



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

## Meeting Agenda

605 W. 4th Ave. Suite 306  
Anchorage, AK 99501  
(907) 271-2809  
Fax (907) 271-2817

*Eric A. Olson, Chairman*  
*Chris Oliver, Executive Director*  
*Telephone (907) 271-2809*

*Visit our website: <http://www.alaskafisheries.noaa.gov/npfmc>*

**December 9-16, 2013**

**Hilton Hotel, Anchorage, AK**

The North Pacific Fishery Management Council will meet December 9-16, 2013 at the Hilton Hotel, 500 W. 3rd Avenue, Anchorage, AK. Other meetings to be held during the week are:

Scientific and Statistical Committee: December 9-11, King Salmon/Illiamna Room

Advisory Panel: December 10-13 Dillingham/Katmai Room

IFQ Committee: December 9, 8:30-noon, Council Office, Room 205

Halibut Charter Management Cmte: December 9, 1-5:00 pm, Council Office, Room 205

Ecosystem Committee: December 10, 8:00-noon, Birch/Willow Room Hilton Hotel

Enforcement Committee: December 10, 1-5 pm, Birch/Willow Room Hilton Hotel

All meetings are open to the public, except executive sessions of the Council. Other committee and workgroup meetings may be scheduled on short notice during the week, and will be posted.

**December 2013 Meeting** Meeting Schedule, Agenda (without attachments), Public Comment Information, and other related information included.

**Attachments:** [Schedule of Agenda.pdf](#)  
[Agenda without List of Attachments.pdf](#)  
[Public Comment Information.pdf](#)  
[Enforcement Committee Agenda 12/10/13.pdf](#)  
[Ecosystem Committee Agenda 12/10/13](#)

### **A. CALL MEETING TO ORDER**

a) **ID 13-026** Approval of Agenda

**Attachments:** [Agenda without List of Attachments.pdf](#)

b) **ID 13-025** Approval of Minutes

**Attachments:** [October 2013 AP Minutes.pdf](#)  
[October 2013 SSC Minutes Final.pdf](#)  
[October2013 Council Minutes.pdf](#)

### **B. REPORTS - 6 hours**

**B-1 REP 13-003** Executive Director's Report

- Attachments:** [B1 Executive Director's Report 1213.pdf](#)
- B-2 REP 13-006** NMFS Management Report (including update on final 2014 annual deployment plan, update on observer/tendering issue; update on LAPP cost-recovery; ROFR clarification from February 2013 Council motion; update on at-sea scales rule; update on EM EFP; and EFH consultation update (T))
- Attachments:** [NMFS Status of Actions \[LINK TO WEBSITE\]](#)  
[B2 supp-ALFA EFP to AFSC 110613.pdf](#)  
[B2 supp-NMFS Ltr EM EFP ApplicationReview 111913.pdf](#)  
[B2 supp ALFAsLtr EFP planning and 2014 research.pdf](#)  
[B2 supp 2014 deployment plan letter.pdf](#)  
[B2 supp Annual Deployment Plan for Observers.pdf](#)  
[B2 supp Tendering Reg Amd discussion paper 1213.pdf](#)  
[B2 supp-ExecSumm to Cost Recovery Analysis.pdf](#)  
[B2 supp-Ltr from NMFS on ROFR Am44.pdf](#)  
[B2 comments.pdf](#)  
[B2 supp Cost Recovery RIR/IRFA full analysis.pdf \[NOT INCLUDED IN BOOKS\]](#)  
[B2 At-sea Flow Scales RIR 21nov2013.pdf \[NOT INCLUDED IN BOOKS\]](#)
- B-3 REP 13-007** ADF&G Report (including review of BOF scallop and pollock proposals; halibut subsistence report)
- Attachments:** [B3 Executive Summary of Subsistence Halibut Harvests 2012.pdf](#)  
[B3 Summary of Subsistence Halibut Harvests 2012.pdf](#)  
[Alaska Subsistence Halibut Harvests 2012 \[NOT INCLUDED IN BOOKS\]](#)  
[B3 comments.pdf](#)  
[B3 Supplemental-Sallop Plan Team Report 12/13.pdf](#)  
[B3 SubsistenceHalibut 2012 PPT.pdf](#)
- B-4 REP 13-015** NOAA Enforcement
- Attachments:** [B4 NOAA Enforcement Report 1213.pdf](#)
- B-5 REP 13-010** USCG Report
- B-6 REP 13-012** IPHC Report
- B-7 REP 13-013** USFWS Report
- Attachments:** [B7 USFWS Report.pdf](#)
- B-8 REP 13-014** Protected Species Report (including SSL EIS and BiOp update)

**Attachments:**     [B8a NPFMC Ltr to NMFS 110413.pdf](#)  
                              [B8b whale attachment.pdf](#)  
                              [B8 supp-NMFS Ltr to NPFMC-SSL sched 112713.pdf](#)  
                              [B8 supp-Alaska Seafoods Cooperative Ltr to NMFS 112513.pdf](#)

## C. MAJOR ISSUES/FINAL ACTION ITEMS

Charter Halibut Issues - 6 hours

### C-1    **HAL 13-005**    Halibut Issues

**Attachments:**     [C1a Area 2C/3A Final 2012 091113.pdf](#)  
                              [C1b Charter Implementation Committee Recommendations 1013.pdf](#)  
                              [C1 supp-OLE comments on Annual harvest limits 12-3-13.pdf](#)  
                              [C1 Analysis of Management Options.pdf](#)

Groundfish Issues - 8 hours

### C-2    **GF 13-012**    Initial Review of Round Island Transit

**Attachments:**     [C2a Executive Summary of Round Island.pdf](#)  
                              [C2 Round Island Transit Initial Review analysis 1113.pdf \[NOT INCLUDED IN B\]](#)

### C-3    **GF 13-025**    Chinook salmon PSC limit rollover for GOA non-pollock trawl catcher vessels

**Attachments:**     [C3a ExecutiveSummary.pdf](#)  
                              [C3 GOA Chinook PSC rollover PubRev 1113.pdf \[NOT INCLUDED IN BOOKS\]](#)  
                              [C3 comments.pdf](#)

### C-4    **GF 13-026**    Grenadier management

**Attachments:**     [C4a Executive Summary of Grenadier Management anaysis 1113.pdf](#)  
                              [C4 Initial Review of Grenadier Management.pdf \[NOT INCLUDED IN BOOKS\]](#)  
                              [C4 comments.pdf](#)

Final Groundfish Specifications - 10 hours

### C-5    **GF 13-013**    Discussion paper on directed fishing for Gulf of Alaska octopus and EGOA skates fishery

**Attachments:**     [C-5 GOA Skate and Octopus Fishery Discussion Paper.pdf](#)

### C-6    **GF 13-029**    Adopt final harvest specifications for GOA groundfish

**Attachments:**     [C6 memo-attachment tables.pdf](#)  
                              [C-6\(a\) GOA Specifications Table 1213.pdf](#)  
                              [C-6\(b\) GOA Plan Team report Nov 2013.pdf](#)  
                              [Draft SAFE reports](#)

**C-7     GF 13-028**     Adopt final harvest specifications for BSAI groundfish

**Attachments:**     [C-7 ActionMemoPart2.pdf](#)  
                              [C7a BSAI Specs.pdf](#)  
                              [C7b Joint BSAI PlanTeamMinutes Nov13Fv2.pdf](#)  
                              [C7c PSC Tables 10-13.pdf](#)  
                              [C7d ADFG Ltr Herring biomass estimate EBS 2014.pdf](#)  
                              [C7e 2013 PSC Catch as of 12-5 with MF edits.pdf](#)  
                              [C7 comments.pdf](#)  
                              [C7 Errata BSAI SAFE 2013 skates revised harvest rec.pdf](#)  
                              [Draft SAFE reports](#)

Fishing Cooperative Issues - 6 hours

**C-8     Catch 13-003**     Discussion paper on Co-op reporting requirements

**Attachments:**     [C8a Coop Report Requirements Discussion Paper.pdf](#)

**C-9     Crab 13-006**     BSAI Crab Cooperative Reports; Crew Provisions, etc.

**Attachments:**     [C9a CrabCoopReportReference 1213.pdf](#)  
                              [C9b Quota Leases EDR 1213.pdf](#)  
                              [C9 Crab coop reports.pdf](#)

## **D. OTHER ISSUES - 8 hours**

**D-1     Crab 13-003**     Discussion paper on BSAI Crab ROFR contract clarifications

**Attachments:**     [D1a ROFR Discussion Paper.pdf](#)

**D-2     GF 13-019**     Discussion paper on GOA pot gear for sablefish

**Attachments:**     [D2 GOA Sablefish Pot Discussion Paper 1113.pdf \[NOT INCLUDED IN BOOKS\]](#)  
                              [D2 Public Comment.pdf](#)

**D-3     Catch 13-004**     Amendment 80 Program 5-year Review

**Attachments:**     [D3 Am80 5-year Review Workplan 1213.pdf](#)

**D-4     Cons 13-006**     Ecosystem Committee

**D-5 Cons 13-004** Review EFP for Electronic Monitoring (Postponed)

**D-6 HAL 13-006** IFQ Implementation Committee report

**Attachments:**     [D6a FLL use caps 1013.pdf](#)  
                              [D6b IFQ Proposals from Oct2013.pdf](#)  
                              [D6c Fishing IFQ in multiple areas from Oct2013.pdf](#)

## **E. STAFF TASKING - 4 hours**

**E-1 ID 13-022** Staff Tasking

**Attachments:**     [E1\(a\) NPFMC Committees Dec 2013.pdf](#)  
                              [E1\(b\) Three Meeting Outlook Dec 2013.pdf](#)  
                              [E1\(c\) Workplan status Dec 2013.pdf](#)  
                              [E1\(d\) Tasking status Dec 2013.pdf](#)  
                              [E1 comments.pdf](#)



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## Action Memo Text

**File Number:**December 2013 Meeting

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**Agenda Date:** 12/9/2013

**Agenda Number:**

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Meeting Schedule, Agenda (without attachments), Public Comment Information, and other related information included.

## Draft Agenda Schedule

**DECEMBER 2013**

	SSC King Salmon/Illiamna	AP Dillingham/Katmai	Council Aleutian Room
<b>Mon Dec 9</b> IFQ Committee 8:30-12 – Council office room 205  Halibut Charter 1-5 pm – Council office room 205	8:00 am C-5 GOA Skate & Octopus C-6 GOA Specifications  1:00 pm C-6 GOA Specs continued		
<b>Tue Dec 10</b> Ecosystem Committee 8am -12 – Birch/Willow Enforcement Committee 1-5pm – Birch/Willow Greenpeace Canyon Workshop – 5:30-6:30 King Salmon	8:00 am C-7 BSAI Specifications  1:00 pm C-7 BSAI Specifications C-2 Round Island Transit	8:00 am C-2 Round Island C-3 GOA Rockfish Chinook Cap Rollover  1:00 pm C-4 Grenadiers C-1 Charter Halibut	
<b>Wed Dec 11</b> Observer Outreach session – Council Room 5:30 or ½ hour after breaking  Young Fishermen's Reception – 6:30 pm Snow Goose	8:00 am C-4 Grenadiers D-4 EBFM update <del>D-5 EFP for EM</del>  1:00 pm D-3 Am 80 Workplan continue as necessary	8:00 am C-1 Charter Halibut C-5 GOA Skate & Octopus C-6 GOA Specifications  1:00 pm C-6 GOA Specifications	8:00 am B Reports  1:00 pm B Reports continued C-1 Charter Halibut
<b>Thurs Dec 12</b> IPHC - 2013 Halibut Assessment – Council room – 5:30 or ½ hour after breaking		8:00 am C-7 BSAI Specifications  1:00 pm D-5 EFP for EM (T) C-8 Coop Reporting D-6 IFQ Committee Report	8:00 am C-1 Charter Halibut  1:00 pm C-5 GOA Skate & Octopus C-6 GOA Specifications
<b>Fri Dec 13</b>  Reception –5:30-7:00 pm Top of the World		8:00 am C-9 BSAI Crab Coop D-1 Crab ROFR D-2 GOA Pot Gear for Sablefish D-3 AM80 Workplan  1:00 pm D-4 Ecosystem Committee E – Staff Tasking	8:00 am C-6 GOA Specifications C-7 BSAI Specifications  <b>12:00pm Executive Session</b> 1:30 pm C-7 BSAI Specifications <del>D-5 EFP for EM (T)</del>
<b>Sat Dec 14</b>			8:00 am C-2 Round Island Transit C-3 GOR Rockfish Chinook Cap Rollover  1:00 pm C-4 Grenadier
<b>Sun Dec 15</b>			8:00 am C-8 Coop Reporting C-9 BSAI Crab Cooperatives  1:00 pm C-9 BSAI Crab Cooperatives D-1 Crab ROFR D-2 GOA Pot Sablefish D-3 AM 80
<b>Mon Dec 16</b>			8:00 am D-4 Ecosystem Committee D-6 IFQ Committee Report  1:00 pm E – Staff Tasking

**NOTE:** The above agenda items may not be taken in the order in which they appear and are subject to change as necessary. All meetings are open to the public with.

*Updated December 3, 2013*



# **NORTH PACIFIC FISHERY MANAGEMENT COUNCIL**

## **Meeting Agenda**

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- B-2 REP 13-006** NMFS Management Report (including update on final 2014 annual deployment plan, update on observer/tendering issue; update on LAPP cost-recovery; ROFR clarification from February 2013 Council motion; update on at-sea scales rule; update on EM EFP; and EFH consultation update (T))

- B-3 REP 13-007** ADF&G Report (including review of BOF scallop and pollock proposals; halibut subsistence report)
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### **C. MAJOR ISSUES/FINAL ACTION ITEMS**

Charter Halibut Issues - 6 hours

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Groundfish Issues - 8 hours

- C-2 GF 13-012** Initial Review of Round Island Transit
- C-3 GF 13-025** Chinook salmon PSC limit rollover for GOA non-pollock trawl catcher vessels
- C-4 GF 13-026** Grenadier management

Final Groundfish Specifications - 10 hours

- C-5 GF 13-013** Discussion paper on EGOA skate fishery and GOA octopus fishery
- C-6 GF 13-029** Adopt final harvest specifications for GOA groundfish
- C-7 GF 13-028** Adopt final harvest specifications for BSAI groundfish

Fishing Cooperative Issues - 6 hours

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- C-9 Crab 13-006** BSAI Crab Cooperative Reports; Crew Provisions, etc.

### **D. OTHER ISSUES - 8 hours**

- D-1 Crab 13-003** Discussion paper on BSAI Crab ROFR contract clarifications
- D-2 GF 13-019** Discussion paper on GOA pot gear for sablefish
- D-3 Catch 13-004** Amendment 80 Program 5-year Review
- D-4 Cons 13-006** Ecosystem Committee
- D-5 Cons 13-004** ~~Review EFP for Electronic Monitoring~~ (Postponed)
- D-6 HAL 13-006** IFQ Implementation Committee report

**E. STAFF TASKING - 4 hours**

- E-1 ID 13-022** Staff Tasking

# North Pacific Fishery Management Council

Eric A. Olson, Chairman  
Chris Oliver, Executive Director



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## INFORMATION FOR PERSONS WISHING TO PROVIDE PUBLIC COMMENTS

Sign-up sheets are available at the registration table for those wishing to provide public comments on a specific agenda item. Sign-up must be completed **before** public comment begins on that agenda item. Additional names are generally not accepted **after** public comment has begun.

**Submission of Written Comments.** Written comments and materials to be included in Council meeting notebooks must be received at the Council office by 5:00 pm (Alaska Time) on **TUESDAY December 3, 2013**. Written and oral comments should include a statement of the source and date of information provided as well as a brief description of the background and interests of the person(s) submitting the statement. Comments can be sent by mail, fax, email, or through the website [npfmc.granicusideas.com](http://npfmc.granicusideas.com). **It is the submitter's responsibility to provide an adequate number of copies of comments after the deadline.** Materials provided **during** the meeting for distribution to Council members should be provided to the Council secretary. A minimum of **25** copies is needed to ensure that Council members, the executive director, NOAA General Counsel, appropriate staff, and the official meeting record each receive a copy. If copies are to be made available for the Advisory Panel (**28**), Scientific and Statistical Committee (**18**), or the public after the pre-meeting deadline, they must also be provided by the submitter.

