charter business model is an owner/operator. Another typical charter business model is for a charter business to hire a captain to take clients fishing. Some businesses hire a captain for the businesses' vessel while other businesses hire a captain and a vessel. Contracts with captains are business arrangements that can extend within a year, or over a number of years, and may be terminated at any time. These business arrangements make it difficult to determine with certainty whether permits would be leased to a captain or if the captain is working as an employee of the owner.

To proceed further to limit leasing of charter halibut permits, the Council first must define the activity for both leasing of vessels *and* leasing of permits. The definition of a boat lease in commercial IFQ regulations was developed by the Office of Administrative Appeals (OAA) over time and through case law. It is not definitive, however; it is based on "a preponderance of evidence" (see pages 5-6 of this OAA Decision: http://www.fakr.noaa.gov/appeals/98-0001.pdf).

The Council discussed that hiring a skipper means that someone else is running your boat, but a business owns the vessel and the LEP; however this interpretation does not include businesses that hire a skipper and a boat. The Council identified that leasing a permit means transferring the permit, with monetary compensation to an entirely different business owner with their own vessel(s). But transferring a permit with compensation also could occur to a different business owner without its own vessel(s) or to a skipper with or without his own boat. Many different combinations occur in the fleet. Another scenario that the Council could consider to be leasing would involve an operator that allows a family member, close friend, etc. to fish under an unused permit at no charge.

Council Concerns

- · Current rule does not prevent leasing
- Lack of incentive to transfer a permit
- · Constraints on new entrants (no incentive to (permanently) transfer permits)
- More desirable to have turnover rather than long term leasing
- If harvest privilege is associated with permit, then it could have additional value in the future

Staff Comments:

- Unique permit identifier(s) for 2011 may be recorded in the logbook.
- Inherent nature of limited entry is less exit/entry
- · A lease is paying for the privilege of using a permit
- Council adopted a program where the permit is not tied to a vessel (or skipper)
- State requires skipper to have a copy of the owner's business permit
- · Achieving new social goals will incur a high cost on charter fleet

- · More economical for new entrants to lease, rather than buy (transfer), permits
- · Concerns about new entry contrast with number of current participants who do not qualify
- Potential for hundreds of new community permit holders provides entry level opportunities

What NMFS Might be Able to Do

(to limit leasing, but not prevent it and whose effectiveness has not been determined)

Amend the regulations to require that the name of the permit holder match the business owner as listed on the ADF&G business license. The ADF&G business license number and name of business, vessel name, and AK number is recorded when the logbook is checked out. Enforcement staff can match the permit owner name on the logbook with business license. They may transfer that logbook to another vessel if the first breaks down.

What NMFS Can Do

(but with potentially burdensome impediments)

- Require business owners to name a specific vessel and consider it a transfer to change the vessel affiliation, and then require the name of the owner of a vessel (but this is contrary to original intent of the program and could be an administrative and public burden- i.e., changing vessels due to breakdowns, document ownership in vessels see history of commercial halibut IFQ hired skipper amendments)
- · Owner on board requirement (but is contrary to original intent of the program)
- Grandfather current participants and require all future permit holders (transferees) to be owner on board (i.e., remove current grandfather provision that allows e.g., lodges to transfer
- Add Use it or Lose it element to the program to transfer unused permits to (new) entrants

What NMFS Cannot Do

- Define a permit that is being leased or prohibit permit leasing without further definition of a lease by the Council (e.g., would the Council consider a business that owns 5 boats and hires 5 (or more) skippers for the boats to be leasing permits?)
- Define a vessel that is being leased
- Distinguish between legitimate and illegitimate business arrangements
- Require (corporate) business owners to be on board (e.g., commercial IFQ A shares)
- Verify contract during a boarding
- Continue current fleet behavior and prohibit leasing requiring that all skippers be an employee
 of the business but this could be circumvented (similar to commercial hired skipper "paper"
 transactions could employ on a daily basis or not pay with cash)

Written Record for the Status Quo

PROPOSED RULE

The proposed rule does not include a prohibition against leasing charter Limited Entry Permits (LEPs) although the Council recommended such a prohibition because such a prohibition would not lead to a permit holder being on board the vessel or having any direct connection with the charter operation. Under the proposed rule, a permit holder would not have to own a vessel or operate a vessel. A permit holder could legitimately allow a vessel operator to use the permit holder's permit as authority for the vessel operator to take anglers out charter halibut fishing, even though the permit holder does not own or operate the vessel and has nothing directly to do with the charter vessel fishing operation. The vessel operator may pay the permit holder for the right to use the permit or the permit holder may pay the vessel operator to take out anglers organized by the permit holder. The charter industry has a variety of business models and the way some of these business models function is substantially similar to a lease between the permit holder and the vessel operator. Therefore, prohibiting leasing may result in a restructuring of many charter businesses.

Further, it would be difficult to enforce a prohibition on leasing. NMFS would have to collect additional information attendant to a transfer. Simply prohibiting a transfer called "a lease" would result in the prohibition being enforced only against legally unsophisticated persons who did not draft their document to avoid such a term. For NMFS to examine the substance of any transaction would be difficult, time—consuming and undermine the principle that the permits are relatively freely transferable.

In light of this difficulty, the Council recommended three specific measures to *discourage* leasing:

- 1. Prohibit the charter halibut permit from being used on board a vessel unless that vessel is identified in an ADF&G Saltwater Charter Logbook;
- 2. Require that a charter vessel operator have on board the vessel an ADF&G Saltwater Charter Logbook issued in the name of the charter halibut permit holder; and
- 3. Require the authorizing charter halibut permit number to be recorded in the ADF&G Saltwater Charter Logbook for each trip.

This action proposes all of these Council recommendations as part of the requirement to have the Saltwater Charter Logbook on board. The requirement to identify the vessel in the logbook is intended to be consistent with an existing State of Alaska requirement that a charter vessel operator have on board the vessel an ADF&G Saltwater Charter Logbook. This logbook must be specific to the vessel on which it is used.

FINAL RULE

The final rule does not have an explicit prohibition against leasing, although the Council recommended one, for the reasons discussed in the proposed rule (74 FR 18178, April 21, 2009) at page 18191 and summarized above. The charter industry has a variety of business models, and the way some of these business models function is substantially similar to a lease between the permit holder and the vessel operator. For example, the owner of a charter business or of a business such as a wilderness lodge, that also provides charter services, employs hired skippers and guides to operate one or more vessels. The charter business may or may not own the vessels.