Submission of EMAIL Comments: The Council is accepting email comments at one email address: [npfmc.comments@noaa.gov](mailto:npfmc.comments@noaa.gov); or through the website [npfmc.granicusideas.com](http://npfmc.granicusideas.com)

The Comments must identify the submitter by legal name, affiliation, and date, and must also identify the specific agenda item by number (C-1(a) for example), and must be submitted by the comment deadline. Comments received under these conditions, will be sorted, copied, and included in the Council notebooks. PDF attachments will be accepted, as long as the above criteria are met. Comment received after the deadline will not be copied and distributed, but will be treated the same as written late comments. Emails submitted for the comments must be to the above address, and not to specific Council staff or Council members. Additionally, email comments will only be accepted on items that are on the scheduled agenda. A return receipt will be issued automatically upon opening the electronic comment.

### FOR THOSE WISHING TO TESTIFY BEFORE THE ADVISORY PANEL

The Advisory Panel has revised its operating guidelines to incorporate a strict time management approach to its meetings. Rules for testimony before the Advisory Panel have been developed which are similar to those used by the Council. Members of the public wishing to testify before the AP **must** sign up on the list for each topic listed on the agenda. Sign-up sheets are provided in a special notebook located at the back of the room. The deadline for registering to testify is when the agenda topic comes before the AP. The time available for individual and group testimony will be based on the number registered and determined by the AP Chairman. **The AP may not take public testimony on items for which they will not be making recommendations to the Council.**

### FOR THOSE WISHING TO TESTIFY BEFORE THE SCIENTIFIC AND STATISTICAL COMMITTEE

The usual practice is for the SSC to call for public comment immediately following the staff presentation on each agenda item. The Committee will discourage testimony that does not directly address the technical issues of concern to the SSC. **Presentations lasting more than five minutes will require prior approval from the Chair.**

#### Commonly used Acronyms

AI - Aleutian Islands	GOA - Gulf of Alaska
AFA - American Fisheries Act	GKC - Golden King Crab
BBRKC - Bristol Bay Red King Crab	GHL - Guideline Harvest Level
BiOp - Biological Opinion	HAPC - Habitat Areas of Particular Concern
BKC - Blue King Crab	IBA - Individual Bycatch Accounting
BSAI - Bering Sea and Aleutian Islands	IBQ - Individual Bycatch Quota
BSFRF - Bering Sea Fisheries Research Foundation	ICA - Inter-cooperative Agreements
BSIERP - Bering Sea Integrated Ecosystem Research Program	IFQ - Individual Fishing Quota
AK BOF - Alaska Board of Fisheries	IPQ - Individual Processor Quotas
CDQ - Community Development Quota	IPA - Incentive Program Agreements
CIE - Center for Independent Experts	MPA - Marine Protected Area
CGOA - Central Gulf of Alaska	NOI - Notice of Intent
CQE - Community Quota Entity	PSEIS - Programmatic Supplemental Impact Statement
EBFM – Ecosystem Based Fishery Management	PSC - Prohibited Species Catch
EBM – Ecosystem Based Management	RKC - Red King Crab
EDR - Economic Data Reporting	ROFR - Right of First Refusal
EFP - Exempted Fishing Permit	SAFE - Stock Assessment and Fishery Evaluation
EIS - Environmental Impact Statement	SSL - Steller Sea Lion
EFH - Essential Fish Habitat	TAC - Total Allowable Catch
FLL - Freezer longliners	VMS - Vessel Monitoring System

**Enforcement Committee Agenda**  
**December 10, 2013**  
**1pm – 5pm**  
**Birch/Willow Room, Hilton Hotel**  
**Anchorage, Alaska**

**I. Charter Halibut Annual Management Measures**

**Background**

The Charter Management Implementation Committee met on October 25, 2013 to recommend a range of potential management measures for Area 2C and Area 3A in 2014 to frame the ADF&G analysis. The analysis will provide the projected harvests for the proposed measures under either the GHL Program or Halibut Catch Sharing Plan (CSP), which is still pending Secretarial approval. Two of the management measures recommended for analysis for Area 2C and one of the management measures recommended for analysis for Area 3A includes an annual limit on halibut harvested by charter vessel anglers in Alaska. The Office of Law Enforcement (OLE) has concerns with its ability to effectively enforce an annual limit on charter harvested halibut in any area without an accurate annual accounting method implemented via regulation. At this meeting, representatives from OLE will present these concerns to the committee. Attached below is a letter from OLE to the Council that conveys these concerns.

**II. C-2 Initial review of Round Island transit analysis**

**Background**

This Draft EA/RIR analyzes the potential environmental and economic effects of a proposal to establish season transit areas through the Round Island and Cape Peirce walrus protection areas in northern Bristol Bay, Alaska. The proposed action would establish one or more transit areas through the walrus protection areas at Round Island and Cape Peirce in order to allow vessels with Federal Fisheries Permits (FFPs) to transit through the areas while tendering for State of Alaska managed herring and salmon fisheries in Togiak Bay, Cape Peirce and Cape Newenham, and Security Cove, or while transferring groundfish to floating processors or trampers in Togiak Bay or Hagemeister Strait. Before implementation of Component 10 to GOA FMP Amendment 83, vessels with FFPs were allowed to surrender their FFP for the tendering season in order to transit through the walrus protection area, with the expectation that they could reactivate their FFP when tendering was completed. Now those vessels are prohibited from reapplying for a FFP within a three year period, putting their FFP at risk or putting themselves at risk of violating regulations if they transit the walrus protection area. The purpose of this action is to maintain suitable protection for walrus on Round Island and Cape Peirce, to restore access to routes used by tendering vessels before implementation of GOA FMP Amendment 83, and to allow vessels delivering groundfish to the route north of Round Island to reduce the likelihood of disturbance to walrus on Hagemeister Island.

**III. Implementation recommendations for other VMS features for vessels already subject to VMS requirements**

**Background**

Over a series of three meetings in 2012, the Council reviewed a discussion papers regarding the use and requirements of vessel monitoring system (VMS) in the North Pacific fisheries and other regions of the U.S. At the December 2012 meeting, the Council reviewed a discussion paper that evaluated, among other things, how advanced features of VMS are being utilized in the other regions in the U.S. Based on those different usages, the Council recommended that the Enforcement Committee assess the utility of

features such as geo-fencing, increased polling rates, and declarations of species, gear, and area for improving enforcement efforts and efficiency for vessels already subject to VMS requirements. The Council noted implementation recommendations could be in the form of agency regulations, Council actions, and some may not be worth implementing. To address the Council's request, LCDR Tony Keene prepared an outline for the committee to review and edit, which is attached below. **At this meeting, the committee will finalize the outline, determine who is responsible for completing each section noted in the outline, and set the time line for completing the document.**



**UNITED STATES DEPARTMENT OF COMMERCE  
NOAA / National Marine Fisheries Service**

*Alaska Enforcement Division*

DATE: December 3, 2013

TO: Chris Oliver, Executive Director  
North Pacific Fisheries Management Council

FROM: Matthew S. Brown, Acting Special Agent in Charge

RE: Enforcement Concerns on Annual Harvest Limit

The Charter Management Implementation Committee has recommended analysis of several potential management measures for charter halibut harvests in 2014. Two of the management measures recommended for analysis for Area 2C and one of the management measures recommend for analysis for Area 3A includes an annual limit on halibut harvested by charter vessel anglers in Alaska.

The Alaska Enforcement Division has concerns with its ability to effectively enforce an annual limit on charter harvested halibut in any area without an accurate annual accounting method implemented via regulation.

The method that has been offered to account for annual halibut harvests for charter vessel anglers is to require anglers to complete a harvest record that is located on the reverse side of a State of Alaska sport fishing license. Anglers not required to obtain a sport fishing license under Alaska law, e.g. Youths, PID card holders and senior citizens, would be required to complete a free harvest record card.

There are many ways that an angler that wants to exceed an annual halibut harvest limit could easily circumvent this cursory record keeping mechanism and successfully evade detection by enforcement personnel:

- An angler could inadvertently or intentionally fail to record their charter harvested halibut on their license or harvest record card until or unless they get checked by enforcement personnel from NOAA, the USCG or the Alaska Wildlife Troopers. If the angler isn't checked, they may never record harvests and no accounting is created.
- Many anglers obtain multiple fishing licenses throughout the year. The use of multiple fishing licenses (including duplicate licenses) by an individual angler doesn't allow for continuity of accounting for an annual limit throughout the year. An angler could inadvertently or intentionally fail to record harvest records from previous

fishing license(s) to a new fishing license(s) and there is no mechanism to audit or follow up on this practice during the current fishing year.

- Accounting for annual halibut limits for anglers that are not required to obtain a sport fishing license is even more problematic because the harvest record cards are not tracked or otherwise accounted for, and there is no continuity of accounting for anglers that use multiple harvest record cards throughout the year. ADF&G saltwater logbook data indicates that in 2012 there were approximately 11,790 charter vessel anglers that retained halibut from Area 2C and 3A but were not required to obtain a sport fishing license. In 2011 there were approximately 13,402. This is an estimate of the number of charter vessel anglers that would be required to use a harvest record card if an annual halibut limit were to be implemented. Given the uncontrolled nature of the harvest record card, anglers that want to exceed an annual limit on halibut would only have to complete a new harvest record card with each new fishing trip. This would effectively restart the accounting for an annual limit of halibut with each fishing trip and new harvest record card.
- If the CSP is implemented in 2014 with a provision for Guided Angler Fish “GAF”, GAF would not be counted towards a person’s annual halibut limit. This could further confuse the accounting for an annual halibut limit because GAF are not required to be recorded on the back of an angler’s license or harvest record card.

It has been suggested that NOAA OLE could audit annual harvest limits by matching licensing data with salt water logbook data. This is impractical for some of the reasons stated below:

- Licensing data is not available until after the end of the fishing season. This creates significant evidentiary problems in prosecuting an angler for exceeding their annual limit. The halibut and the license or harvest card would likely be either discarded or carried out of state by the angler, witnesses are unlikely to have a clear memory of relevant events that occurred months before, and it would be extraordinarily labor intensive and expensive to prosecute cases involving small numbers of halibut.
- The saltwater logbook data doesn’t contain information that individually identifies youth anglers and there is no licensing data at all for youth anglers. There is no mechanism to audit or follow up on youth angler harvests. In 2012 there were approximately 7,340 youth anglers that retained halibut from Area 2C or 3A and in 2011 there were approximately 8,886.

It has also been suggested that annual limits are best enforced at-sea while fishing for halibut is ongoing or at the dock at the end of a trip. This isn’t entirely accurate. When an enforcement contact occurs at-sea or at the dock, the authorized officer can only verify compliance with the regulations for the activities that the authorized officer observes at that point in time. The authorized officer has no way of verifying that any halibut that was harvested by the charter

vessel angler on previous days or trips was properly recorded on the license or harvest record, nor does the authorized officer have any mechanism to follow up on any fishing activity that occurs after the enforcement contact.

If anglers suspect that they are unlikely to be caught doing something unlawful or if they suspect that violations are not likely to be prosecuted, the threat of being fined becomes a weak deterrent to breaking the law.

For the reasons outlined above, NOAA OLE recommends that an annual charter halibut limit should not be implemented without a more accurate method to fully account for individual annual charter halibut harvests.

*\*NOTE: AKD Enforcement prepared the following comments to this paper independently since the enforcement concerns were separated from the analysis being conducted by Sustainable Fisheries and ADF&G. AKD OLE has not had the opportunity to review the analysis and reserves the right for further comment once that analysis has been released.*

## **Outline for VMS Paper**

- I. North Pacific Fishery Management Council action request – Jon McCracken**
- II. Brief history of VMS, implementation purposes, and current status of fleets requiring coverage. – Jon McCracken**
- III. What is the current world of VMS**
  - a. VMS requirements (Generally provide vessel identification, date and time stamp, 2x/hour) – Guy Holt
  - b. Based upon Table 2, p. 3 of the VMS discussion paper (December 2012), there are approximately 1666 vessels with federal permits that target North Pacific groundfish, halibut or crab. Of these, only 556 currently are required to carry VMS units, representing only about 33% of the total vessel population.
    - i. Vessels carrying VMS
      - 1. CLS American Thorium (% of fleet)
        - a. Total Number of Units
        - b. Units with data terminals
        - c. Cost to Upgrade to data terminals
      - 2. Faria WatchDog (% of fleet)
        - a. Total Number of Units
        - b. Units with data terminals
        - c. Cost to Upgrade to data terminals
      - 3. GMPCS Thrane & Thrane (% of fleet)
        - a. Total Number of Units
        - b. Units with data terminals
        - c. Cost to Upgrade to data terminals
      - 4. Skymate/Orbcomm (% of fleet)
        - a. Total Number of Units
        - b. Units with data terminals
        - c. Cost to Upgrade to data terminals
    - ii. Possible Other Tools/cost to implement
      - 1. No Data Terminal Items
        - a. Increased Poll Rates
          - i. General Increases
          - ii. GEO Fencing associated poll increases
        - b. Geo-Fencing
      - 2. Requires Data Terminal
        - a. Gear Declaration
        - b. Species Declaration
        - c. Area Declaration
        - d. Electronic Logbooks (Appendix A of the EM Strategic Plan, p. 23)
          - i. Required for:

1. AFA CPs/Motherships
2. CGOA Rockfish CP
3. BSAI P-cod Freezer Longliners
- ii. Voluntary for:
  1. BSAI Trawl CPs in H&G
  2. AFA C/Vs
  3. GOA CP Trawl
  4. COA CP longline
- iii. Not required for all others
- c. Current users of VMS data:
  - i. NOAA OLE – Law Enforcement Case Use (Guy Holt and Matt Brown) –
  - ii. NOAA Sustainable Fisheries/In-season Management (Jennifer Mondragon and Josh Keaton) –
  - iii. NOAA Catch in Areas (Steve Lewis?)
  - iv. NOAA Observer Program (Martin Loefflad) – Purpose statement from the 2005 VMS plan listed "To permit more cost-effective and productive use of observers" as their third purpose to expand VMS coverage.
    1. Evaluation of temporal and spatial fleet distribution as compared to observer distribution.
    2. Safety for Observers, and identification of vessel locations in the event of a mishap.
  - v. ADF&G Biologists/In-season managers (Nicole Kimball)
    1. Assessment of fishery effort in seasons to anticipate fishery closures while meeting as closely as possible catch limits through determination of number and identity of vessels participating in a given fishery.
    2. Tracking of fishing vessels and tenders to establish delivery locations and estimated time of arrival in order to have port samplers or observers available to collect biological samples.
    3. Assessment of fleet distribution/harvest areas to determine whether or not there are concerns of localized depletion.
    4. Closed Area enforcement, particularly Steller Sea lion habitat protection measures.
    5. Verification of actual fishing locations to amend fish ticket data and confirm appropriate statistical area.
    6. Enforcement notifications to Alaska Wildlife Troopers.
  - vi. USCG Enforcement (Tony Kenne)
  - vii. USCG Search and Rescue (Tony Kenne)
  - viii. Industry (Fleet Management Aspects and uses of VMS)
    1. Karl Haflinger – AFA Fleet Management
    2. Lori Swanson – A80
    3. Chad See – Freezer Longliners
    4. Julianne Curry – UFA
    5. Mark Gleason – Bering Sea Crabbers
    6. Others?

**Other questions that may be answered...**

- IV. Are the above users currently getting what they need from the VMS system?**
  - a. NOAA
  - b. ADF&G
  - c. USCG
  - d. Industry
- V. What do VMS end users currently need for now and for the foreseeable future given the ever increasing number of complex spatial management needs for fisheries.**
  - a. NOAA
  - b. ADF&G
  - c. USCG
  - d. Industry
- VI. Case Studies in VMS use/potential benefits from expansion for current management actions.**
  - a. Steller Sea Lion No-Transit Zone Violations and VMS (Guy Holt and Sara Sundsten)
  - b. Development of a "fishing button" for catch in areas use/in-season management – may be beneficial for monitoring of effort through Skate HAPC.
  - c. Electronic Logbooks – (Jennifer Mondragon and Josh Keaton)
    - i. C/Vs not currently covered.
    - ii. C/Ps already have these.
    - iii. Are there other methods for real time transmission of data?
    - iv. Clarity of data for enforcement (hand-written logs can be hard to read.)

# Ecosystem Committee Meeting

Tuesday, December 10, 2013 8am-noon  
Birch/Willow Room, Hilton Hotel, Anchorage, AK

## **Draft Agenda:**

- Continue discussion of a vision statement for maintaining productive ecosystems and sustainable long-term fisheries
- Recommend draft language to the Council
- Discuss and evaluate near- and long-term implications for Council actions

## **Recap of minutes and Council action from September 2013 workshop / October Council meeting:**

The Council endorsed consideration of two approaches, and asked for a discussion of the relative merits of either:

1. Developing a comprehensive ecosystem-based fishery management policy, using the existing documents as a basis, but perhaps refining or adding to the objectives or approach; or
2. Developing a new ecosystem-based vision statement, articulating the Council's overarching goals and principles for achieving them.

The Council agreed with the Committee's recommendation that a vision statement should include the following components:

- Broad focus – encompass all Council ecosystems (Bering Sea, Aleutian Islands, Gulf of Alaska, Arctic)
- Protect fisheries from impacts from other sources (shipping, etc.)
- Science-based – management based on the best scientific information available, including local and traditional knowledge, as well as having scientists interacting with managers in the Council process
- Reflective of the need to bring people together to talk about tough issues, in order to find a path to mutually-agreed end goals (sustainable fisheries and healthy ecosystems)
- Bring in the human component (communities, social sciences, etc.)
- Acknowledge that EBFM includes tradeoffs that need to be addressed explicitly in decisionmaking
- Recognition of uncertainty, for example changing climate and associated ocean trends, and support for Council and other stakeholders to adapt to rapidly changing circumstances

The Committee articulated the following **example** of a vision statement in September:

*Healthy, biodiverse, resilient ecosystems that (1) are managed using a broad, precautionary, transparent, and inclusive process that is based on sound science (including local and traditional knowledge), allows for an analysis of tradeoffs, accounts for changing conditions, and mitigates threats; and (2) provide opportunities for vibrant sustainable fisheries, the subsistence way of life, undisturbed habitat, and designations for national fisheries food security areas.*



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

605 W. 4th Ave. Suite 306  
Anchorage, AK 99501  
(907) 271-2809  
Fax (907) 271-2817

## Action Memo Text

**File Number:**ID 13-026

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**Agenda Date:** 12/9/2013

**Agenda Number:** a)

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Approval of Agenda



# **NORTH PACIFIC FISHERY MANAGEMENT COUNCIL**

## **Meeting Agenda**

605 W. 4th Ave. Suite 306  
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(907) 271-2809  
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*Eric A. Olson, Chairman*  
*Chris Oliver, Executive Director*  
*Telephone (907) 271-2809*

*Visit our website: <http://www.alaskafisheries.noaa.gov/npfmc>*

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**December 9-16, 2013**

**Hilton Hotel, Anchorage, AK**

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The North Pacific Fishery Management Council will meet December 9-16, 2013 at the Hilton Hotel, 500 W. 3rd Avenue, Anchorage, AK. Other meetings to be held during the week are:

Scientific and Statistical Committee: December 9-11, King Salmon/Illiamna Room

Advisory Panel: December 10-13 Dillingham/Katmai Room

IFQ Implementation Committee: December 9, 8:30-noon, Council Office, Room 205

Halibut Charter Management Cmte: December 9, 1-5:00 pm, Council Office, Room 205

Ecosystem Committee: December 10, 8:00-noon, Birch/Willow Room Hilton Hotel

Enforcement Committee: December 10, 1-5 pm, Birch/Willow Room Hilton Hotel

All meetings are open to the public, except executive sessions of the Council. Other committee and workgroup meetings may be scheduled on short notice during the week, and will be posted.

**December 2013 Meeting Info** Meeting Schedule, Agenda (without attachments), Public Comment Information, and other related information included.

### **A. CALL MEETING TO ORDER**

a) Approval of Agenda

b) Approval of Minutes

### **B. REPORTS - 6 hours**

**B-1 REP 13-003** Executive Director's Report

**B-2 REP 13-006** NMFS Management Report (including update on final 2014 annual deployment plan, update on observer/tendering issue; update on LAPP cost-recovery; ROFR clarification from February 2013 Council motion; update on at-sea scales rule; update on EM EFP; and EFH consultation update (T))

- B-3 REP 13-007** ADF&G Report (including review of BOF scallop and pollock proposals; halibut subsistence report)
- B-4 REP 13-015** NOAA Enforcement
- B-5 REP 13-010** USCG Report
- B-6 REP 13-012** IPHC Report
- B-7 REP 13-013** USFWS Report
- B-8 REP 13-014** Protected Species Report (including SSL EIS and BiOp update)

### **C. MAJOR ISSUES/FINAL ACTION ITEMS**

Charter Halibut Issues - 6 hours

- C-1 HAL 13-005** Halibut Issues

Groundfish Issues - 8 hours

- C-2 GF 13-012** Initial Review of Round Island Transit
- C-3 GF 13-025** Chinook salmon PSC limit rollover for GOA non-pollock trawl catcher vessels
- C-4 GF 13-026** Grenadier management

Final Groundfish Specifications - 10 hours

- C-5 GF 13-013** Discussion paper on EGOA skate fishery and GOA octopus fishery
- C-6 GF 13-029** Adopt final harvest specifications for GOA groundfish
- C-7 GF 13-028** Adopt final harvest specifications for BSAI groundfish

Fishing Cooperative Issues - 6 hours

- C-8 Catch 13-003** Discussion paper on Co-op reporting requirements
- C-9 Crab 13-006** BSAI Crab Cooperative Reports; Crew Provisions, etc.

### **D. OTHER ISSUES - 8 hours**

- D-1 Crab 13-003** Discussion paper on BSAI Crab ROFR contract clarifications
- D-2 GF 13-019** Discussion paper on GOA pot gear for sablefish
- D-3 Catch 13-004** Amendment 80 Program 5-year Review
- D-4 Cons 13-006** Ecosystem Committee
- D-5 Cons 13-004** ~~Review EFP for Electronic Monitoring~~ (Postponed)
- D-6 HAL 13-006** IFQ Implementation Committee report

**E. STAFF TASKING - 4 hours**

- E-1 ID 13-022** Staff Tasking



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**ID 13-025

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**Agenda Date:** 12/9/2013

**Agenda Number:** b)

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Approval of Minutes

**DRAFT**  
**ADVISORY PANEL MINUTES**  
**October 1 – 4, 2013**  
**Anchorage, Alaska**

The following members were present for all or part of the meetings (absent ~~stricken~~):

Ruth Christiansen	Becca Robbins-Gisclair	Andy Mezirow
Kurt Cochran	John Gruver	Joel Peterson
John Crowley	Mitch Kilborn	Theresa Peterson
Jerry Downing	<del>Alexus Kwachka</del>	<del>Neil Rodriguez</del>
Tom Enlow	Craig Lowenberg	Lori Swanson
<del>Tim Evers</del>	Brian Lynch	Anne Vanderhoeven
Jeff Farvour	Chuck McCallum	Ernie Weiss

**C-1 Observer Program**

The AP recommends the Council adopt the OAC recommendations captured in pages 3 – 6 of the OAC report. *Motion carried 18/0*

- The OAC report includes the rationale for the recommendations.
- This includes the comments on the NMFS letter on the EM pilot program listed on page 6.

The AP recommends the Council ask NMFS to collect data on number of sets and hauls made by vessels carrying observers, the number of sets or hauls sampled, and the percent of each observed set or haul sampled. *Motion carried 18/0*

- This information could help in understanding the data from the observer samples.
- It is not expected to be expensive or burdensome to collect. Note this could not be verified with the Agency due to federal shutdown.

**C-2 SSL EIS Final Action**

The AP recommends the Council select its Preliminary Preferred Alternative as its preferred alternative for the SSL EIS. The AP recommends the Council request that the Agency provide a draft biological opinion to the Council prior to the February 2014 Council meeting. The draft BiOp should provide clear and definitive information to allow the Council to understand what elements of the PA do not create JAM and what adjustments are needed to any elements that may cause JAM. The draft BiOp should also allow the Council to discern what combinations of elements in each AI subarea are allowable. The timing of the draft BiOp should allow the Council to have full participation in crafting the final RPAs. *Motion passed 17/1*

**C-3 BSAI Crab SAFE Report**

The AP recommends the Council approve the 2013 BSAI Crab SAFE report and the 2013/2014 OFL and ABC specifications as recommended by the SSC. *Motion carried 18/0*

## C-4 Groundfish Specifications

### a) Stock Structure

The AP recommends the Council establish a process for addressing stock structure concerns raised by the Plan Teams as part of the harvest specifications process. This process should encompass the following:

- A) Clearly identify the problem that justifies a need for spatial management. i.e., Is this a yield issue? Is it a conservation of genetic diversity issue? Has a new stock been identified?
- B) Identify the possible tools that may be appropriate for dealing with the concern. These may include industry's ability to adjust harvest on a spatial scale, specification of OFLs, ABCs, or TACs, or other tools.
- C) This process should allow time for input by in-season management, stakeholders, and the Council before final SSC recommendations are made on harvest specifications

*Motion carried 17/0*

- Public needs to understand what the problem is, and why action is needed. Stock structure alone may not require management action.
- Industry has demonstrated the ability to respond to spatial concerns.
- Input from management and fishermen will help all decision-makers understand the possible unintended effects of spatial management.

### b) Sablefish TAC apportionment

*The following motion failed on a 9/9 vote*

*AP recommends that Council direct staff to develop an expanded discussion paper analyzing a broad range of options aimed at maximizing the utilization of all sablefish in the BSAI fishery. Included in the analysis would be an evaluation of use caps, effects on CDQ participation in the fishery, adjustment of the trawl and fixed gear TAC apportionment, underutilized sablefish harvest by sector and gear type, and potential entry level opportunity in the sablefish fixed gear fishery.*

#### Minority Report

*BSAI Sablefish TAC Apportionment: The minority felt that an expanded discussion paper regarding an evaluation of potential options aimed at increasing the utilization of Sablefish in the BSAI is appropriate at this time.*

- *Additional analysis is required to provide information capable of achieving an adequate response to this issue.*
- *Regulations regarding use caps and sector allocations in the BSAI may no longer accurately reflect current industry conditions, and restrict some industry participants from increasing their harvest of otherwise non-harvested sablefish.*
- *Employing a broader scope to examine possible actions will help avoid adverse consequences to sectors, current and future industry participants, and CDQ fisheries.*
- *Additional analysis on potential factors impeding full utilization should also be addressed.*

*Signed by: Becca Robbins Gisclair, Ruth Christiansen, Ernie Weiss, Jeff Favour, Theresa Peterson, Chuck McCallum, Brian Lynch, John Crowley, Joel Peterson.*

**C-4 (b) continued**

Rationale against the motion:

- This is a very complex issue and only provides more fish to the few vessel owners that are at the IFQ use cap in the Bering Sea fixed gear sablefish fishery. The Council has much bigger issues of greater importance to address.
- There is unharvested TAC in both the trawl and fixed gear Bering Sea sablefish fishery. Moving TAC from one sector to another does not address the root problem.
- The Council is already considering a change in use caps to address this issue.
- There are other options for fixed gear participants, including leasing CDQ fish.
- As proposed, this could fund a new fishery (entry level) for fixed gear using TAC allocated to the trawl sector.

**c) Groundfish harvest specifications**

BSAI:

The AP recommends that the Council adopt the ABC, OFL and TAC numbers for 2014 and 2015 contained in the attached spreadsheet.

*Motion passed 18/0*

The AP recommends that the Council adopt the PSC limits and apportionments contained in Tables 10 to 13 in the Action Memo for the BSAI for 2014 and 2015.

*Motion passed 18/0*

- These TAC numbers make some slight adjustments, but primarily roll over last year's numbers as a placeholder.
- The AP adjusted the industry proposal slightly down for pollock and up for Alaska plaice .
- Catch to date is 21,600 mt for plaice and went to PSC in May. There is a viable market for these fish and it is important to fund the fishery adequately

GOA:

The AP recommends that the Council adopt the SSC recommendations for ABC and OFLs for the GOA proposed specifications for 2014 and 2015, and:

Roll over the TACs from Table 2 of the final specifications for 2013/2014 (attached) with the following changes

- 1) Shallow-flatfish in WYAK to 4,299 MT
- 2) Shallow flatfish in SEO to 1,092 MT
- 3) Rex sole in WYAK to 823 MT

For the 2014 and 2015 proposed TACs.

Adopt the tables (pages 10 and 11 in the action memo) that reflect:

- 1) 2013/2014 halibut PSC limits, allowances and apportionments.
- 2) 2013/2014 halibut PSC trawl limits between the trawl gear deep-water species fishery and the shallow-water species fisheries.
- 3) Apportionment of the “other H&L fisheries” 2013 and 2014 halibut PSC allowance between the H&L catcher vessel and catcher processor sectors.

For the proposed 2014 and 2015 specifications.

*Motion passed 18/0*

- This primarily rolls over the numbers from last year for now and adjustments can be made in December when we have more information available.

## **C-5 GOA Trawl Issues**

### **a) Updated discussion paper on GOA trawl bycatch management.**

The AP recommends the Council accept the revised proposals received by the AP (Groundfish Forum and Pacific Seafoods) for inclusion in future discussion and analysis along with the current suite of proposals.

*Motion passed 18/0*

- The current suite of proposals has merit and its worth continuing to analyze all of them.
- The revised proposals flesh out some important details from the previous proposals.
- There are still details which need to be further developed in many of the proposals and we expect to see additional revisions as we move through the process.
- The fleet needs tools to reduce bycatch and it is important to continue to move this process forward.

The AP recommends the Council request an expanded discussion paper which compares the current/revised suite of proposals to the Council’s goals and objectives.

*Motion passed 18/0.*

- While the proposals are still works in progress, comparing the current proposals to the Council’s goals and objectives will assist us in measuring the proposals against the Council’s stated goals and objectives.
- This comparison should assist us in narrowing the range of proposals under consideration.

### **b) GOA trawl data collection**

The AP recommends the council take final action and adopt the Preliminary Preferred Alternative.

*Motion passed 18/0*

- Adopting a data collection program now before the new trawl management program is in place makes sense to collect pre-program data.
- The consistency between this data collection program and that utilized in the Bering Sea will be helpful to industry in collecting and reporting data.

**C-5 continued**

**c) GOA rockfish Chinook cap rollover**

The AP recommends the Council add:

Alternative 5. Rollover all Chinook PSC but 50 fish remaining in the Rockfish Program CV Chinook cap on October 1. No uncertainty buffer would apply to the Rockfish Program CV sector.

*Motion passed 18/0*

- A rollover provision is critical to the operations of this fishery. It is important that we develop a plan that works
- Utilizing an uncertainty buffer in the rockfish program makes things complicated.
- For ease of managing the fishery, we need something simple and clean.
- This alternative combines several approaches and is worth analyzing.

**C-6 BSAI Salmon Bycatch**

**a) SeaShare report on Salmon Donation Program**

The AP received a report on the SeaShare PSC donation program.

**b) BSAI Chinook salmon report and industry Chinook IPA reports**

The Advisory Panel recognizes the continued importance of maintaining low Chinook salmon bycatch by the Bering Sea pollock fishery. The AP has determined that the Amendment 91 IPAs are working as intended and are reducing Chinook bycatch at all levels of abundance. The Performance Standard at 47,591 and the 60,000 hard cap are accomplishing their role in establishing incentives as originally designed by the unique nature of Amendment 91. Therefore, the AP recommends the Council take no further action on Amendment 91 at this time.

*Motion passed 13/5*

- Industry IPAs have been a factor in recent low Chinook bycatch numbers; they are working.
- The industry is doing a lot to avoid bycatch, at a cost in terms of higher fuel use, lower value products.
- Industry is developing salmon excluders and developing new fishing styles that are effective at reducing bycatch.
- Amendment 91 has only been in effect for two years. It is too early to revisit.