The rules governing the identification of qualified businesses and the number of permits they would receive did not require vessel ownership by the qualified business. Operations by these businesses may be difficult to distinguish from leasing. There is no bright line between how these types of businesses operate and what would be considered leasing arrangements. For this reason, enforcement of a prohibition on leasing would be difficult, time consuming, and costly. NMFS determined that the benefits derived from a leasing prohibition did not justify the costs of enforcement and the disruption to existing business operations. This position was described in the Council analysis, yet the Council identified a prohibition on leasing in its preferred alternative.

§ 300.66 Prohibitions.

* * * * *

- (v) Be an operator of a vessel in Area 2C or Area 3A with one or more charter vessel anglers on board that are catching and retaining halibut without having on board the vessel a State of Alaska Department of Fish and Game Saltwater Charter Logbook that specifies the following:
- (1) The person named on the charter halibut permit or permits being used on board the vessel;
- (2) The charter halibut permit or permits number(s) being used on board the vessel; and
- (3) The name and State issued boat registration (AK number) or U.S. Coast Guard documentation number of the vessel

Council EA/RIR/IRFA (excerpts)

Page 55.

"Issue 6 [see Motion above] was selected as part of the Council's preferred alternative. Leasing of permits (and IFQs) is generally discouraged in fisheries under Council authority. Prohibitions on leasing stem from a desire to keep persons from holding permits for the sole purpose of generating income from the active participants. The Groundfish LLP program discourages leases by only allowing the permit to be transferred once per year. The NMFS transfer application also asks if there is an agreement to return the license to the seller or to transfer it to any other person, or if there is any condition requiring the resale or conveyance of the license.

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The IFQ program for halibut and sablefish has an owner-on-board requirement for most vessel classes, to encourage only persons intending to actively fish to buy into the fleet. Persons subject to owner-on-board must carry government issued photo identification while onboard the vessel.

Tracking whether halibut charter moratorium permits are being leased may be difficult without a provision such as owner-on-board. However, that type of requirement is not practical, because of the structure of the halibut charter fishery. In some cases, a charter business may hire a captain(s) to take clients fishing. Contracts with captains are business arrangements that can be extended within a year, or over a number of years, and may be terminated at any time with proper notice. The hired captain may or may not own the vessel used to take clients fishing. If the captain owns the vessel and the permit holder hires him to take their clients fishing, distinguishing this operation from a lease arrangement may not be possible.

These business arrangements may make it difficult to determine with certainty whether permits are being leased to a captain for a year, or if the captain is working as an employee of the owner. Given the structure of business arrangements within the halibut charter industry, enforcing a prohibition on permit leases may be problematic.

Given the above complexity with enforcing a prohibition on leasing, the Council added a footnote to this provision, clarifying the implementation approach intended under the moratorium. In brief, halibut charter permit holders may only use their permit onboard a vessel that is identified on an ADF&G saltwater logbook assigned to the person holding the permit. If the permit holder wishes to use the permit on a different vessel, they must obtain an ADF&G logbook for the new vessel before the permit may be used on that vessel. The permit number must also be recorded on the logbook for each trip. While these provisions are not expected to completely prevent leasing, they are intended to discourage some private leasing arrangements. A discussion of this approach is provided in Section 2.6.4.3 of the implementation section."

Page 124.

"2.6.3 Leasing

The Council's preferred alternative includes a provision under Issue 6 to prohibit leasing in the moratorium program. Leasing is a nebulous term that describes a multitude of arrangements between two or more persons, but generally infers a temporary transfer of a right to possess or use specific property or a property-like privilege (e.g., fishing permit). Leasing arrangements are often designed to generate rent on the property or property-like privilege while allowing the lessee to use the property without the outlay of capital required if the property privilege was transferred. These lease arrangements are often short-term in nature. One type of leasing arrangement that is common in the commercial halibut fishery is the leasing of halibut individual fishing quota (IFQ). Leasing, in terms of the IFQ Program, occurs when there is a transfer of annual IFQ from the quota share holder to another party. In this situation, the quota share holder retains the quota share and the annual right of receiving IFQ resulting from that quota share, but

transfers the annual right to harvest the IFQ to another person. In this way, the person(s) involved in the transfer (conducted through NMFS) would be expected to have an arrangement that allows for mutual gain.

An important difference between the IFQ program and the moratorium program is that there is not a short-term harvest privilege (i.e., IFQ) associated with the moratorium permit that could be transferred through NMFS. In the case of the proposed charter moratorium, any change of the person(s) holding the moratorium permit would involve a transfer conducted by NMFS. For example, a permit holder who wants to "lease" a permit could conduct short-term transfers through NMFS, or completely circumvent NMFS by making private business arrangements without changing the permit holder's name. Thus, in the latter example, NMFS and NOAA OLE would not have any documentation that a private business exchange took place. Moreover, there may be a greater incentive for permit holders to use private transactions because transaction costs associated with the application process can be avoided.

Private business arrangements are extremely difficult for NOAA OLE to enforce, because documentation about the arrangement is often not available, and a large amount of enforcement resources would be required to interpret documents, investigate, and prosecute leasing situations. This problem has been encountered by NMFS, with current leasing provisions in the groundfish LLP and IFQ. Regulations governing current programs, such as the groundfish LLP, prohibit leasing and allow NMFS to review transfer agreements to check if leasing has occurred. Despite having access to the transfer agreements, it is very difficult for NMFS to determine if the ostensive transfer is, in fact, a lease. Moreover, defining the term "lease" is problematic, because business contracts can be carefully worded to obfuscate a lease, so that NMFS will not deny an application.

The nature of charter businesses also makes it extremely difficult to determine the types of leasing agreements that would be prohibited and those that would be allowed. Many charter businesses hire a captain to take clients fishing, as this represents a typical charter business model. Contracts with captains are business arrangements that can extend within a year, or over a number of years, and may be terminated at any time. These business arrangements make it difficult to determine with certainty whether permits are being leased to a captain or if the captain is working as an employee of the owner. Given the structure of business arrangements within the halibut charter industry, enforcing a prohibition on leasing would be extremely difficult, at best, and impossible in many situations. Section 2.3.3 provides more information about enforcement issues associated with a prohibition on leasing.