**Minority Report**

*A minority of the AP supported this substitute motion:*

*The AP recommends the Council request an expanded discussion paper which investigates methods to further reduce bycatch, including the overall cap level and placing limitations on late September through October fishing. The discussion paper should include additional information on Western Alaska stock status including detailed descriptions of the restrictions imposed on commercial and subsistence salmon fisheries in the region over the last 5 years, total subsistence harvests and whether amounts necessary for subsistence have been met.*

## C-6 (b) continued

### **Minority report continued:**

*Chinook salmon stocks are in a state of crisis throughout Western Alaska. Subsistence harvests have been dramatically reduced and commercial harvests virtually eliminated for Chinook salmon. Despite these reductions and the extreme sacrifices made by in-river users, escapement goals are not being met. In this context, it's critical that all sources of mortality are reduced. In a time when every fish counts, bycatch in the pollock fishery has an impact. Coming close to the Amendment 91 cap limits in these conditions of stock abundance would be devastating to Western Alaska stocks. It is therefore imperative that we take a look at what can be done to further reduce bycatch as both a matter of conservation and equity.*

*Becca Robbins Gisclair, Theresa Peterson, Andy Mezirow, Jeff Farvour, Chuck McCallum*

### **c) Industry IPA reports for BSAI chum salmon**

The AP supports the IPA/RHS proposals and recommends the Council request a discussion paper which further evaluates the following:

- Modifications needed to Amendment 91 and Amendment 84 to adopt this type of proposal.
- What components of the rolling hot spot program are critical and could be placed into regulation while still providing flexibility for the industry to adapt the program to new information?
- Improved reporting requirements.
- Potential approaches for combining reporting requirements for chum and Chinook IPAs.

*Motion passed 18/0*

- The AP appreciates industry's work to develop IPA's which are responsive to the Council's requests and supports moving forward with these.
- The IPA presented by industry focuses chum salmon bycatch reduction on the time period when mature Western Alaska stocks are more present in the bycatch and provides mechanisms for balancing chum and Chinook salmon avoidance.
- A discussion paper will help clarify the regulatory process for adopting this approach via amendments to Amendment 84 or 91.
- Forwarding the proposal will provide an opportunity for public and Council review, along with information on regulatory process which can inform our path forward on chum salmon bycatch bycatch measures.

## **D-1 Miscellaneous issues**

### **a) Discussion paper on AI Pacific cod processing**

The AP recommends the council request staff to bring back a discussion paper to develop a problem statement.

Issues that should be addressed include:

- A history of both shoreside and offshore processing of all species in the Aleutian Islands.
- What protections currently exist and may be required to provide for community stability?

- Dependence of the communities on cod and other fishery-related operations
  - Proposed scale of processing in the communities
  - The impact of the AI TAC split on creating a race for fish
  - Considerations to mitigate harm from any potential action on other stakeholders
- Historic and relative dependence by all fishery sectors on Aleutian Island fisheries  
The effect competition among processors on CV operations  
Other opportunities available for affected stakeholders.

**b) GOA Gear Committee report on implementing a sablefish pot fishery**

The AP recommends that the Council direct staff to develop an expanded discussion paper on the use of pots in the Gulf Of Alaska sablefish IFQ fisheries, and that the analysis include the topics of concern and recommendations identified in the minutes of the September 30 meeting of the Gulf of Alaska Gear Committee. In addition to the topics brought forth by the Gear Committee, the following topics should also be included for analysis:

- The cost of gear conversion from longline to pot gear
- Vessel demographics: vessel size by area and Quota Share size by area
- Halibut bycatch by different pot configurations
- Information on the biodegradability of twine used for escape ports at sablefish fishing depths
- A wider range of gear location methods than only AIS as found in the committee report.

*Motion passed 17/0*

**D-2 Staff Tasking**

The AP recommends that the Council initiate a discussion paper, adopting a problem statement, and considering proposed regulation changes or exemptions that will: 1) promote the development of a CDQ village directed Pacific cod fishery; and 2) allow CDQ and IFQ halibut harvesters to retain CDQ Pacific cod in excess of the 20% MRA, as proposed in the handout by the CDQ groups.

*Motion passed 17/0*

- Current regulations applicable to vessels targeting Pcod with hook and line gear are prohibitive for the CDQ village fleets.
- The CDQ groups believe easing certain regulations will make the development of the fishery viable, particularly as the halibut quotas they currently fish continue to decline.
- Regulatory precedence has been set with similar sized vessels in jig fisheries having been exempted from VMS and LLP requirements.
- It would be most efficient and conservative to allow retention of CDQ Pcod when the village fleet targets CDQ and/or IFQ halibut.

The AP acknowledges the request submitted in writing by Melvin Grove Jr and recommends that the Council take no further action on this item.

*Motion passed 17/0*

Advisory Panel Proposed BSAI OFL and ABC Recommendations (metric tons) for 2014 - 2015

AP Minutes  
October 2013

Species	Area	2013				2014				2015			
		OFL	ABC	TAC	Catch	OFL	ABC	TAC		OFL	ABC	TAC	
Pollock	EBS	2,550,000	1,375,000	1,247,000	1,146,604	2,730,000	1,430,000	1,249,000		2,730,000	1,430,000	1,249,000	
	AI	45,600	37,300	19,000	2,916	48,600	39,800	19,000		48,600	39,800	19,000	
	Bogoslof	13,400	10,100	100	57	13,400	10,100	100		13,400	10,100	100	
Pacific cod	BSAI	359,000	307,000	260,000	178,388	n/a	n/a	n/a		n/a	n/a	n/a	
	BS	n/a	n/a	n/a	169,840	352,470	300,390	243,100		352,470	300,390	243,100	
	AI	n/a	n/a	n/a	8,548	22,500	16,900	7,381		22,500	16,900	7,381	
Sablefish	BS	1,870	1,580	1,580	548	1,760	1,480	1,480		1,760	1,480	1,480	
	AI	2,530	2,140	2,140	702	2,370	2,010	2,010		2,370	2,010	2,010	
Yellowfin sole	BSAI	220,000	206,000	198,000	101,596	219,000	206,000	198,000		219,000	206,000	198,000	
Greenland turbot	BSAI	2,540	2,060	2,060	1,097	3,270	2,650	2,060		3,270	2,650	2,060	
	BS	n/a	1,610	1,610	818	n/a	2,070	1,610		n/a	2,070	1,610	
	AI	n/a	450	450	279	n/a	580	450		n/a	580	450	
Arrowtooth flounder	BSAI	186,000	152,000	25,000	18,515	186,000	152,000	25,000		186,000	152,000	25,000	
Kamchatka flounder	BSAI	16,300	12,200	10,000	7,500	8,300	7,100	7,100		8,300	7,100	7,100	
Northern rock sole	BSAI	241,000	214,000	92,380	55,401	229,000	204,000	92,450		229,000	204,000	92,450	
Flathead sole	BSAI	81,500	67,900	22,699	15,317	80,100	66,700	22,699		80,100	66,700	22,699	
Alaska plaice	BSAI	67,000	55,200	20,000	19,982	60,200	55,800	23,700		60,200	55,800	23,700	
Other flatfish	BSAI	17,800	13,300	3,500	1,467	17,800	13,300	3,500		17,800	13,300	3,500	
Pacific Ocean perch	BSAI	41,900	35,100	35,100	26,460	39,500	33,100	33,100		39,500	33,100	33,100	
	BS	n/a	8,130	8,130	1,573	n/a	7,680	7,680		n/a	7,680	7,680	
	EAI	n/a	9,790	9,790	8,209	n/a	9,240	9,240		n/a	9,240	9,240	
	CAI	n/a	6,980	6,980	6,614	n/a	6,590	6,590		n/a	6,590	6,590	
	WAI	n/a	10,200	10,200	10,064	n/a	9,590	9,590		n/a	9,590	9,590	
Northern rockfish	BSAI	12,200	9,850	3,000	1,892	12,000	9,320	3,000		12,000	9,320	3,000	
Blackspotted/Rougheye rockfish	BSAI	462	378	378	324	524	429	429		524	429	429	
	EBS/EAI	n/a	169	169	173	n/a	189	189		n/a	189	189	
	CAI/WAI	n/a	209	209	151	n/a	240	240		n/a	240	240	
Shortraker rockfish	BSAI	493	370	370	333	493	370	370		493	370	370	
Other rockfish	BSAI	1,540	1,159	873	653	1,540	1,159	873		1,540	1,159	873	
	BS	n/a	686	400	146	n/a	686	400		n/a	686	400	
	AI	n/a	473	473	507	n/a	473	473		n/a	473	473	
Atka mackerel	BSAI	57,700	50,000	25,920	16,031	56,500	48,900	25,379		56,500	48,900	25,379	
	EAI/BS	n/a	16,900	16,900	8,899	n/a	16,500	16,500		n/a	16,500	16,500	
	CAI	n/a	16,000	7,520	7,012	n/a	15,700	7,379		n/a	15,700	7,379	
	WAI	n/a	17,100	1,500	120	n/a	16,700	1,500		n/a	16,700	1,500	
Skates	BSAI	45,800	38,800	24,000	19,643	44,100	37,300	24,000		44,100	37,300	24,000	
Sculpins	BSAI	56,400	42,300	5,600	4,323	56,400	42,300	5,600		56,400	42,300	5,600	
Sharks	BSAI	1,360	1,020	100	100	1,360	1,020	150		1,360	1,020	150	
Squids	BSAI	2,620	1,970	700	235	2,620	1,970	500		2,620	1,970	500	
Octopuses	BSAI	3,450	2,590	500	132	3,450	2,590	500		3,450	2,590	500	
<b>Total</b>	<b>BSAI</b>	<b>4,028,465</b>	<b>2,639,317</b>	<b>2,000,000</b>	<b>1,620,216</b>	<b>4,193,257</b>	<b>2,686,688</b>	<b>1,990,481</b>		<b>4,193,257</b>	<b>2,686,688</b>	<b>1,990,481</b>	

Advisory Panel Proposed GOA OFL, ABC, and TAC Recommendations (metric tons) for 2014 - 2015

Species	Area	2013				2014			2015		
		OFL	ABC	TAC	Catch	OFL	ABC	TAC	OFL	ABC	TAC
Pollock	W (61)		28,072	28,072	6,173		25,648	25,648		25,648	25,648
	C (62)		51,443	51,443	41,988		47,004	47,004		47,004	47,004
	C (63)		27,372	27,372	11,357		25,011	25,011		25,011	25,011
	WYAK		3,385	3,385	2,917		3,093	3,093		3,093	3,093
	Subtotal	150,817	110,272	110,272	62,435	138,610	100,756	100,756	138,610	100,756	100,756
	EYAK/SEO	14,366	10,774	10,774	0	14,366	10,774	10,774	14,366	10,774	10,774
	Total	165,183	121,046	121,046	62,435	152,976	111,530	111,530	152,976	111,530	111,530
Pacific Cod	W		28,280	21,210	13,587		29,470	22,103		29,470	22,103
	C		49,288	36,966	23,574		51,362	38,522		51,362	38,522
	E		3,232	2,424	313		3,368	2,526		3,368	2,526
	Total	97,200	80,800	60,600	37,474	101,100	84,200	63,150	101,100	84,200	63,150
Sablefish	W		1,750	1,750	1,003		1,641	1,641		1,641	1,641
	C		5,540	5,540	4,285		5,195	5,195		5,195	5,195
	WYAK		2,030	2,030	1,910		1,902	1,902		1,902	1,902
	SEO		3,190	3,190	2,593		2,993	2,993		2,993	2,993
	Total	14,780	12,510	12,510	9,791	13,871	11,731	11,731	13,871	11,731	11,731
Shallow-Water Flatfish	W		19,489	13,250	152		18,033	13,250		18,033	13,250
	C		20,168	18,000	2,962		18,660	18,000		18,660	18,000
	WYAK		4,647	4,647	1		4,299	4,299		4,299	4,299
	EYAK/SEO		1,180	1,180	2		1,092	1,092		1,092	1,092
	Total	55,680	45,484	37,077	3,117	51,580	42,084	36,641	51,580	42,084	36,641
Deep-Water Flatfish	W		176	176	22		176	176		176	176
	C		2,308	2,308	126		2,308	2,308		2,308	2,308
	WYAK		1,581	1,581	4		1,581	1,581		1,581	1,581
	EYAK/SEO		1,061	1,061	3		1,061	1,061		1,061	1,061
	Total	6,834	5,126	5,126	155	6,834	5,126	5,126	6,834	5,126	5,126
Rex Sole	W		1,300	1,300	98		1,287	1,287		1,287	1,287
	C		6,376	6,376	3,129		6,310	6,310		6,310	6,310
	WYAK		832	832	0		823	823		823	823
	EYAK/SEO		1,052	1,052	-		1,040	822		1,040	822
	Total	12,492	9,560	9,560	3,228	12,362	9,460	9,242	12,362	9,460	9,242
Arrowtooth Flounder	W		27,181	14,500	779		26,970	14,500		26,970	14,500
	C		141,527	75,000	13,164		140,424	75,000		140,424	75,000
	WYAK		20,917	6,900	49		20,754	6,900		20,754	6,900
	EYAK/SEO		20,826	6,900	68		20,663	6,900		20,663	6,900
	Total	247,196	210,451	103,300	14,060	245,262	208,811	103,300	245,262	208,811	103,300
Flathead Sole	W		15,729	8,650	569		16,063	8,650		16,063	8,650
	C		26,563	15,400	1,556		27,126	15,400		27,126	15,400
	WYAK		4,686	4,686	0		4,785	4,785		4,785	4,785
	EYAK/SEO		1,760	1,760	-		1,797	1,797		1,797	1,797
	Total	61,036	48,738	30,496	2,125	62,296	49,771	30,632	62,296	49,771	30,632

Advisory Panel Proposed GOA OFL, ABC, and TAC Recommendations (metric tons) for 2014 - 2015

Species	Area	2013				2014			2015		
		OFL	ABC	TAC	Catch	OFL	ABC	TAC	OFL	ABC	TAC
Pacific Ocean Perch	W		2,040	2,040	436		2,005	2,005		2,005	2,005
	C		10,926	10,926	8,484		10,740	10,740		10,740	10,740
	WYAK		1,641	1,641	1,537		1,613	1,613		1,613	1,613
	W/C/WYAK	16,838				16,555			16,555		
	SEO	2,081	1,805	1,805	0	2,046	1,775	1,775	2,046	1,775	1,775
	E(subtotal)										
	Total	18,919	16,412	16,412	10,457	18,601	16,133	16,133	18,601	16,133	16,133
Northern Rockfish	W		2,008	2,008	2,164		1,899	1,899		1,899	1,899
	C		3,122	3,122	2,360		2,951	2,951		2,951	2,951
	E		-	-	-		-	-		-	-
	Total	6,124	5,130	5,130	4,524	5,791	4,850	4,850	5,791	4,850	4,850
Shortraker Rockfish	W		104	104	39		104	104		104	104
	C		452	452	376		452	452		452	452
	E		525	525	246		525	525		525	525
	Total	1,441	1,081	1,081	661	1,441	1,081	1,081	1,441	1,081	1,081
Dusky Rockfish	W		377	377	215		354	354		354	354
	C		3,533	3,533	2,597		3,317	3,317		3,317	3,317
	WYAK		495	495	3		465	465		465	465
	EYAK/SEO		295	295	7		277	277		277	277
	Total	5,746	4,700	4,700	2,822	5,395	4,413	4,413	5,395	4,413	4,413
Rougheye and Blackspotted Rockfish	W		81	81	20		83	83		83	83
	C		856	856	385		871	871		871	871
	E		295	295	188		300	300		300	300
	Total	1,482	1,232	1,232	593	1,508	1,254	1,254	1,508	1,254	1,254
Demersal shelf rockfish	Total	487	303	303	209	487	303	303	487	303	303
Thornyhead Rockfish	W		150	150	216		150	150		150	150
	C		766	766	449		766	766		766	766
	E		749	749	221		749	749		749	749
	Total	2,220	1,665	1,665	886	2,220	1,665	1,665	2,220	1,665	1,665
Other Rockfish (Other slope)	W		44	44	194		44	44		44	44
	C		606	606	425		606	606		606	606
	WYAK		230	230	65		230	230		230	230
	EYAK/SEO		3,165	200	44		3,165	200		3,165	200
	Total	5,305	4,045	1,080	728	5,305	4,045	1,080	5,305	4,045	1,080
Atka mackerel	Total	6,200	4,700	2,000	1,241	6,200	4,700	2,000	6,200	4,700	2,000
Big Skate	W		469	469	71		469	469		469	469
	C		1,793	1,793	1,807		1,793	1,793		1,793	1,793
	E		1,505	1,505	61		1,505	1,505		1,505	1,505
	Total	5,023	3,767	3,767	1,939	5,023	3,767	3,767	5,023	3,767	3,767
Longnose Skate	W		70	70	37		70	70		70	70
	C		1,879	1,879	972		1,879	1,879		1,879	1,879
	E		676	676	365		676	676		676	676
	Total	3,500	2,625	2,625	1,374	3,500	2,625	2,625	3,500	2,625	2,625
Other Skates	Total	2,706	2,030	2,030	1,409	2,706	2,030	2,030	2,706	2,030	2,030
Sculpins	GOA-wide	7,614	5,884	5,884	1,241	7,614	5,884	5,884	7,614	5,884	5,884
Sharks	GOA-wide	8,037	6,028	6,028	793	8,037	6,028	6,028	8,037	6,028	6,028
Squids	GOA-wide	1,530	1,148	1,148	147	1,530	1,148	1,148	1,530	1,148	1,148
Octopuses	GOA-wide	1,941	1,455	1,455	191	1,941	1,455	1,455	1,941	1,455	1,455
Total		738,676	595,920	436,255	161,600	723,580	584,094	427,068	723,580	584,094	427,068

### **Catcher Processor Gulf Bycatch Incentive Program**

The catcher processor sector has developed this paper in response to the Council's request for stake holder input concerning an appropriate bycatch incentive program in the Gulf of Alaska trawl fisheries. The paper represents the discussions within the sector of possible measures to include in a program. The sector has **not** reached a consensus on these issues. The paper is intended only to show the Council the scope of discussions and the general program structure that the sector believes may beneficially address its bycatch concerns.