2.6.3.1 Purpose of prohibiting leasing

Fisheries generally have leasing prohibitions for permits, because of concerns by fishermen about the "absentee landlord" syndrome (Wilen and Brown 2000). In fisheries, this syndrome broadly refers to situations where a permit holder does not personally fish the permit, or have any direct involvement with the fishery. Business arrangements involving owners who are not operating the charter vessel are common for the halibut charter industry. Many charter business owners hire captains or deckhands to operate the charter vessel, whether the vessel is owned by the business or captain. For example, a charter business owner in Atlanta may own a lodge in Southeast Alaska that relies on staff to manage the lodge, market trips, and provide guide services. Thus, while maintaining and managing capital in the sport fishery, this type of charter business owner is not on-site, fishing or working in fishery operations. The moratorium program (Alternative 2) would not eliminate or reduce this type of absentee ownership. Alternative 2 was intended to allow charter businesses to operate the way they do currently, which includes owning a business and hiring skipper and crew to operate the vessel, and/or operate several vessels under a single business.

The extent of the absentee ownership issue in the charter fishery is difficult to predict prior to program implementation. Looking at similar situations and economic theory for guidance, most mature markets that involve productive assets ultimately allow leasing and short-term contracting. In fact, it is difficult to find many property-like privilege systems in the world that prohibit short-term leasing and only allow

"permanent" transfers in order to eliminate absentee landlords. The widespread tolerance of leasing suggest two possibilities: (1) the benefits associated with short term production flexibility are seen by most participants as outweighing the social costs associated with absenteeism; and/or, (2) the basic incentives in many systems work against absenteeism (Wilen and Brown 2000). The latter seems particularly likely when the productive use of the asset requires specialized skills. For example, in the charter fishery, the skills and knowledge associated with catching halibut may discourage absenteeism. However, absenteeism in the charter fishery may be encouraged by specialized skills such as superior marketing, packaging, and bundling skills that better serve the market niche associated with a primary business. Given that many business owners currently operating in the charter fishery do not personally guide clients or are offsite managing the charter fishing business, incentives that currently exist for absenteeism would likely continue under Alternative 2.

2.6.3.2 Options to discourage leasing

Given the problems associated with enforcing the prohibition on leasing, other types of regulatory controls that do not directly prohibit leasing were considered by the Council. The types of controls that may be considered have the potential to influence behavior by increasing the transaction and opportunity costs associated with business arrangements.

The IFQ Program has several controls in place that increase transaction costs between IFQ users by limiting the use of a vessel. These types of controls include a requirement for a certain level of vessel ownership before IFQ may be fished from that vessel, and a proposed regulation that prevents short-term transfers of vessel ownership (i.e., vessel ownership for at least 12 months). The vessel ownership regulation requires a corporation, partnership, or entity who did not receive an initial issuance of QS to demonstrate 20-percent ownership of a vessel before the IFQ may be fished (50 CFR 679.42). This capital investment imposes an opportunity cost for individuals wanting to use QS/IFQ and thus reduces the incentive for some individuals to enter contractual agreements. To further reduce the number of shortterm leasing transactions, a 12-month vessel ownership requirement was recently published as a proposed rule in the Federal Register. A vessel ownership requirement is an effective method for limiting some types of short-term transactions; however, a vessel use restriction that requires a unique vessel be registered through RAM is not an option for the charter moratorium program described in Alternative 2. This type of vessel use restriction would require registration of the vessel with NMFS which would substantially reduce the charter fleet's ability to quickly change vessels in case of breakdowns. In December 2006, the Council considered adding a vessel registration requirement, but decided not to do so, primarily due to the additional burden created.

The Council's preferred alternative under Issue 6 includes an explicit provision intended to help both enforce the use cap and discourage certain lease arrangements. This provision allows halibut charter permit holders to only use their permit onboard a vessel that is identified on an ADF&G saltwater logbook assigned to the person holding the permit. If the permit holder wants to use the permit on a different vessel, he or she must obtain an ADF&G logbook for the new vessel before the permit may be used on that vessel. The logbook could provide linkage between the business holding the moratorium permit and the vessel from which guided fishing occurs, although there is no requirement that the charter business owner also own the vessel from which guided fishing occurs. Implementation of this provision would require modifying the ADF&G logbook to allow the recording of moratorium permit numbers for each trip.

The State has indicated its ability and willingness to make the required change to the logbook. This change would allow moratorium permits to be linked to a business operating a charter vessel on a specific trip (assuming the business holding the permit also operated the charter vessel). Note that a permit holder could only use their permit onboard a vessel that is identified on an ADF&G logbook assigned to the person holding the permit. The advantage to this enforcement method is that additional reporting requirements imposed on the charter fleet are minimal and enforcement authorities could determine if a

business exceeded its use cap. This measure would not increase NOAA OLE's ability to determine if private leasing arrangements occurred between the permit holder and the person using the permit to guide charter clients. However, the logbook information would allow enforcement to "flag" businesses that exceeded the use cap or were used on a vessel not corresponding to the business holding the moratorium permit.

Current ADF&G regulations require that every charter vessel from which guided trips are being conducted must have a logbook onboard and be an ADF&G licensed sport fish business. The logbook effectively links a vessel with the ADF&G business operating a charter vessel and is typically unique to each vessel. A business can obtain a logbook for any vessel it may use to conduct guided trips during any point in the season. Thus, at the beginning of a fishing season, a business could obtain a logbook for each vessel it intends to use. For example, a business that generally uses a single vessel, but has a second spare vessel used only occasionally, could obtain a logbook for the spare vessel at the start of the season. In this example, the logbook for the spare vessel would also be registered to the ADF&G business that was holding the moratorium permit. In some situations, a single vessel is used by two businesses. In these situations, each business would need to have a unique logbook linked to the vessel to allow identification of the business holding a moratorium permit. The 2006 logbook provides this linkage for each trip fished.

In summary, the "no leasing" provision is very difficult to enforce on the charter fishery, and its purpose in the context of the traditional industry structure that characterizes halibut charters in Alaska. The Council's preferred alternative continues to include a prohibition on leasing, and includes provisions that are intended to discourage leasing."

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"Leasing of permits (annual) would not be allowed. 161

Leasing of permits is generally discouraged in fisheries under Council authority. Prohibitions on leasing stem from a desire to keep persons from holding permits for the sole purpose of generating income from the active participants. Because of the nature of charter fishing businesses (e.g., an operator may run multiple boats, perhaps out of different ports, targeting different species) the traditional reasons for the Council's objections to "leasing", per se, may not readily apply. For example, the "owner-on-board" rationale for restricting leasing in traditional commercial fisheries is inconsistent with the charter business model of many operations active in Alaska.

Furthermore, tracking whether halibut charter limited access permits are being leased may be exceedingly difficult and costly. In many cases, a charter business must hire a captain(s) to take anglers fishing. Contracts with captains are private business arrangements that can be extended within a year, or over a number of years, and may be terminated at any time. The hired captain may or may not own the vessel used to take anglers fishing. If the captain owns the vessel, and the permit holder hires him to take anglers fishing, distinguishing this operation from a lease arrangement may not be possible.

These business arrangements may make it difficult to determine with certainty whether permits are being leased to a captain for a year or if the captain is working as an employee of the owner. Given the structure of business arrangements within the halibut charter industry, enforcing a prohibition on permit leases may be difficult, without additional intrusive and potentially burdensome requirements.

The proposed rule does not have a prohibition against leasing, although the Council recommended one. The proposed rule does not contain a comprehensive prohibition on leasing, because such a prohibition would not lead to a permit holder being on board the vessel or having any direct physical interaction with the clients, while they are actively participating in any given charter cruise. Under the proposed rule, a permit holder would not have to own a vessel or operate a vessel. A permit holder could legitimately allow a vessel operator to use the permit holder's permit as authority for the vessel operator to take anglers out charter halibut fishing, even though the permit holder does not own or operate the vessel and has nothing directly to do with the charter vessel fishing operation. The vessel operator may pay the

permit holder for the right to use the permit or the permit holder may pay the vessel operator to take out anglers organized by the permit holder. As noted, the charter industry has a variety of business models and the way some of these business models function is substantially similar to a lease between the permit holder and the vessel operator.

Further, as noted, it would be difficult to enforce a prohibition on leasing. NMFS would have to collect additional information attendant to a transfer. Simply prohibiting a transfer called "a lease" would result in the prohibition being enforced only against legally unsophisticated persons who did not draft their document to avoid such a term. For NMFS to examine the substance of any transaction would be difficult, time—consuming, and could undermine the principle that the permits are relatively freely transferable.

In light of this difficulty, the Council recommended three specific measures to discourage leasing:

- Prohibit the charter halibut permit from being used on board a vessel, unless that vessel is identified in an ADF&G Saltwater Charter Logbook;
- Require that a charter vessel operator have on board the vessel an ADF&G Saltwater Charter Logbook issued in the name of the charter halibut permit holder; and
- Require the authorizing charter halibut permit number to be recorded in the ADF&G Saltwater Charter Logbook for each trip.

This action proposes all of these Council recommendations as part of the requirement to have the Saltwater Charter Logbook on board. The requirement to identify the vessel in the logbook is intended to be consistent with an existing State of Alaska requirement that a charter vessel operator have on board the vessel an ADF&G Saltwater Charter Logbook. This logbook must be specific to the vessel on which it is used."

"2.6.4.3 Leasing

As stated previously, enforcement of a prohibition on leasing is very difficult for NOAA OLE and GC to investigate and prosecute. There are two primary issues that complicate enforcement: (1) often it is not possible for enforcement to obtain private business contracts that are not submitted to NMFS; and (2) even when business contracts are submitted to NMFS, it is not always possible for NMFS and enforcement to determine that the business arrangement described in the contract is a lease. The first issue cannot be avoided under Alternative 2, because of the myriad small business arrangements that may be arranged by a permit holder. NOAA OLE does not have the capability to enforce private business arrangements outside of agency processes, such as requiring transfers and associated contractual documentation through NMFS. Even if NMFS receives contractual documentation during a transfer, the term "lease" is very difficult to define and contracts can be constructed in such a way that they obfuscate lease arrangements by avoiding key terms that may trigger suspicion by enforcement authorities. Thus, attempting to enforce a prohibition on leasing requires substantial staff resources to investigate and prosecute cases. Additionally, many situations would likely not contain the level of documentation necessary to prosecute a case. Given the inherent historic structure of the charter sector and the enforcement complexities referenced above, a prohibition on leasing permits in the Alaska halibut charter industry may not be justified on efficiency and/or cost-benefit grounds."

Interagency Staff Comments April 2010 NPFMC Motion to Limit Leasing of Charter Halibut Limited Entry Permits

Motion:

Initiate discussion paper of the following elements and options regarding leasing of

Halibut Charter Permits.

Problem Statement¹: Leasing of Halibut Charter Permits could substantially change the character and current primary business practice of the halibut charter fleet and could enable increased acquisition of halibut charter permits by individuals that do not have an investment in the fishery. In addition, leasing provisions are likely to decrease the sale and transfer² of permits from existing permit holders and may inhibit entry level opportunities for new halibut charter operators as well as increase the price of entry.

Alternative 1: Status Quo

Alternative 2: Limit Leasing of Halibut Charter Permits

Option 1: Halibut charter permit holders that use their permit onboard a vessel that is identified

on an ADF&G saltwater logbook must own at least 20 – 51% interest in the vessel.³

Sub option: 12 month rule applies⁴

Option 2: Halibut charter permit holders that use their permit onboard a vessel that is identified

on an ADF&G saltwater logbook must log at least 1-5 halibut charter trips ⁵in the logbook. For businesses owning halibut charter permits, an individual with a minimum

ownership interest of 10-33% must log the minimum number of trips⁶.

Sub option: Log at least 3-10% of the trips in the logbook

Sub option: Apply only to logbooks that have at least 10-20 trips recorded.⁷

¹ Limiting leasing of Halibut Charter Permits could substantially change the character and current primary business practice of the halibut charter fleet.

²Leasing would also allow an operator with a non-transferable permit to "use" it indefinitely.

³ The CHP holder must own the vessel that fishes under the permit at this required percent, at the time of each trip. This will require extensive investigative efforts by enforcement personnel. Ownership interest information may not exist in any form for non-documented vessels, rendering this requirement pointless. Current ADFG practice is that a logbook is issued to a licensed business and a single ADFG number is written in by the logbook holder/CHP permit holder; but there are instances in which ADF&G instructed/instructs people to use the same logbook for multiple vessels.

⁴ This option and suboption seems to limit alternate vessel use. If a boat breaks down, the operation would be stranded. The options include some exceptionally complex exemptions for using alternate boats, similar to those which continue to be problematic with IFQ Hired Master vessel ownership requirements.

⁵ Does this mean that the person to whom the permit is issued would be required to sign the logbook? Often signatures are illegible. If the business owner/permit holder is not a licensed charter guide, this option would require the owner to be present (similar to Option 4).