### **Rationale for the program structure - regulatory bycatch measures and cooperative bycatch measures**

The Council has clearly indicated that performance-based PSC avoidance measures will be a component of any Gulf trawl bycatch program. The Council has suggested that performance based measures should be administered at the individual vessel level to ensure that all participants undertake efforts to avoid PSC. While the use of individual performance based measures can create effective incentives, if poorly designed, they may not achieve broader objectives. In the development of a performance based program, the Council should take care to avoid creation of individual incentives that might result in poorer PSC performance overall.

Two concerns with individual performance measures should be considered. First, the measures should not deter vessels from sharing information across a fleet to achieve the PSC avoidance. Since the actions to avoid PSC may change over time with fishing conditions (such as hotspots and target concentrations), it is important not only that a fleet share information, but that it develop means for timely information sharing. Measures that create an incentive to withhold bycatch information from others could lead to poorer bycatch performance. While performance-based measures can lead to improved PSC performance, in some cases individual competition arising from those measures can impede the development of PSC improvements leading to poorer overall PSC performance.

Similarly, measures should create an incentive for development of technologies (such as excluders) for PSC avoidance. Past practices have demonstrated that the development of new technologies are most likely if undertaken at the fleet level where costs can be dispersed across several vessels. Given the potential for individual performance based measures to lessen incentives for sharing costs and information to avoid PSC, the Council should consider developing a program that mitigates these effects.

A carefully developed cooperative program can overcome these incentives, while maintaining a meaningful vessel level performance based component. Such a program structure needs to have a fleet level incentive for information sharing that outweighs any disincentive created by the vessel level performance measures. Cooperative programs also have an inherent benefit for information sharing by creating an institutional structure for undertaking that sharing. A program could be developed that rewards cooperative members collectively for acceptable bycatch performance. A cooperative bycatch performance incentive could be created by either an inseason or annual reward for acceptable PSC performance. Such a provision could be a bonus for acceptable PSC performance that is shared pro rata by all cooperative members. An individual performance measure could be imbedded in that structure by giving the best performing individuals a slightly larger share of the cooperative's reward. For example, some percentage of the cooperative's reward could be allocated based on vessel performance. This

performance based incentive would need to be large enough to be meaningful, but small enough not to overshadow the incentive for information sharing.

Using a cooperative structure has an added benefit in that it is flexible. Gulf fisheries are currently a series of overlapping target fisheries. Under a new cooperative structure, it is anticipated that target fishery seasons will be extended, with more overlaps. In addition, PSC avoidance capability is likely to change under the revised program. Relying on a cooperative to set and administer individual incentive provisions is more likely to result in an acceptable incentive structure, since changes in that structure can be made based on experience without regulatory action. Given the lack of experience administering individual performance measures, it is possible that the first effort to define such a measure could be less than perfect. Allowing a cooperative to negotiate and administer the measure would allow for rapid correction of any such errors.

Cooperative administration also can encourage experimentation needed for PSC avoidance developments. PSC avoidance often requires some trial-and-error. At the simplest level, a vessel may do a single tow to determine PSC rates at a particular time and location. Exempting this test tow from a reward system (or at least establishing a system that does not discourage it, is likely necessary to penalize it) is a necessary component of any effective reward system. Regulations establishing penalties and rewards cannot possibly identify this type of experimentation and address the disincentive for their use that may arise from general rules that reward performance.

#### **A80 CP Trawl Co-op management measures for PSC**

- ***Possible performance standards and incentives currently under discussion***
  - A80 CP co-op sets performance standards for PSC rates based on actual fishing conditions, past history, and achievability by target fishery (*see halibut rate and mortality Tables in Chapter 4 from Amendment 95 EA for example*) – used for implementing individual performance rewards
  - Incentive measures (*in development*)
  - CPs receive pro-rata share of halibut and salmon, under co-op mgmt., based on agreed upon formula (*TBD*)
  - Possible A80/Rockfish Program cost recovery payments tied to PSC usage (inverse relationship)
- ***Cooperative communication***
  - Monitor PSC by vessel, fishery, time and area
  - Daily call-in to discuss PSC, ongoing communication on grounds
  - Information sharing between sectors, coops
  - Seastate program monitors vessels' fishing locations and bycatch data, and disseminates daily (as in whiting fishery)
- ***Reporting to the Council***
  - Annual Report to Council, detailing bycatch avoidance measures and progress (similar to Seastate presentation on whiting )

- Cooperatives to inform Council on measures taken to date and what's in the pipeline, ie salmon excluders, BS and GOA halibut excluder)
- **Possible PSC measures**
  - Chinook:
    - 200% observer coverage
    - Video monitoring in factory
    - whole haul instead of basket sampling
    - Seashare program participation
    - genetic sampling for Auke Bay lab
    - use of cameras on headrope and/or along body of net to see where salmon is with respect to water column
    - NMFS cooperative research program on salmon excluder panels
    - Industry experimentation with salmon flaps and panels
  - Halibut
    - 200% observer coverage
    - Basket sampling
    - Ongoing use and refinement of excluder devices and gear modification
    - EFP for Deck sorting to reduce mortality
    - Cameras on headrope and intermediate
    - Test tows
    - Spread out effort (avoid chumming in halibut)
- **Gear Development**
  - Continue trawl gear modifications presently in use to reduce bycatch
  - Continue to investigate new gear modifications, camera systems, EM
  - EFP for Halibut Deck Sorting program
  - NMFS cooperative research program on salmon excluders

NMFS Regulatory management changes necessary to reduce footprint, bring greater efficiency to harvesting for resultant reduction in halibut take and mortality

- **Hard cap allocations between sectors**
- **Allocate halibut to each co-op as one aggregate amount: not divided into either SW or DW; not divided into 5 seasonal apportionments; not divided between WGOA or CGOA**
  - *Rationale: Captains can fish when target is most aggregated, ie rex sole in the end of April or May, to reduce halibut (conversely may avoid fishing rex sole in May to avoid Chinook)*
- **Enforce MRAs on trip to trip/offload to offload basis**
  - *Rationale: When marketable species which are on MRA "bycatch status" are caught before there is adequate basis species, the amt in excess of the allowable MRA is discarded. However, the vessel will "top off" at the end of the trip to catch that same marketable species. This results in the Captain towing twice in the same area, to catch*

*an amt of fish that has been 1) discarded previously in the trip and 2) doubles PSC catch because the same tow is made twice for one total amt of fish.*

- **Allow Deck sorting in the Gulf fisheries where feasible**
  - *Rationale: getting halibut off the deck within 20 minutes greatly reduces the mortality. Catcher vessels sort at sea, and have lower mortality as a result. Afford same benefit to CPs (and to the resource). Decreased halibut mortality allows greater arrowtooth harvest which helps to better achieve OY and removes more arrowtooth from the GOA biomass so that halibut have less competition for food.*

### **Catcher processor program structure**

Catcher processor sector members have actively participated in the industry stakeholder discussions with the shoreside sector. The following provisions, elements, and options are patterned after the stakeholder group's submission to the Council to aid in integrating the provisions into a single document in the future. The format, presentation, or absence of competing options for a provision should not be interpreted as suggesting that the sector has reached consensus on any provision.

### **Sector allocations**

Pollock (620/630) – The target fishery shall be prosecuted exclusively by the inshore sector with an ICA set aside for the offshore sector as currently defined by Amendment 23 – offshore sector is regulated through the current MRAs.

Pacific cod (CG) Allocations as currently defined and managed for trawl CP and CV sectors for Western/Central Pacific cod by Amendment 83

CGOA rockfish – Primary, Secondary, PSQ allocations as currently defined by Amendment 88 (the rockfish program)

### **CGOA Flatfish**

Option 1: No allocation

Option 2: Allocate rex sole, arrowtooth, and/or deepwater flatfish (as defined in the TAC sheet) based on:

- a) Sector total catch/trawl total catch (allocates entire TAC)
- b) Sector total catch/ABC (allocates only a portion of the TAC),
- c) Arrowtooth as total/abc

Under either option, sector catch is the trawl catch of eligible LLPs that apply for sector under the program. For CP LLPs that apply for the inshore sector, any catch of the vessel (including catch processed onboard) will count toward the LLP's allocation. For CP LLPs that apply for the offshore sector, only catch that is processed onboard will count toward the LLP's allocation.

Based on sector catches from:

Option 1: 2010-2012

Option 2: 2008-2012

Option 3: 2003-2012

Option 4: 1998-2004

#### WGOA rockfish

Option 1: No allocation

Option 2: Allocate Pacific ocean perch, northern rockfish, and dusky rockfish to the offshore sector based on A80 sideboards for Pacific ocean perch and northern rockfish with the remainder allocated to the inshore. For dusky rockfish recalculate A80 sideboard based on catches of dusky alone. Black rockfish, blue rockfish, and dark dusky, yelloweye, and widow rockfish were removed from pelagic shelf rockfish complex since implementation of the sideboards and are now managed by the State of Alaska.

#### WYak rockfish

Option 1: No allocation

Option 2: Allocate Pacific ocean perch, northern rockfish, and dusky rockfish to the offshore sector based on A80 sideboards for Pacific ocean perch and northern rockfish with the remainder allocated to the inshore. For dusky rockfish recalculate A80 sideboard based on catches of dusky only, since black rockfish, blue rockfish, and dark dusky rockfish were removed from pelagic shelf rockfish complex and are now managed by the State of Alaska

Sablefish - (excluding CGOA rockfish program sablefish allocation)

Long-nose skate

Big skate

Other species could be allocated after consideration of data and circumstances.

## 2 Sector PSC Apportionments

### 3.1 Halibut

The annual PSC limit will be apportioned between the following sectors and areas:

Offshore sector Gulfwide

Allocations to each sector/area will be based on relative historical PSC usage from:

Option 1: 2010-2012

Option 2: 2008-2012

Option 3: 2003-2012

Option 4: 1998-2004

Option 5: Allocation to the offshore sector will be based on the Amendment 80 sideboards, plus the history of any qualifying vessel the history of which is not included in the Amendment 80 sideboard.

### 3.2 Chinook

Apportionment to the inshore and offshore sectors will be based on the current apportionment to the pollock fishery and Council's June 2013 motion.

A review of Amendment 80 and Central Gulf rockfish program sideboards may be appropriate.

### **Catcher processor cooperative program**

#### Eligible catcher processors

Those A80 vessels, and their replacement vessels, defined by Column A of Table 31 CFR part 679, and the LLP currently issued to them.

#### Allocation of groundfish history and apportionment of PSC limits within the catcher processor sector

Target species:

All allocations from the Central Gulf rockfish program will be maintained (including primary, secondary and PSC).

For distribution of allocations within the catcher processor sector other allocated target species, catch history is based on total catch during the qualifying period, with each eligible license receiving history based on catch of the vessel it is assigned to relative to the total catch of all vessels in the sector. All history will be attributed to the LLP license identified by the vessel owner at the time of implementation. To assign history to a license, that license must have gear, operation type, and area endorsements permitting that history.

Allow offload to offload MRA management for certain species when on bycatch status, to minimize regulatory discards:

Options: pollock, cod, other non-allocated species as determined

Note: Cod management needs special consideration because of the small allocation to the sector.

#### Halibut PSC:

Apportionment of halibut to LLP licenses under the Central Gulf rockfish program will continue as prescribed by that program.

The remainder of the sector's PSC will be apportioned within the sector to the following target species:

Pacific cod

Rex sole

Arrowtooth flounder

WGOA and WYAK rockfish

(A complete list of species should be developed after examining PSC usage and rates)

based on the average use of halibut PSC in each target species within the CP sector from the years \_\_\_\_, expressed as a percent of the total halibut PSC allocation to the sector (i.e., same general allocation system used for A80).

Each eligible license will then be assigned a share of the sector's available halibut PSC based on its catch of those target species equal to its proportion of the sector's qualified catch history of the target species. (Note – Halibut PSC apportionments may be made for targets that are not allocated under this program.)

Chinook PSC:

The sector's Chinook PSC will be apportioned within the sector to the following target species:

Central Gulf Rockfish (Pacific ocean perch, northern rockfish, and dusky rockfish) in the aggregate

Western Gulf rockfish (Pacific ocean perch, northern rockfish, and dusky rockfish) in the aggregate

Pacific cod

Rex sole

Arrowtooth flounder

(A complete list of species should be developed after examining PSC usage and rates)

based on the average use of Chinook PSC in each target species from the years \_\_\_\_, expressed as a percent of the total Chinook PSC allocation to the sector.

Each eligible license will then be assigned a share of the sector's available Chinook PSC based on its catch of those target species equal to its proportion of the sector's qualified catch history of the target species. (Note – Chinook PSC apportionments may be made for targets that are not allocated under this program.)

The PSC apportionments will not change from year to year (i.e., will not fluctuate annually with target TACs).

Catch history used for allocation and eligibility purposes will be legal and documented catch. For the catcher processor sector WPR data shall be used to determine catch.

Cooperative provisions for the catcher processor sector

No later than November 1 of each year, an application must be filed with NOAA fisheries by the cooperative with a membership list for the year.

In order to operate as a cooperative, membership must be comprised of:

At least \_\_\_\_ separate entities (using the 10% AFA rule) and

At least \_\_\_\_% of the eligible LLP licenses.

Annually, each cooperative will receive allocations of each allocated target species equal to its members' LLPs aggregate share of the sector's target species allocation.

Annually, each cooperative will receive allocations of halibut and Chinook PSC equal to its members' LLPs aggregate share of the sector's halibut and Chinook PSC apportionments, respectively.

Annual allocations would be to the cooperative and will be transferable within the cooperative among its members without NOAA Fisheries approval.

Annual allocations to the cooperative will be transferable among Gulf catcher processor cooperatives.

Inter-cooperative transfers must be processed and approved by NOAA Fisheries.

The cooperative(s) would need to show evidence of binding private contracts and remedies for violations of contractual agreements would need to be provided to NOAA Fisheries. The cooperative would need to demonstrate adequate mechanism for monitoring and reporting prohibited species and groundfish catch. Participants in the cooperative would need to agree to abide by all cooperative rules and requirements. Cooperative members are jointly and severally responsible for cooperative vessels harvesting in the aggregate no more than their cooperative's allocation of target species and PSC mortality.

CP annual cooperative allocations may be transferred to CV cooperatives.

All transfers of annual cooperative allocations would be temporary, and history would revert to the original LLP at the beginning of the next year.

Permit post-delivery transfers of cooperative quota (annual allocations to cooperatives)

There would be no limits on the number or magnitude of post-delivery transfers. All post-delivery transfers must be completed by December 31st.

#### Catcher processor limited access fishery

The catcher processor limited access fishery is prosecuted by eligible catcher processor LLP participants who elect not to be in a cooperative.

Annually, the catcher processor limited access fishery will be allocated a share of the sector's allocation of each allocated target species equal the aggregate share of all LLPs that are not assigned to a cooperative.

Annually, the catcher processor limited access fishery will receive allocations of halibut and Chinook PSC equal to \_\_ percent of the aggregate share of the sector's halibut and Chinook PSC apportionments, respectively, of LLPs that are not assigned to a cooperative. Note: this provision is used to create an incentive for cooperative membership and participating in the PSC reduction measures required of cooperatives.

The catcher processor limited access fishery will be subject to all current regulations including all seasonal and deepwater/shallowwater complex fishery regulations and restrictions of the LLP and MRA limitations.

All vessels participating in the Gulf catcher processor fisheries will need to have an eligible catcher processor LLP with the appropriate gear, operation type, and area endorsement assigned to the vessel at the time of fishing.

Permanent transfers of an eligible license and its associated catch history would be allowed. Eligible LLP licenses and their associated catch history and eligibility endorsements would not be separable or divisible.

# North Pacific Fishery Management Council

Eric A. Olson, Chairman  
Chris Oliver, Executive Director



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Certified: *Jan Bender*  
Date: *12/6/13*

## REPORT of the SCIENTIFIC AND STATISTICAL COMMITTEE to the NORTH PACIFIC FISHERY MANAGEMENT COUNCIL September 30<sup>th</sup> – October 1<sup>st</sup>, 2013

The SSC met from September 30<sup>th</sup> through October 1<sup>st</sup> at the Hilton Hotel, Anchorage AK.

Members present were:

Pat Livingston, Chair  
*NOAA Fisheries—AFSC*

Robert Clark, Vice Chair  
*Alaska Department of Fish and Game*

Jennifer Burns  
*University of Alaska Anchorage*

Alison Dauble  
*Oregon Dept. of Fish and Wildlife*

Sherri Dressel  
*Alaska Department of Fish and Game*

Anne Hollowed  
*NOAA Fisheries—AFSC*

George Hunt  
*University of Washington*

Gordon Kruse  
*University of Alaska Fairbanks*

Seth Macinko  
*University of Rhode Island*

Steve Martell  
*Intl. Pacific Halibut Commission*

Franz Mueter  
*University of Alaska Fairbanks*

Lew Queirolo  
*NOAA Fisheries—Alaska Region*

Terry Quinn  
*University of Alaska Fairbanks*

Kate Reedy-Maschner  
*Idaho State University Pocatello*

Farron Wallace  
*NOAA Fisheries—AFSC*

### C-1(b) Observer Program 2014 deployment plan

A presentation was given by Craig Faunce (NMFS-AFSC) on the NMFS Annual Deployment Plan (ADP) for the North Pacific Groundfish Observer Program in 2014. Public testimony was provided by Bob Alverson (FVOA).

The SSC appreciates the extensive work done to initiate the revised observer program in 2013 and to develop the draft 2014 ADP. For years, the SSC has pointed out the bias that may occur by not placing observers on vessels according to a random sampling design. The new observer program has finally addressed this problem although several issues remain.

The 2014 deployment plan provides details on the deployment that attempts to obtain observation rates that constrain program costs and provide sample sizes for precisely observing catches at sea and dockside for groundfish fisheries in the Gulf of Alaska and Bering Sea/Aleutian Islands. The draft 2014 ADP also provides an initial review of successes and challenges of implementing the ADP based on data from a portion of the 2013 season. This will be an ongoing process to improve the program.

The SSC looks forward to a complete performance review of the 2013 season along with an evaluation of the efficiency of the current sample design with respect to coverage of catch and bycatch. A standard

set of performance measures should be developed for the purpose of evaluating how well the observer program is meeting its objectives (precision and accuracy of estimating catch, bycatch, and catch of prohibited species, collection of biological information, and ability to fulfill assigned tasks, including special projects). The review should also highlight any changes in the magnitude of sampling rates of harvests and other harvesting characteristics (such as discard rates) that deviate significantly from years prior to implementing the revised program.

Additional SSC comments on the 2014 ADP are:

- The revised Chinook salmon genetics sampling design for the GOA appears to be well suited for the fisheries in the GOA. This revised design should result in many more genetic samples taken at a lower cost than the Pella-Geiger sampling design, which was developed for systematically sampling a 100% observed bycatch of Chinook salmon in the BSAI.
- The trip selection process appears to be working well with respect to the implementation of a random sample of trips. The SSC recommends addressing the potential problems associated with self-selecting the order of trips and the ability of captains to opt out of carrying an observer without apparent penalty in a future ADP. There was also a potential bias detected in 2013 as it appears that trips delivering to tenders are not being observed. **This omission needs to be addressed with a regulatory change as soon as possible.**
- **Problems with the vessel selection process need to be addressed in the next ADP.** The registry of vessels to be potentially selected is based on prior year fishing activity, leading to potential bias in the selection of vessels to be observed. Perhaps a pre-registration system for vessels that will be fishing in the coming year could be implemented to resolve this sampling issue.
- Further research is needed on the use of EM technology as an auditing tool to reduce the “observer effect” (the alteration of harvesting behavior when an observer is onboard).
- Observer program personnel could look at other observer programs from around the world to see how they deal with the observer effect.
- Now that small vessels are being observed, an analysis should be conducted to compare the spatial distribution of catch and bycatch with that of larger boats.
- A list of vessels that opt out of observer coverage and their reasons for opting out could be maintained and published to determine representativeness of sampling.

### C-3 BSAI Crab Management

Diana Stram (NPFMC) presented the Crab Plan Team report and sections of the Crab SAFE. There was no public testimony. The SSC reviewed the SAFE chapters and information provided by the Plan Team with respect to the stock status information from 2012/2013 relative to total catch in that time period (Table 1). The SSC notes that no stock was subject to overfishing in 2012/2013. In addition, Tables 2 and 3 contain the SSC recommendations for 2013/2014 catch specifications.

Table 1. Stock status of BSAI crab stocks in relation to status determination criteria for 2012/13. Values are in thousand metric tons (kt).

Chapter	Stock	Tier	MSST	B <sub>MSY</sub> or B <sub>MSYproxy</sub>	2012/13 MMB	2012/13 MMB / MMB <sub>MSY</sub>	2012/13 OFL	2012/13 Total catch	Rebuilding Status
1	EBS snow crab	3	77.1	154.2	170.1	1.10	67.8	32.4	
2	BB red king crab	3	13.19	26.4	29.05	1.10	7.96	3.90	
3	EBS Tanner crab	3	16.77	33.54	59.35	1.77	19.02	0.71	
4	Pribilof Islands red king crab	4	2.61	5.22	4.03	0.77	0.90	0.013	
5	Pribilof Islands blue king crab	4	1.99	3.98	0.58	0.15	0.00116	0.00061	overfished
6	St. Matthew Island blue king crab	4	1.8	3.6	2.85	0.79	1.02 [total male catch]	0.82 [total male catch]	
7	Norton Sound red king crab	4	0.8	1.6	2.08	1.30	0.24	0.21	
8	AI golden king crab	5					5.69	3.12	
9	Pribilof Islands golden king crab	5					0.09	Conf.	
10	Adak red king crab	5					0.054	0.001	

MMB as estimated during this assessment for 2012/13 as of 2/15/2013.

Table 2. Maximum permissible ABCs for 2013/14 and SSC recommended ABCs for those stocks where the SSC recommendation is below the maximum permissible ABC as defined by Amendment 38 to the Crab FMP. Bold indicates where SSC recommendations differ from Crab Plan Team recommendations. Values are in thousand metric tons (kt).

Stock	Tier	2013/14 MaxABC	2013/14 ABC
EBS Snow Crab	3a	78.03	70.30
BBRKC	3b	7.07	6.36
Tanner Crab	3a	25.31	17.82
PIRKC	4b	0.759	0.718
PIBKC	4c	0.00116	0.00104
SMBKC	4b	1.23	0.45
Norton Sound RKC	<b>4a</b>	<b>0.26</b>	<b>0.24</b>
Adak red king crab	5	0.05	0.03

Table 3. SSC recommendations for 2013/2014 (stocks 1-7). Note that recommendations for stocks 7-10 represent those final values recommended by the SSC in June 2013. Bold indicates where SSC recommendations differ from September 2013 Crab Plan Team recommendations. Note diagonal fill indicated parameters not applicable for that tier level. Values are in thousand metric tons (kt).

Chapter	Stock	Tier	Status (a,b,c)	F <sub>OFL</sub>	B <sub>MSY</sub> or B <sub>MSYproxy</sub>	Years <sup>1</sup> (biomass or catch)	2013/14 <sup>2</sup> MMB	2013 MMB / MMB <sub>MSY</sub>	$\gamma$	Mortality (M)	2013/14 OFL	2013/14 ABC
1	EBS snow crab	3	a	1.58	154.2	1979-current [recruitment]	157.6	1.02		0.23(females) 0.386 (imm) 0.2613 (mat males)	78.1	70.3
2	BB red king crab	3	b	0.29	26.4	1984-current [recruitment]	25.0	0.95		0.18 default Estimated <sup>4</sup>	7.07	6.36
3	EBS Tanner crab	3	a	0.73	33.54	1982-current [recruitment]	59.4	1.77		0.34 (females), 0.25 (mat males), 0.247 (imm males and females)	25.35	17.82
4	Pribilof Islands red king crab	4	b	0.16	5.16	1991-current	4.68	0.91	1.0	0.18	0.90	0.72
5	Pribilof Islands blue king crab	4	c	0	3.99	1980-1984 1990-1997	0.28	0.07	1.0	0.18	0.00116	0.00104
6	St. Matthew Island blue king crab	4	b	0.18	3.1	1978-current	3.01	0.98	1.0	0.18	0.56 [total male catch]	0.45 [total male catch]
7	Norton Sound red king crab	4	a	<b>0.18</b>	<b>1.86</b>	1980-current [model estimate]	<b>2.27</b>	<b>1.22</b>	1.0	0.18 0.68 (>123 mm)	<b>0.26</b> [total male]	<b>0.24</b> [total male]
8	AI golden king crab	5				See intro chapter					5.69	5.12
9	Pribilof Island golden king crab	5				See intro chapter					0.09	0.08
10	Adak red king crab	5				1995/96– 2007/08					0.05	0.03

<sup>1</sup> For Tiers 3 and 4 where B<sub>MSY</sub> or B<sub>MSYproxy</sub> is estimable, the years refer to the time period over which the estimate is made. For Tier 5 stocks it is the years upon which the catch average for OFL is obtained.

<sup>2</sup> MMB as projected for 2/15/2014 at time of mating.

<sup>3</sup> Model mature biomass on 7/1/2013

<sup>4</sup> Additional mortality males, two periods: 1980-1985; 1968-1979 and 1986-2013. Females, three periods: 1980-1984; 1976-1979; 1983-1993 and 1968-1975; 1994-2013. See assessment mortality rates associated with these time periods.

## Snow Crab

Jack Turnock (NMFS-AFSC) presented results from this year's snow crab assessment. Survey estimates of both male and female biomass, as well as base model estimates of MMB at mating, decreased in 2012/13 compared to the previous year. The model structure of this year's base model differs from the September 2012 assessment in two ways: discard mortality was changed to 30%, and new growth data from Somerton (2012) was fit by sex within the model to estimate parameters of a linear growth function. Three alternative scenarios were explored. Model 2 used the new growth data but a 50% discard mortality as in previous years, while models 3 and 4 used the old growth data (with priors on growth parameters and a common intercept for both sexes) with a 30% and 50% discard mortality, respectively.

The SSC concurs with the CPT to use the base model for specification purposes for 2013/14, although we share CPT concerns over the poor fit to the female growth data. **Results from the assessment place the EBS snow crab stock in Tier 3a, with a mature male biomass at mating in 2013/14 that was estimated to remain above the current proxy for  $B_{MSY}$  ( $B_{35\%} = 154.2$  kt).** The SSC had some concerns over the current stock status. After a substantial increase in biomass in 2010/11 and 2011/12, both survey and model estimates of biomass have dropped substantially in the last two years and the model estimate is currently projected to stay just above  $B_{35\%}$ . This drop occurred in spite of conservative harvest levels and favorable environmental conditions for young crab (cold bottom temperatures). Earlier surveys, particularly in 2009/10, suggested a large pulse of small crab was entering the population, but the anticipated strong recruitment failed to materialize. For these reasons, and because of the continuing concerns over how growth is modeled, **we concur with the CPT recommendation to use a 10% buffer to set the ABC below maximum permissible. This results in an OFL for 2013/14 - as determined by the  $F_{35\%}$  control rule - of 78.1 kt (172.1 million lb) and an ABC of 70.3 kt (154.9 million lb).**

The SSC further endorses the Plan Team recommendations for improving the stock assessment as listed in CPT minutes and offers some additional suggestions. The SSC recommended in June 2013 to use a "best" estimate of discard mortality in addition to discard mortalities of 0.5 and 0.3. Based on their review of available information on discard mortality, the CPT recommended 0.3 as a "best" estimate; however, their estimate is still based on the maximum short-term mortality estimate and maximum injury rate, multiplied by 1.5 to account for unknown long-term mortality. The assumed level of discard mortality has a substantial impact on reference points (e.g.  $F_{35\%}$ ) and the SSC re-iterates its request from June 2013 to develop a "best" estimate of total handling mortality derived by adding the average annual short-term estimate (0.04) to the average injury rate, and multiplying the result by a factor corresponding to the best guess of additional long-term mortality.

The CPT and SSC previously recommended a 2-piece growth function, but the model failed to converge, hence a linear growth model by sex is used in the current assessment, using the growth data recommended by Somerton (2012). The model is reasonably consistent with observed male growth but not with observed female growth. The SSC recommends that the authors further examine how to best parameterize growth in the model to achieve a better fit to the growth data, maybe using a simple curvilinear or non-linear model rather than the suggested two-piece model.

Additional minor comments on the assessment follow:

- Some figures (e.g. Figure 4) have mis-labeled lines and there is a discrepancy between the units in the figure legend and in the y-axis label.
- The paragraph on the centroids of the cold pool in the middle of the section on "Mating ratio and reproductive success" is out of place and should be moved.

### **Bristol Bay Red King Crab**

This assessment was based on six alternative model scenarios. The base model for the alternatives, Scenario 0, was identical to the Scenario 7ac model used in the 2012 assessment, except that it was updated using the 2013 survey and 2012/13 fishery data, and used NMFS length-weight relationships. The author explored alternative ways to estimate effective sample sizes and molting probabilities. The SSC agrees with the author's and Plan Team's recommendation to use the proposed new methods for estimating effective sample size and molting probability. The author also explored the implications of alternative start dates (i.e., start in 1975, Scenario 1) and the incorporation of length / sex composition and survey biomass estimates from the BSFRF survey (Scenario 4). In response to an SSC request, the authors implemented a random walk approach for estimating natural mortality to evaluate the evidence for time blocks of high natural mortality. The SSC appreciates the responsiveness of the author to Plan Team and SSC requests. The SSC agrees with the Plan Team recommendation to use Scenario 4 as the basis for 2013/14 harvest specifications. The SSC agrees with the author that the results from Scenario 7 were informative and indicate that further exploration of the time blocks used for estimating elevated natural mortality is needed.

**The SSC appreciates the author's consideration of breakpoints for estimation of biological reference points.** This year's assessment contains a detailed statistical evaluation of the stock recruitment relationships. The authors provided several lines of evidence to support their selection of the 1984-2012 time period. **The SSC agrees with the author's recommendation for use of this time period for estimation of reference points for 2013/14.**

The author was responsive to SSC and Plan Team requests to conduct retrospective analyses. The previous evidence for overestimation at the end of the time series appears to be less evident in the new model.

**The SSC accepts the OFL recommendations of the Plan Team. Based on the results of Scenario 4, the stock is in Tier 3b resulting in an OFL of 7.07 kt (15.58 million pounds).**

The SSC agrees with the Plan Team that a 10% uncertainty buffer should be applied to determine ABC. The rationale for this decision is the lack of small crab in the survey since 2008. While the 2011 survey showed a very high catch of crab <60 mm CL at a single station, this high catch did not track into the 2012 or 2013 surveys.

**The SSC accepts the ABC recommendations of the Plan Team. Based on the results of Scenario 4, the stock is in Tier 3b resulting in an ABC of 6.36 kt (14.02 million pounds).**

#### **Recommended research:**

1. Shifts in the center of distribution of BBRKC can be a function of depletion of the stock, the crab closure area, shifts in larval drift, habitat selection, or fishing. The interpretation of which of these potential causes contributes to the selection of a time period should be investigated.
2. We suggest that the authors work with flatfish authors to come up with a consistent approach to treatment of biomass outside of the survey area.
3. Further study of maturity is needed.
4. The SSC suggests a re-evaluation of predation pressure on BBRKC.
5. The Plan Team should investigate the impact of dropping hotspots as per the CIE review.
6. The Plan Team should investigate the impact of corner stations for hotspots as per the CIE review.
7. The Plan Team should investigate the impact of re-tows as per the CIE review.