⁶ 1. What is the consequence of not achieving the minimum number of trips? 2. Will ADF&G report that performance from entered logbook data after the season, and report that to appropriate enforcement office? 3. What if there is NO individual owner with at least 10% ownership - are the CHP holder and sub-level owner entities required to restructure the businesses to meet this in order to use the CHP?

⁷ Same questions as for Option 2. Logbooks are issued to persons first, vessels second, so it is not clear how someone else could use that logbook.

Option 3: Halibut charter permit holders that use their permit onboard a vessel that is identified on an ADF&G saltwater logbook are limited to requesting 2-3 saltwater logbooks⁸ for unique vessels in a 12 month period and no more than 2-3 unique vessels in a 60

month period. 9

Option 4: Halibut charter permit holders that use their permit onboard a vessel that is identified on an ADF&G saltwater logbook are required to be present either at the point of departure or at the point of return for the charter trip. For businesses owning halibut charter permits, an individual with a minimum ownership interest of 10%-33% must be present at either the point of departure or at the point of return for the charter trip^{10 11}.

Alternative 3: Halibut charter permit holders or an employee of a halibut charter permit holder that uses their permit onboard a vessel that is identified on an ADF&G saltwater logbook must be aboard the vessel when their permit is being used. For businesses owning halibut charter permits, an individual with a minimum ownership interest of 10-33% must be aboard the vessel. 12 13

Upon the halibut charter permit holder's request for the issuance of or transfer of a halibut charter permit, or the charter permit holder's request for change of use of the permit to a unique vessel¹⁴ when requesting an ADF&G saltwater logbook, the permit owner is required to sign a sworn affidavit¹⁵ that the permit will not be leased and that the individual or entity does not expect to receive economic compensation from "leased" use of the permit.

Charter halibut permits are not linked to vessels. A business can operate any vessel it wants, as long as the vessel is registered with ADF&G and has a logbook. In fact, multiple permits may be used on a single vessel trip in order to ensure that the total angler endorsements cover the number of anglers that retain halibut [e.g., see 300.66(s)]. The 2011 logbook pages may contain a space to record the charter halibut permit number(s).

⁸ NMFS can not write a regulation restricting access to ADF&G logbooks if they are required for state-managed fisheries.

⁹ Businesses could not use more than a specific number of vessels or replace existing vessels very often. This would severely limit vessel use, which seems a contradictory (to the problem statement) way in which to limit CHP leasing. How would this work for large businesses that already have (or use) more than 3 vessels, for the ability of businesses to expand by buying more vessels or buying/absorbing other businesses? How would it work, for lodges that use numerous contract vessels? A business might be prevented from using all of its CHPs. This may limit vessel leasing more than CHP leasing; a business should be able to use at least as many vessels as it holds CHPs, and some routinely use more.

¹⁰ If there is no owner that is an individual at the 10% or greater level, would that require a business to restructure its ownership? If there is no individual with minimum ownership at the "first level of ownership," could any owner in the ownership chain meet this requirement?

¹¹ The first sentence needs to be distinguished from the second, as they appear to address two completely different ideas. In fact, all permits are held (not owned) by businesses.

¹² It may be straight forward to establish (whether true or not) that an individual on the boat is an employee of an individual CHP holder; however, this may require more "proof" than is available for enforcement. And again, what if there is no individual that has at least 10% ownership?

¹³ Same comment as above. What is the distinction between a charter permit holder and a business holding a charter permit. They're all businesses. So there is a conflict between allowing an employee to be on board versus requiring someone with at least 10-33% ownership being on board.

¹⁴ Permits are NOT linked to unique vessels, therefore why would someone have to request the change of use of the permit?

¹⁵ If the intent is to prohibit leasing, this affidavit might be sufficient if combined with a requirement that the permit holder's name be the same as the name of the business owner (which must be carried at all times when chartering, and must match the business license number in the charter logbook).

The North Pacific Fishery Management Council is Evaluating Measures to Limit Chum Salmon Bycatch in the Bering Sea Pollock Fishery

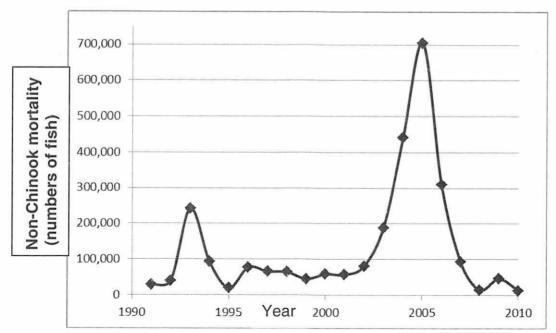


Salmon and pollock are both important fisheries for Alaska. Salmon support large and critically important subsistence, commercial, and recreational fisheries throughout Alaska and elsewhere, and are the basis of a cultural tradition in many parts of the state. At the same time, the commercial pollock fishery produces significant revenue for participants in the fishery, the State of Alaska, and other states. In addition, participation in the fishery (through royalties and employment) is important for the western Alaska Community Development Quota communities.

Salmon are caught unintentionally in the Bering Sea pollock trawl fishery, and may not be kept by regulation. Despite bycatch control measures implemented in the pollock fishery since the mid-1990s, chum (non-Chinook) salmon bycatch reached a historic high of 704,590 in 2005 (see figure below). Levels since that time have been lower, most recently 13,300 in 2010. Current fishery regulations attempt to control bycatch through fixed area closures, triggered by a cap of 42,000 chum salmon. These are areas with historically high chum salmon bycatch. However, current regulations include an exemption to these fixed area closures for vessels that participate in a program that requires more frequently adjusted closures for vessels with high bycatch rates. The North Pacific Fishery Management Council (Council) is required by the Magnuson-Stevens Fishery Conservation and Management Act to balance minimizing salmon bycatch, to the extent practicable, with allowing full harvest of the pollock total allowable catch.

Current trends in non-Chinook (chum) salmon bycatch

Salmon bycatch in the groundfish fisheries is grouped as Chinook bycatch and non-Chinook bycatch (comprised of chum, sockeye, pink, and silver salmon species). Over 99% of non-Chinook bycatch is comprised of chum salmon. Chum bycatch in the Bering Sea pollock fishery from 1991 - 2010 is shown below. Chum bycatch is taken almost entirely in the summer/fall ('B') pollock fishery.



Non-Chinook salmon bycatch in the Bering Sea pollock trawl fishery, 1991 - 2010 Note: 1991 - 1993 values do not include CDQ fisheries. 2010 data is preliminary.