### **Tanner Crab**

With the acceptance of a new stock assessment model last year, the Tanner crab assessment was shifted in 2012 from Tier 4 to Tier 3, which resulted in a significant reduction in  $B_{MSY}$ . As a consequence, this stock

was found to no longer be overfished and was declared to be rebuilt in 2012. However, despite the specification of an ABC, the fishery remained closed this year owing to the State of Alaska harvest strategy.

The 2013 Tanner Crab assessment is clearly written. The SSC appreciates the summary of changes and detailed responses to previous Crab Plan Team and SSC comments. The model code was modified to improve user friendliness, computational speed, and presentation of output. Also, a few coding errors were discovered and corrected. Impacts of model coding fixes are clearly shown in tables and figures and the net effects are relatively minor. Several extant Crab Plan Team and SSC comments have not yet been addressed and the SSC looks forward to the progress on those in the next assessment. The Crab Plan Team again highlighted some of those in their report.

**The SSC agrees with the authors' and team's recommendation to use Model 01 (based on the 2012 base model including fixes to known errors in model code) for this year's specifications.** Last year, the SSC recommended adoption of a 3-year stair-step strategy to transition from the lower ABCs resulting from the previous assessment to the higher ABCs indicated by the 2012 assessment. Application of this stair step resulted in an ABC of 8.17 kt for 2012/2013. In this year's assessment, the authors noted that, if the third and final step were to be applied with a 10% buffer, the ABC would equate to a 40% harvest rate. The authors further noted that rates of this magnitude were associated with stock collapses during the history of this fishery. Owing to these concerns, the authors recommended re-starting the stair step transition at the first step (8 kt) for 2013/2014. The Crab Plan Team recommended continuing with the SSC approach and implementing the second step for 2013/2014, which would equate to an ABC of 17.82 kt. However, in so doing, the Plan Team also expressed concern about the uncertainty in this stock assessment and the stock status. The Plan Team indicated that they will reevaluate their ABC recommendations next year, rather than automatically applying the final stair step.

**The SSC agrees with the Crab Plan Team's recommendation to apply the second stair step for setting OFL and ABC for 2013/2014.** In doing so, the SSC noted that the State of Alaska harvest policy will reduce the TAC by 50% if a fishery is opened, given that next year will be the first year of a resumed fishery after a period of closure. So, there is an additional large buffer between ABC and TAC for 2013/2014. This will not be the case for 2014/2015.

**Over the long term, the SSC shares the author's and team's concerns about the control rule used to set OFL and ABC for Tanner crab and looks forward to additional advice from the authors and team in next year's assessment.** The SSC recommends conducting a management strategy evaluation (MSE) to determining the long-term consequences of alternative harvest rates on stock status and yield under various sources of uncertainty. The SSC understands that a MSE may not be feasible in the coming year, especially given additional planned work on the assessment model.

The Crab Plan Team provided a number of recommendations to the stock assessment authors, which the SSC supports. The SSC continues to note that some retrospective patterns in model estimated biomass remain. For instance, the model under-estimates the decline in male and females in the survey in the mid-1980s and overestimates them in recent years. On the other hand, legal males appear to be overestimated in recent years. There are patterns in other residuals. The SSC continues to encourage alternative model specifications to address these patterns. Possibly, inclusion of a time-varying growth function may address some of those retrospective patterns, as pointed out in previous comments. New growth studies on EBS Tanner crab remains a very high priority.

The SSC greatly appreciates the author's additional work on break-point analyses shown in the Appendix that largely address the SSC's previous comments on this matter. Two candidate periods for break points were identified: 1974-1975 and 1983-1987. The former was interpreted as a decrease in productivity,

whereas the latter was interpreted as an increase in density-dependent mortality. The team discounted the latter and pointed out that the 1974-1975 change point was quite similar to the 1976-1977 regime shift recommended by the SSC on an interim basis. This results in the use of recruitments from 1982 onwards for purposes of MSY estimation. However, as noted by the authors and team, the break point analysis did not lead to a compelling reason to differ from the regime shift-based break point recommended by the SSC. **Given this, the SSC continues to support the use of recruitments since 1982 for purposes of computing  $B_{MSY}$ .** The author listed additional work to be conducted on this topic in the future. The SSC looks forward to any new findings that may shed more light on this topic.

Finally, the SSC encourages the authors to continue to review model code for any lingering errors, and also encourages a thorough review and re-compilation of all data sources. The team raised some questions about the validity of the size composition data used in the assessment, however it would be wise to check and verify all data used in the assessment.

### **Pribilof Islands Red King Crab**

The fishery for red king crab in the Pribilof Islands district has been closed since 1999 due to concerns about low abundance, imprecise biomass estimates, and bycatch of Pribilof Islands blue king crab, which are classified as overfished. Fishing mortality since the closure of the directed fishery has been limited to incidental catches in other crab fisheries and in groundfish fisheries. The SSC supports the CPT recommendation to continue using the same base years as used previously (1991 to the current year) for determination of  $B_{MSY}$  for the Pribilof Islands red king crab stock. **The SSC also supports a Tier 4b designation for this stock, noting that the estimate of mature male biomass (MMB; 4.68 kt) is below  $B_{MSY}$  (5.16 kt). As in 2012, estimates of MMB were calculated in the assessment as a 3-year weighted moving average, centered on the current year and weighted by the inverse variance. Under the Tier 4b designation, the OFL for 2013/2014 is 0.90 kt.**

**The SSC agrees with the CPT recommendation to include additional uncertainty ( $\sigma_b = 0.4$ ) when calculating the ABC using the P\* approach, resulting in an ABC of 0.72 kt.** The SSC's support for this approach is based in large part on the recognition that the brief history of exploitation of this stock makes it difficult to identify an appropriate period of time suitable for establishing  $B_{MSY}$ , such that the true distribution of the OFL is poorly known. The SSC notes that large cohorts of young crab have not been observed since the mid-2000s and that estimates of bycatch in the groundfish fisheries were higher in 2012/13 than in previous years.

The SSC appreciates the author's responses to requests for CVs in tables of abundance estimates and confidence intervals in the table of weighted moving average estimates of abundance, and appreciates the improved estimates of discard catch for 2009/10-2012/13 based on a new methodology using State reporting areas.

### **Pribilof Islands Blue King Crab**

Retained catches for Pribilof Island blue king crab have not occurred since 1998/1999. Improved estimates of discard catch were calculated for 2009/10-2012/13 based on a new methodology using State reporting areas. Bycatch and discards have been steady or decreasing in recent years, but increased in the trawl fishery for 2012/13.

In this assessment, survey biomass estimates were updated to include an additional 20 nm strip on the eastern portion of the Pribilof District due to the change in the stock boundary. Stock biomass estimates decreased by more than 50% from 2012 to 2013, but the uncertainty in biomass estimates is extremely high due to low survey catches. Following the approach in the 2012 assessment, biomass estimates were based on a 3-year weighted average, centered on the current year and weighted by the inverse of the variance. The projected

mature male biomass (MMB) decreased substantially in this assessment, from 0.58 kt in 2012/13 to 0.28 kt in 2013/14, and remained well below the minimum stock size threshold.

**The SSC supports the CPT and author recommendations for management of Pribilof Islands blue king crab under Tier 4c to reflect the conservation concerns with this stock and to acknowledge the existing non-directed bycatch mortality. Following the advice of the CPT, the SSC recommends a modified Tier 5 calculation of average catch mortalities between 1999/2000 and 2005/2006, resulting in a total catch OFL of 0.00116 kt. Similarly, the SSC supports using a 10 percent buffer for the ABC calculation, resulting in an  $ABC_{max}$  of 0.00104 kt. The SSC discussed using a more conservative buffer (e.g., 20%) to further reduce the ABC due to concerns over the status of the Pribilof Islands blue king crab stock, but continues to recommend the 10% buffer for 2013/14. **The Pribilof blue king crab stock is overfished; however, overfishing did not occur during the 2012/2013 season.****

The MSY stock size ( $B_{MSY}$ ) is based on mature male biomass at the time of mating ( $MMB_{mating}$ ), which serves as an approximation for egg production. The MMB for 2013/14 was estimated at 0.28 kt. For 2012/2013,  $B_{MSYproxy} = 3.99$  kt of  $MMB_{mating}$  derived as the mean MMB from 1980 to 1984 and 1990 to 1997. The stock demonstrated highly variable levels of MMB during both of these periods. Compared to other BSAI crab stocks, the uncertainty associated with the biomass estimates for Pribilof Islands blue king crab is very high due to insufficient data and the small distribution of the stock relative to the survey sampling density, likely leading to uncertain approximations of  $B_{MSY}$ .

A revised rebuilding plan was approved by the Council in June 2012 and was submitted for review by the Secretary of Commerce in early 2013. The revised rebuilding plan closes the Pribilof Habitat Conservation Zone to Pacific cod pot fishing.

### **Saint Matthew Island Blue King Crab**

The author evaluated 11 alternative model configurations against the base model first used to provide harvest specifications in 2012. Alternative model configurations differed in their treatment of M, weighting of trawl survey and pot survey size-compositions, and trawl survey selectivity by crab stage. The author also provided a preliminary evaluation of a stage-transition matrix based on the growth study of Otto and Cummiskey (1990) on Pribilof and St. Matthew Island blue king crab. Results from alternative model scenarios do not provide a compelling reason to switch models. **Thus both the author and CPT recommended continued use of the base model for the 2013 harvest specifications using Tier 4b. The SSC agrees and also concurs with the team's recommendation to set the ABC to be 20% below the OFL instead of the more usual 10%.** The use of a larger buffer is recommended due to large uncertainty in stock abundance estimates owing to a retrospective pattern. With each year's new assessment, there is a decline in the estimates of abundance in prior years, suggesting that the stock is in poorer condition than the current-year model indicates. Additionally, there is a declining trend in abundance coupled to very large CVs in trawl survey estimates in recent years. In combination, these factors lead to higher than usual uncertainty in current year biomass estimates for this declining stock.

For next year's assessment, the SSC encourages the stock assessment author to focus on addressing the retrospective bias in the current assessment and offers the following recommendations:

- Develop a likelihood profile over a large range of Ms and provide diagnostics on model fits. Misspecification of M can lead to biases in abundance estimates.
- As suggested by the team, further work on a biologically defensible age-transition matrix may be fruitful. Alternative models should be developed using this approach.
- Investigate all other model assumptions to evaluate their potential contribution to the retrospective pattern.

### **Norton Sound Red King Crab**

The lead author, Toshihide Hamazaki (ADF&G), was available to answer questions on this assessment. In June 2013 the Crab Plan Team and SSC recommended that the assessment model be used to calculate ABC and OFL, and ABC and OFL values were determined for 2013-2014 because there is no survey for this stock. It was also recommended that the assessment schedule be changed from July 1 – June 30 to November 1 – October 31 to better accommodate the summer fishery.

Thus, an updated assessment was completed for this meeting to commence the new schedule. Updated data included the 2013 summer commercial fishery catch, the 2012/2013 winter commercial fishery catch, and standardized CPUE data with the 2013 summer commercial fishery observer data. Revised data included time series of the historical winter total subsistence catch (now including mortality of discards) and crab abundance estimates from the 1976-1991 NMFS survey (re-estimated from the original survey data). The model was revised to start in February instead of July. Some other minor changes were also made. Assessment results now calculate retained OFL and ABC for both winter (including subsistence) and summer fisheries.

The assessment authors had only about two weeks to complete the stock assessment and SAFE document, because CPUE data were not available until the end of summer. Initial results from the full model that used all the data were puzzling, showing very high recruitment in 2013, and resulting in very high projected legal biomass in 2014 (almost double that of the previous year). The authors then conducted a reduced model run without the 2013 observer data, which resulted in a slight decline in projected legal biomass in 2014.

The authors checked that the change of assessment schedule did not have an effect. There were no differences in fits to all data sources between the full model and the reduced model. Almost all parameter estimates and their standard errors (SE's) were similar. The exception was the last recruitment parameter, which was estimated to be 4.5 million in 2013 in the full model (more than twice as high as the next largest estimate) and 0.646 million in 2013 in the reduced model (lower than average; Table 12). The uncertainty (SE) for log recruitment in 2013 in the full model was 1.1, and it was higher in the reduced model (SE = 7.0; Table 11). The authors examined the observer data from 2013 in great detail and found nothing that would indicate an error in data collection. Over 50% of the sublegal crab were in the smallest length class, the highest percentage on record (Table 7). This apparent large recruitment event seems at odds with declining fishery CPUE; fishery CPUE in 2013 was the lowest of the past 12 years.

The Crab Plan Team chose the reduced model because it did not find the 2013 recruitment estimate to be credible. The SSC declined to follow this course because it could find no reason to reject the data, which was collected according to normal protocols. Instead, it encourages the stock assessment authors to further examine the data and stock assessment model to see if better understanding of the effect of the 2013 observer data can be found by the time of the next assessment cycle in May/June 2014. In addition, the SSC requests a sensitivity analysis of data weighting, with consideration of recent recruitment events. Effectively, this will put off the change in the assessment cycle until next year. Also, there will be a trawl survey next year that should help reconcile data conflicts and should substantially reduce the uncertainty in the 2013 recruitment estimate.

**In the absence of an accepted model from this new assessment, the SSC recommends using the assessment results from June 2013. This places Norton Sound RKC in Tier 4a, with an ABC of 0.24 kt and an OFL of 0.26 kt.**

### **Pribilof Island Golden King Crab**

This is a Tier 5 stock and it is not possible to determine stock status; therefore, it is unknown if the stock is overfished. Due to the limited number of participants in this fishery, catch information is confidential;

however, the author does indicate that the total catch did not exceed the OFL of 0.20 million lb. The OFL for 2014 was calculated as 90.7 t (0.20 million lb), and the ABC is based on a 10% buffer at 81.6 t (0.18 million lb). **The SSC supports the CPT recommendation of a 10% buffer to set the ABC below the maximum permissible.**

This year the assessment author also prepared an appendix proposing a Tier 4 biomass calculation for catch specifications. The crab plan team reviewed this appendix and recommends that alternative OFL and ABC specifications based on this approach be included in the 2014 assessment. **The SSC recommends including any auxiliary trend information that can be used to support Tier 4 recommendations.**

### **Adak Red King Crab**

The CPT discussed the Alaska Board of Fisheries proposals to establish an Adak red king crab district in order to prosecute a proposed red king crab fishery in the AI. The SSC agreed with the comments and concerns raised during the CPT discussion regarding these proposals and their associated implications for Adak red king crab management.

### **Economic SAFE**

A brief presentation of the Economic SAFE was provided by Diana Stram (NPFMC) on behalf of the AFSC Social and Economic Program staff. The subject SAFE is nicely presented, including interesting reporting on price projection modeling efforts. **The SSC believes it would be very valuable if the authors of the Economic SAFE report(s) could be present during the annual Council meeting cycle to provide the SSC with the opportunity to formally interact with them.** Over several consecutive years, the SSC has not received a “formal” presentation of the Economic SAFE, either for crab or groundfish. This puts the SSC at a disadvantage in conducting a meaningful review, as questions cannot be asked of the analyst, nor can recommendations be offered.

The SSC suggests that the AFSC undertake modifications to the Economic SAFE documents (again, ultimately for both crab and groundfish) to accommodate and reflect new Small Business Administration mandates to employ separate thresholds to determine the relevant size of the directly regulated entity for RFA. Effective July 22, 2013, an entity participating in commercial finfish fishing is small for RFA purposes if their total average annual gross receipts, from all economic activity, including that of all affiliates, worldwide, is \$19.0 million or less. Commercial entities participating in shellfish fishing are small for RFA purposes if their total average annual gross receipts, from all economic activity, including that of all affiliates, worldwide, is \$5.0 million or less. Previously, commercial fishing had a single threshold, making target species differentiation unnecessary. This is no longer true.

NMFS has provided initial guidance on application of these new standards. That advice will require identifying the principal commercial fishery source of gross receipts for each directly regulated entity. Council management actions will require analysis of these differential principal-source thresholds for each future action it proposes. The Economic SAFE is an excellent opportunity to provide one identifiable official source.

### **C-4 (a) Stock Structure Workshop Report**

Jane DiCosimo (NPFMC) provided a report on the Council workshop on spatial management held in Seattle on April 16, 2013. Public testimony was provided by Merrick Burden (Marine Conservation Alliance) and Jason Anderson (Alaska Seafood Cooperative). The purpose of the workshop was to improve the current process for determining spatial management by raising new ideas, issues to be addressed in the future, and potential actions. It was also a venue to discuss the need for and application of the stock structure template.