NOTICE: Chum Salmon Bycatch in the Bering Sea Pollock Fishery

The Council is considering whether new measures are needed to limit chum salmon bycatch

The Council is beginning the process of considering modifying management measures to limit chum salmon bycatch in the Bering Sea pollock trawl fishery. The current range of alternatives is on the Council website: http://www.fakr.noaa.gov/npfmc/current issues/bycatch/Chumbycatchmotion610.pdf. Measures currently under consideration include:

- caps on the amount of chum salmon bycatch allowed in the pollock fisheries, that when reached, would prevent further harvest of pollock
 - o limits under consideration range from annual caps of 50,000 to 353,000 chum salmon (overall for the pollock fishery or divided by processing sector with options for transferable bycatch allocations among sectors or components of sectors).
- Rolling closure of areas where high chum salmon bycatch has historically occurred

Next steps & schedule for action

The Council reviewed a discussion paper in June 2010 on area closure options, as well as the full suite of alternatives for analysis. The Council modified the suite of alternatives at that meeting. The preliminary impact analysis of the current alternatives is scheduled for review at the February 2011 Council meeting, with the draft analysis released to the public in mid-January. The Council's initial review of a comprehensive analysis is scheduled for its June 2011 meeting, in Nome.

The Council's Rural Community Outreach Committee identified this action as an important project for outreach efforts to rural communities. An outreach plan has been developed for the proposed action, available here: http://www.fakr.noaa.gov/npfmc/current_issues/bycatch/ChumOutreach1010.pdf. The outreach plan includes attending several regional meetings in rural Alaska, in order to explain the proposed action, provide preliminary analysis, and receive direct feedback from rural communities. The majority of these meetings will occur in early 2011. The current analytical schedule is as follows:

May 4, 2010	Community teleconference, prior to Council final review of alternatives.
June 7 – 15, 2010	Council meeting, Sitka. Council review and opportunity to revise alternatives prior to preliminary analysis; review of expanded discussion paper on area closure options; report on community teleconference.
December 2010	Presentation to Yukon River Panel (Anchorage)
June – Dec 2010	Preparation of preliminary review analysis.
Mid-Jan 2011	Preliminary review draft analysis available.
February 2011	Council meeting, Seattle. Council preliminary review of impact analysis.
Feb – March 2011	Rural community outreach meetings on Council preliminary review draft. Potentially 7 regional meetings.
Feb - April 2011	Preparation of revised analysis for initial review.
May 2011	Initial review draft analysis available.
June 2011	Council meeting, Nome. Council initial review of analysis; review of outreach report; Council selection of preliminary preferred alternative.
Oct or Dec 2011	Council meeting, Anchorage. Council takes final action, selects final preferred alternative.

NOTICE: Chum Salmon Bycatch in the Bering Sea Pollock Fishery

Outreach meetings:

The general components of the outreach plan for the proposed action on chum salmon bycatch in the Bering Sea pollock fisheries include: direct mailings to stakeholders; community outreach meetings; additional outreach (statewide teleconference, radio/newspaper, press releases); and documentation of rural outreach meeting results. The entire outreach plan is provided on the Council website.

The approach for community outreach meetings is to work with established community representatives and Native entities within the affected regions and attend annual or recurring regional meetings, in order to reach a broad group of stakeholders. The timing is such that outreach would occur prior to the Council's selection of a preliminary preferred alternative (tentatively scheduled for June 2011 in Nome). This would allow the public to review and provide comments directly on the preliminary impact analysis, such that changes could be made prior to completion of the final analysis, and allow the Council to receive community input prior to its selection of a preliminary preferred alternative.

In sum, through coordination with the meeting sponsors, the Council has been offered time on the agenda of each of the following regional meetings. All of these meetings are open to the public. The lead Council staff analyst and at least two Council members are scheduled to attend.

Yukon River Panel

Yukon River Drainage Fisheries Assn annual meeting

Yukon-Kuskokwim Delta Regional Advisory Council

Bering Strait Regional Conference

Eastern Interior Regional Advisory Council

Western Interior Regional Advisory Council

Bristol Bay Regional Advisory Council

Tanana Chiefs Conference annual meeting

North Pacific Fishery Management Council meeting

Dec 6 - 9, 2010; Anchorage

Feb 14 – 17, 2011; Mountain Village

Feb 23 – 24, 2011; St. Mary's

Feb 22 – 24, 2011; Nome

March 1 – 2, 2011; Fairbanks

March 1 – 2, 2011; Galena

March 9 – 10, 2011; Naknek

Mar 15 – 19, 2011; Fairbanks

June 6 – 14, 2011; Nome

D R A F T ADVISORY PANEL MINUTES North Pacific Fishery Management Council December 6–10, 2010 Anchorage Hilton Hotel

The following (19) members were present for all or part of the meetings:

Tim Evers Theresa Peterson Joe Childers Mark Cooper Jeff Farvour Ed Poulsen Becca Robbins Gisclair Craig Cross Beth Stewart John Crowley Jan Jacobs Lori Swanson Julianne Curry **Bob Jacobson** Anne Vanderhoeven Jerry Downing Chuck McCallum

Tom Enlow Matt Moir

C-2(a) BSAI Crab Emergency Relief

The AP recommends the Council adopt the revised elements and options below for final action (strikeout is deleted text, **bold/underlined** is new text). The action will apply to all crab fisheries except Western Aleutian Islands golden king crab.

Alternative 2 - Regional Landing Exemption

This action would establish an emergency relief exemption for the regional delivery requirement under the BSAI crab program. The action 1) specifies the eligibility requirements for the exemption and the contracting parties, 2) establishes reserve pool certification and periodic reporting requirements 3) establishes how the emergency relief regulation is to be administered and 4) establishes a Council review process.

Regulatory components

Exemption and administration

Option 1: As a prerequisite to being eligible to apply for and receive an exemption from a regional landing requirement, the IFQ holders, the matched IPQ holders and the affected community entity or entities in the region for which the regional landing exemption is sought shall provide NMFS with an affidavit attesting to having entered into a non-binding framework agreement that addresses mitigation, a reasonable range of terms of compensation, and a reserve pool requirement to the satisfaction of the parties. The affidavit shall be delivered to NMFS:

Suboption 1: prior to the opening of the season.

Suboption 2: by a fixed date (October 15 for all fisheries)

To receive an exemption from a regional landing requirement the IFQ holders, the matched IPQ holders and the affected community entity or entities in the region for which the regional landing exemption is sought shall deliver to NMFS an affidavit attesting to having entered into an exemption contract that addresses mitigation, terms of compensation if appropriate, and a reserve pool requirement, to the satisfaction of the parties, prior to the day on which the exemption is sought. The exemption shall be granted upon timely submission of a framework agreement affidavit and subsequent filing of an exemption contract affidavit.

Parties to the framework agreement (and the affidavit attesting to that agreement) may include several IFQ holders, several IPQ holders, and several community/regional representatives, including representatives from multiple regions.

Option 2: To receive an exemption from a regional landing requirement the IFQ holders, the matched IPQ holders and the affected community entity or entities in the region for which the regional landing exemption is sought shall deliver to NMFS an affidavit attesting to having entered into an exemption contract prior to the day on which the exemption is sought.

Note: Any affidavit attesting to an exemption contract shall specifically identify the amount of IFQ/IPQ that are subject to the exemption.

Regional/community representatives

The entity that will represent communities shall be (options):

- (a) the entity holding or formerly holding the ROFR for the PQS,
- (b) the entity identified by the community benefiting from (or formerly benefiting from) the ROFR,

Option: The entity or entities determined by the Council to be the community representatives in a region shall develop an allocation or management plan for any PQS issued without a ROFR in that region by a date certain established by the Council. (Note: This provision could be applied instead of (c), if (a) or (b) is selected as the primary means of determining regional representatives).

(e) a regional entity representing the communities benefiting from the ROFR or formerly benefiting from the ROFR.

Option: The entity or entities determined by the Council to be the community representatives in the North Region shall develop an allocation or management plan for North Region St Matthews Blue King Crab and North Region Opilio Crab PQS issued without a ROFR within 180 days of implementation of this regulation.

Effect on excessive share caps

The requirement that NMFS apply any IPQ used at a facility through a custom processing arrangement against the IPQ use cap of the owners of that facility shall be suspended for all Class A IFQ and matched IPQ included in the exemption.

Reporting requirements

Any IFQ holders who are party to a framework agreement shall provide an annual Regional Landing Exemption Report to the Council which will include the following:

- 1) a comprehensive explanation of the membership composition of the reserve pool and the measures in effect in the previous year,
- 2) the number of times a delivery relief exemption was requested and used, if applicable,
- 3) the mitigating measures employed before requesting the exemption, if applicable,
- 4) an evaluation of whether regional delivery exemptions were necessary, and their impacts on the affected participants, if applicable, and
- 5) a description of the consistency of the agreement with the Council's intent for this action.

At least two weeks prior to providing the annual Regional Landing Exemption Report to the Council, IFQ holders shall provide the annual Regional Landing Exemption Report to the communities and IPQ holders

¹ This provision has been moved under options (b) and (c), as this provision is unnecessary, if (c) is selected.

that are parties to framework agreements. Communities or IPQ holders may submit to the Council a Community Impact Report or IPQ holder report, respectively, that responds to the annual Regional Landing Exemption Report.

Statement of Council Intent

In developing the crab rationalization program, the Council included several measures to protect regional and community interests. Among those provisions, the Council developed regional designations on individual processing quota and a portion of the individual fishing quota that require associated catch to be delivered and processed in the designated region. A well-defined exemption from regional landing and processing requirements of Class A IFQ and IPQ that includes requirements for those receiving the exemption to take efforts to avoid the need for and limit the extent of the exemption could mitigate safety risks and economic hardships that arise out of unforeseeable events that prevent compliance with those regional landing requirements.

The Council intends that exemptions will be developed by agreement of the holders of Class A IFQ, holders of IPQ, and regional/community representatives. For emergency events of less than 2 million pounds in the aggregate, compensatory deliveries offer the opportunity to restore the landings to a region that are intended in current regulations; therefore no party should unreasonably withhold their agreement or unreasonably restrict the industry's ability to respond to those events. A prerequisite to an exemption will be that the parties have entered a nonbinding framework agreement. It is the Council's intent that this framework agreement will define certain terms of the exemption, including mitigation requirements and a range of terms of compensation, and that the exemption contract describes the conditions under which the exemption is being or would be requested, including mitigation requirements and terms of compensation specific to the exemption being sought. Mitigation would be intended to mitigate the effects on parties that might suffer some loss because of the granting of an exemption. Compensation would be intended to compensate parties for losses arising from the exemption. All framework agreements are expected to contain provision for a reserve pool. A reserve pool would be intended to provide industry wide, civil contract based delivery relief without regulatory or administrative intervention. Specifically, a reserve pool would be an agreement among holders of IFQ to certain arrangements in the use of their IFQ to reduce the need for exemptions from the regional landing requirement. It is believed that an effective reserve pool must 1) commit each participant in the pool to be bound by its rules; and 2) include not less than (60%, 70%, 80%) of the "A" share IFQ held by:

- (a) unaffiliated cooperatives and unaffiliated IFQ holders not in a cooperative, in the aggregate; or
- (b) affiliated cooperatives and affiliated IFQ holders not in a cooperative, in the aggregate.

Allowing several IFQ holders, IPQ holders, and community/regional entities to be a party to the same framework agreement is intended to streamline negotiations, facilitate the use of reserve pools, and allow for the incorporation of compensatory deliveries (should the parties believe compensating deliveries are appropriate). If an exemption is needed for compensatory deliveries, the process for receiving that exemption shall be the same as the process of affidavits used to make any other exempt deliveries under this action.

Council Review

The Council will review the Regional Landing Exemption Program within: (a) two years and (b) after the first season in which an exemption is granted. However, if compensatory deliveries occur, the review will happen the year after compensatory deliveries.

Thereafter, the Council will review the Regional Landing Exemption Program as part of its programmatic review, and, based on the record, may amend or terminate the Regional Landing Exemption Program.

Motion passed 19/0.

C-2(b) BSAI Crab ROFR

The AP recommends the Council move the analysis forward with the following changes to the elements and options:

Action 1: Increase a right holding entity's time to exercise the right and perform as required.

Alternative 1 – status quo

- 1) Maintain current period for exercising the right of first refusal at 60 days from receipt of the contract.
- 2) Maintain current period for performing under the right of first refusal contract at 120 days from receipt of the contract.

Alternative 2: Increase an entity's time to exercise the right and perform.

- 1) Require parties to rights of first refusal contracts to extend the period for exercising the right of first refusal from 60 days from receipt of the contract to 90 days from receipt of the contract.
- Require parties to rights of first refusal contracts to extend the period for performing under the contract after exercising the right from 120 days from receipt of the contract to 150 days from receipt of the contract.

Action 2: Increase community protections by removing the ROFR lapse provisions.

Alternative 1 - status quo

- 1) Maintain current provision under which the right lapses, if IPQ are used outside the community of the entity holding the right for three consecutive years.
- 2) Maintain current provision, which allows rights to lapse, if the PQS is sold in a sale subject to the right (and the entity holding the right fails to exercise the right).

[For Alternative 2, delete Option 2 and Combine Option 1 & 3]

Alternative 2 – Strengthen community protections under circumstances where ROFR may lapse.
Option I Require parties to rights of first refusal contracts to remove the provision that rights lapse, if
the IPQ are used outside the community for a period of three consecutive years.
Option 2: If any entity with a right of first refusal chooses not to exercise its right, and the PQS is sold

and used in another community, then the right of first refusal as to the original entity lapses and is acquired by the community entity where the IPQ is currently being used:

is acquired by the community on
Suboption 1: immediately
Suboption 2: after 3 years
 Sucoption 2. unter 3 years
Suboption 3: after 5 years.
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Option-3: Require that any person holding PQS that met landing thresholds qualifying a community entity for a right of first refusal on program implementation to maintain a contract providing that right at all times

[Remove Action 3]

Action 3: Apply the right to only PQS or PQS and assets in the subject community.

Alternative | status quo

The right of first refusal applies to all assets included in a sale of PQS subject to the right, with the price determined by the sale contract.

Alternative 2: Apply the right to only PQS.

Require parties to rights of first refusal contracts to provide that the right shall apply only to the PQS subject to the right of first refusal. In the event other assets are included in the proposed sale, the price of the PQS to which the price applies shall be determined by a) agreement of the parties or b) if the parties are unable to agree, an appraiser jointly selected by the PQS holder and the entity holding the right of first refusal, or c) if the parties are unable to agree, an arbitrator jointly selected by the PQS holder and the entity holding the right of first refusal.

Alternative 3: Apply the right to only PQS and assets in the subject community.

Require parties to rights of first refusal contracts to provide that the right shall apply only to the PQS and other assets physically present in the community benefiting from the right of first refusal. In the event other assets are included in the proposed sale, the price of the PQS to which the price applies shall be determined by a) agreement of the parties or b) if the parties are unable to agree, an appraiser jointly selected by the PQS holder and the entity holding the right of first refusal, or c) if the parties are unable to agree, an arbitrator jointly selected by the PQS holder and the entity holding the right of first refusal.

Motion passed 15/4.

C-2(c) BSAI Crab Rationalization 5-year Review

The AP received the 5-Year Review. The AP acknowledges that the Crab Program is one of the most complex fisheries management programs in the world. Further, the AP feels that the Crab Program has largely resolved the original problems identified during the creation of the Program. These problems include:

- 1. Resource conservation, utilization and management problems;
- 2. Bycatch and its associated mortalities, and potential landing deadloss;
- 3. Excess harvesting and processing capacity, as well as low economic returns;
- 4. Lack of economic stability for harvesters, processors and coastal communities; and
- 5. High levels of occupational loss of life and injury.

The AP recommends that the Council request that the industry coops, boat owners and crew form a committee to develop private agreements to resolve crew issues with a time certain report back to the Council in October 2011.

Motion passed 14/5.

Minority Report: The minority moved to add Alternative 2 (from the Council's December 2008 tabled motion) to the AP's main motion. Alternative 2 contains options for active participants to increase their participation and investment in the BSAI crab fisheries and was identified through public testimony as the best option available in the analysis to achieve that.

The five-year review documents that entry level opportunities are scarce and crew compensation expressed as the crew share of vessel gross revenues is in decline.

Although the motion made and passed by the AP "...recommends that the Council request that the industry co-ops, boat owners, and crew form a committee...," it is not a substitute for Alternative 2. Alternative 2 is a necessary and viable option as crew are often under-represented and thus are overpowered in negotiations, which can create further barriers to entry into those fisheries.

Signed by: Jeff Farvour, Tim Evers, Theresa Peterson, Chuck McCallum, Rebecca Robbins Gisclair

<u>Minority Report</u>: Establish a requirement for holding owner shares that would deter long-term holdings by people not otherwise engaged in the fishery.

This action would lead to a transition away from ownership by retired crabbers. In addition, the action may provide more opportunity for those engaged and those looking to enter in the fishery to establish or increase ownership. The minority believe there is a need to maintain a connection to the fishery and reduce the incentive to maintain absentee ownership into perpetuity. Those directly involved in fishing at some level will be more likely to base decisions for the long-term interest of the fishery.

Signed by: Theresa Peterson, Rebecca Robbins Gisclair, Chuck McCallum, Jeff Farvour

C-4(a) CQE Area 3A Purchase of D Category Halibut Quota

The AP recommends the Council release the analysis for initial public review, with the following inclusions:

- A breakdown of the Area 3A quota share that is held by residents of eligible Area 3A CQE communities, by block size
- An option that the Area 3A CQEs be exempt from the CQE Program block size restrictions when purchasing Area 3A D shares
- Further discussion on the financial advantages CQEs have as non-profits (compared to individuals) when purchasing D shares, and potential impacts
- Further information on the availability of D class quota in Area 3A
- Further information, if available, on whether the CQE Program influenced the increase in QS prices that occurred in 2004.

Motion passed 17/0.

C-4(b) CQE in Area 4B (Adak area)

The AP recommends that the Council convert the discussion paper into an analysis with the following changes:

- Add an option to require that the Adak CQE must lease its QS to Adak residents (this amendment passed 18/1)
- Add an option to allow the Adak CQE to purchase D category halibut QS in Area 4B.
- Add an option that would revise the 50,000-lb vessel use cap such that the vessel use cap would
 be calculated by adding any IFQ derived from CQE-held QS with any individually-owned Area
 4B halibut IFQ (or AI sablefish IFQ) fished off the vessel. Also maintain the option that would
 keep the vessel use cap inclusive of any individually-held IFQ from any area.

Motion passed 18/0

C-4(c) Add New Eligible CQE Communities

The AP recommends the Council revise Table 21 to 50 CFR Part 679 to add Game Creek, Naukati Bay, and Cold Bay as eligible to participate in the CQE Program.

Motion passed 19/0.

C-4(d) Area 4B D Shares on C Vessels

The AP recommends the Council take no action at this time but schedule final action to run parallel with action on the CQE program in Area 4B.

Motion passed 19/0.