**Determination of stock structure is a scientific matter. It is one of the most fundamental and most important tasks of fishery scientists.** Information on stock separation may come from a variety of sources. Genetics can provide the clearest scientific basis in cases where analyses demonstrate little gene flow among stocks. While genetics can demonstrate that stocks are different, it cannot prove that stocks are the same. Thus, other scientific evidence is important. There is a rich scientific literature on the use of other biological information for stock separation, including statistical differences in morphometrics (e.g., body shape), meristics (e.g., number of vertebrae), growth rates, size/age of maturity, recruitment patterns, spawning areas, and migration routes as evidenced by mark-recapture studies. These biological considerations are specified in the stock structure template, which has been previously reviewed and approved by the SSC. **The stock structure template is based on accepted findings and common practices used in the field of fisheries science. Thus the determination of stock structure is a scientific matter obtained from biological information and based on commonly accepted scientific best practices. Moreover, this issue is intimately tied to the SSC responsibility to recommend ABCs and OFLs that prevent overfishing of each underlying stock. The MSFCMA clearly directs the SSC to establish annual catch limits. These limits include an assessment of the evidence for stock delineation and the biological reference points associated with sustainable management of stocks. Therefore, the SSC suggests a modification of the approach recommended by the Plan Teams.**

**The SSC feels that spatial stock management is a two-step process. The first step is the scientific matter of determining the stock structure. The second step is to determine the management response to these scientific findings.** Ideally, separate ABCs and OFLs would be specified for each stock. However, this is not always necessary or practical. There are cases where ABCs and OFLs might be reasonably specified for a collection of stocks, while still achieving conservation and management goals. The SSC recognizes that the NPFMC has a variety of tools that could be utilized to achieve sustainable management of stocks and we encourage input on alternative approaches to maintaining catches at a sustainable level. As soon as preliminary scientific information reveals that further stock separation may be indicated, the stock assessment authors, Plan Teams, and SSC should advise the Council so that remedial actions can be considered to avert conservation problems.

In summary, the SSC does not see a current problem to be addressed in determining stock structure. The stock structure template represents a defensible scientific approach using accepted methods for establishing the biological basis for stock separation. The next step, determining appropriate Council action, is one where other economic and management considerations are brought into the decision-making process. These discussions are typically included in the stock assessments, but they could be highlighted in Plan Team and SSC minutes so that these new issues come to the full attention of the Council family while the science is still being finalized and vetted. **The SSC does not support Option 2 in the joint Groundfish Plan Team report that suggests that the Plan Team should consider economic and management issues in identifying stock structure, which instead should only be based on best science.** The Council always has the option to request further information/analysis (e.g., risk analyses) to evaluate the full range of potential impacts of proposed and alternative actions in formulating its preferred action. The SSC agrees with the Plan Teams that there is a need to address these issues on a case-by-case basis. Finally, the SSC encourages the Council to include the members of the Crab and Scallop Plan teams in future discussions on this topic. The underlying stock structure of weathervane scallops and crab (e.g., EBS snow crab, Adak red king crab) and the possibility of needing increased spatial management have been recurring recent topics of discussion by plan teams and the SSC.

#### **C-4(c) Plan Team Report and Groundfish Harvest Specifications**

The SSC received a presentation from Jane DiCosimo (NPFMC) and Diana Stram (NPFMC) on the proposed harvest specifications for groundfish in both the BSAI and the GOA for 2014 and 2015. There was no public testimony. **The SSC recommends approval of these specifications.**

For the most part, the SSC supports the GPT recommendations, but also had comments and additional recommendations on some of the items presented that are provided below.

### **BSAI and GOA Pacific cod models**

The SSC received summaries from Diana Stram (NPFMC) for the Gulf of Alaska and Joint Plan Teams and from Jane DiCosimo (NPFMC) for the Eastern Bering Sea and Aleutian Islands on preliminary Pacific cod model explorations and Plan Team recommendations with regard to these models. Public testimony, primarily regarding the preliminary Aleutian Islands model, was provided by Chad See (Freezer Longliner Coalition) and Dave Fraser (Adak Community Development Corporation).

The SSC notes that all of the Pacific cod models are characterized by a large number of parameters and dome-shaped selectivities, features that were found to be associated with retrospective patterns and a higher risk of overfishing in the meta-analysis by Hanselman et al. (see separate section). The SSC has previously encouraged the authors to simplify the models when possible and appreciates the suggestion by Grant Thompson (AFSC) to consider omitting seasonal structure in one or more of these models in the future. With respect to this year's assessments, the SSC offers the following recommendations:

#### Gulf of Alaska

**We agree with the Plan Team recommendations regarding the suite of models to bring forward in December.** However, we note the large and increasing number of models and model variants being considered. While most of these models have a similar overall structure, the SSC cautions the analyst and Plan Team to carefully explore incremental changes to the model to evaluate their effects on model fits and reference points.

#### Eastern Bering Sea

**The SSC agrees with Plan Team recommendations regarding models to bring forward in December. In addition to the recommended model configurations, the SSC would like to see a model or models that fix survey catchability at  $Q=1$ .** We suggest presenting variants of model 2a (or 2b with mean  $Q=1$ ) and model 3a with  $Q=1$ . Our rationale for this request is based on the increasing evidence that catchability is higher and quite possibly much higher than the current standard assumption that selectivity in the 60-81 cm size range is 0.47, which is based on a limited study by Nichol (2007). Evidence from an unpublished study conducted in 2012 (Lanth) suggests that there is no difference in catchability between the low-opening (2.5 m) trawl used in the Bering Sea survey and the high opening (7 m) trawl used in the Gulf of Alaska survey. Moreover, observations of acoustic backscatter showed that Pacific cod tended to be near the bottom in the study area, consistent with a dive response to passing vessels commonly observed in other gadids. We note that the default assumption in most assessments is that survey catchability is 1, unless there is strong evidence to the contrary. The evidence to date consists of the vertical distribution of 11 tagged fish under undisturbed conditions over a period of one month (Nichol et al 2007).

#### Aleutian Islands

The SSC concurs with the Plan Team to drop Model 3 from consideration in the December assessment because of the unrealistic value for catchability estimated in the model. Hence, we recommend bringing forward results from models 1 and 2 (and any others at the authors discretion), as well as reference points based on Tier 5 considerations in the December assessment as the SSC has notified the Council that it intends to set separate ABCs for the Aleutians and the Eastern Bering Sea.

### **Flatfish models**

The Groundfish Plan Team reviewed three white papers at their September meeting: (1) aggregate stock assessment for northern and southern rock sole, (2) a transition to a Stock Synthesis model (SS3) for Dover sole, and (3) a transition to SS3 for flathead sole.

For the rock sole model, the primary benefit of using the aggregate northern–southern model is the ability to use a longer time-series of data (back to the 1980s). There was some concern, however, that the SS model fit to the survey abundance index is worse than the 2012 platforms (northern rock sole). Moreover, species composition is not available for the early part of the series. The observer program may be able to help apply species composition ratios to the haul-level. The Plan Team made several recommendations to proceed for the November assessment including: continue to develop SS models for aggregate northern and southern species, investigate empirical weight-at-age data to simplify model structure, investigate data weighting and improve fits to survey data, and find a method to calculate ABC for the aggregate model. Also, there is a need to explore likelihood profiles for the natural mortality rate, derive a prior distribution for  $M$  based on plausible values from similar flatfish, and report the total likelihood and components of the total likelihood for alternative model structures.

A new assessment author has assumed assessment responsibilities for Dover sole and flathead sole. For both Dover sole and flathead sole, new SS models are being developed to replace the previous assessment platforms. The SS models are able to accommodate many of the previous issues identified by the SSC, and the models also appear to match the 2011 models for both species; however, there were some discrepancies in the Dover sole model due to how data are treated within SS3. **The SSC recommends that the previous stock assessment platforms be updated with the most current data for comparison to the new SS models before transition to the new SS platform. The SSC also endorses the Plan Team recommendations to list maturity studies as a research priority due to the large differences in maturity rates between studies in different regions. The SSC also agrees with Plan Team recommendations pertaining to survey expansion, and to disregarding composition data from earlier survey years that had incomplete spatial coverage.**

### **Retrospective analysis workgroup**

The SSC commends the members of the working group for an excellent meta-analysis of retrospective patterns across 20 groundfish stocks, and appreciates the cooperation of all of the assessment authors who contributed. The analysis of patterns across stocks was very informative and suggested that models that are highly parameterized and use dome-shaped selectivities are associated with retrospective patterns that imply a higher risk. **We agree with the recommendations of the Plan Team that retrospective analyses extending back 10 years, and including Mohn's revised  $p$ , should routinely be presented in the assessments. Retrospective patterns should be taken into consideration when selecting a model and when communicating uncertainties associated with biomass estimates.** The SSC also notes that a strong retrospective bias should be one of the criteria considered when setting ABCs and could provide justification for recommending a higher or lower ABC.

### **Survey averaging workgroup**

The SSC agrees with the Plan Teams' recommendation that authors should compare their method of survey averaging with the random effects approach.

### **Stock recruitment workgroup**

Jane DiCosimo (NPFMC) reviewed the "Phase III" Report of the Joint Groundfish and Crab Plan Team/SSC Working Group on Assessment/Management Issues Related to Recruitment. The SSC appreciates the opportunity to review the stock recruitment working group report. This document will improve transparency

in decision making with respect to setting management tiers, recruitment time frames, and methods for estimating biological reference points.

The SSC discussed the strict criteria for determining reliability of the  $F_{MSY}$  pdf in topic B5, and questioned if currently Tier 1 stocks would meet these criteria. The SSC also emphasized that use of environmental variables to explain recruitment variability or in stock assessments need not be at the scale of regime shifts.

#### **ACL II discussion**

The Joint Plan Teams reviewed issues involved in implementing annual catch limits (ACLs) in the groundfish FMPs. The three main issues identified were:

1. Expanding/revising the role of scientific uncertainty in harvest control rules,
2. Establishing a numerical MSST; and
3. Accounting for total catch removals

The basis for the Joint Plan Team review was a report prepared by Grant Thompson in May 2011. Other information considered included the SSC review of the issue paper (June 2011), the Joint Plan Team's review of the document (August 2011, September 2012), excerpts from other SSC reports, as well as SSC comments on the Advance Notice of Public Rulemaking regarding NS1 guidelines. In their September 2013 meeting, the Joint Plan Teams provided new advice on issues 1 and 3, which the SSC supports. Regarding issue 3, the SSC continues to support steady progress toward full accounting of "other" removals. The Joint Plan Teams offered practical guidance in this regard. The SSC encourages further development of these analyses over a reasonable time frame.

#### **GOA DSR**

The SSC received the Plan Team report on the Southeast Demersal Shelf Rockfish (DSR) assessment. In light of the change in survey methodology from use of a submarine to use of a remotely operated vehicle (ROV) without the ability to do a side-by-side comparison, the SSC recommends authors review earlier comparisons of submarine and ROV equipment (O'Connell and Carlile 1994) for potential differences in coverage.

#### **Moving non-Southeast DSR into Other Rockfish**

The SSC agreed with the GPT and author recommendation that DSR remain in the Other Rockfish complex for areas of the GOA outside of the eastern Gulf. We also agree that for the November assessment the author should apply the survey averaging technique for smoothing survey biomass estimates in addition to the current method.

#### **C-5 (a) Discussion paper on GOA Trawl Bycatch Management**

The SSC received a presentation by Darrell Brannan (NPFMC consultant) and Sam Cunningham (NPFMC). Public testimony was provided by Rachel Donkersloot (Alaska Marine Conservation Council). The introduction to this paper sets out an ambitious task. Overall, the paper is nicely written, clear and concise, and it succeeds in presenting each promised element. However, the parts do not appear to comprise a coherent whole. The paper's title, GOA TRAWL BYCATCH MANAGEMENT is only partially and occasionally descriptive of the paper's content, partially because there are passages that address bycatch management and occasionally because the component chapters of the draft move from topic to topic without clear transitions and linkages. The SSC believes that we would have benefited from the initial staff discussion paper presented to the Council in June and the Council's comments/guidance based on that initial discussion paper. However, within the limits of the information presented to the SSC in the document under review, we offer the following observations.

The first substantive section (Section 2) provides a brief, recent, and selective literature review of the general subject area of “quota share-based” fisheries management. The review identifies several key elements of programmatic structures that are based upon apportioning catch-shares to stakeholders. Important observations and assertions about quota-share management, structural elements of several forms of shares management, and principal arguments and counter arguments pertaining to aspects of quota-share based programs within differing temporal and geo-political settings are highlighted by the authors. However, the SSC felt that this selective literature review only captured some aspects of quota-share based fishery management research contained in the contemporary literature and therefore did not provide adequate coverage of the subject.

The presenters informed the SSC that the literature review is unlikely to be edited and reviewed again even with our suggested changes to broaden the literature covered and to develop a stronger analysis of the pertinent findings. This is troubling because of inaccuracies and selective biases in the review. The suggestion that the review will be archived at this point effectively represents an explicit decision to memorialize these shortcomings (which otherwise could easily be addressed). In one example, the economic outcomes section treats fishing as a job with individuals weighing opportunity costs; this discussion ignores the range of cultural attachments, place-based identities, heritages, and many other elements that accompany the fisheries and for which there is an extensive peer-reviewed literature. Specific to catch shares, there is a broad literature on the effects on communities (e.g. Langdon, St. Martin, Macinko, McCay, Eythorsson, Lowe and Carothers, Hegelson and Palsson), however, in the current version, “sociocultural value on maintaining a fishing lifestyle” is only acknowledged in an unreferenced footnote.

**The SSC believes this literature review needs to be broadened before releasing the document to the public.** A detailed set of comments will be provided to the authors, but some of the SSCs concerns are elaborated below.

The review is supposedly confined to recent peer-reviewed literature and yet there are references to selected publications from as early as 2001 (e.g. Hartley and Fina, 2001; Copes and Palsson, 2001) and to non-peer-reviewed working papers (e.g., Grainger and Costello, 2012). Thus it is hard to determine by what process the vast body of potentially relevant literature was culled to produce the sample examined in the review. Further, it is frequently hard to tell when the authors are discussing assertions made by other authors and when they are presenting generally accepted findings or conclusions from world experience with catch share programs. More attention to phrasing could eliminate much of the potential confusion here (e.g., sentences that begin “authors X, Y, Z assert that...” or “authors in this camp generally conclude that...”).

The review contains numerous references to efficiency, productivity, and profitability and sometimes these terms appear to be used interchangeably. These terms are not synonyms and “efficiency” in particular is susceptible to much misuse in public policy settings. The essay by Saraydar (1989) would be particularly helpful in sorting out the confusion on display in the review and in the fisheries economics literature. Older literature is not invalid or irrelevant simply by virtue of its publication date and should not have been excluded.

The discussion of resource rent is jumbled with economic rent and is misleading due to the confusion in the literature relied upon. Resource rent is not “society’s opportunity cost of prosecuting the fishery” regardless of whether that phrase appeared in a publication. Here, the discussion in Bromley (2009) provides model clarity.

The problem of the truncated nature of the literature selected for review becomes glaring when the discussion turns to the so-called transitional gains trap. Here, the authoritative citation would be that of the originator of that phrase in the fisheries literature, Copes (1986), not the more recent works cited. Contrary to the

statement in the discussion paper (footnote 7), the transitional gains trap applies to all subsequent generations of purchasers (the gains are conferred on the initial recipients alone).

The discussion of stewardship effects ignores both established literature emphasizing the importance of the discount rate on personal conservation ethics (Clark, 1973) and recent experiences in the North Pacific involving high profile prosecutions of catch shareholders.

The suggestion that enforcement costs are lower under catch shares (p. 8) contradicts most world-wide experience.

The reference to MSA language defining catch shares as non-compensable privileges, not property, as a disclaimer is inappropriate and inaccurate. This language mirrors Congressional language in the Taylor Grazing Act regarding public lands grazing permits—in both cases Congress has gone to great lengths to be precise about what it is and isn't creating and such language is more than a disclaimer.

In general, the remainder of the discussion paper presents an initial look at several alternatives before the Council. These alternatives have been submitted by various stakeholders and are at various stages of development and specificity. At this early stage, the draft discussion paper does a good job at describing the policy choices inherent in many of the alternatives and these are beyond the scope of the SSC's responsibility or prerogative in the Council process. The procedural steps described appear appropriate as they pertain to what is identified as Tier 1, then Tier 2 level decision points. The eight proposals presented in Section 3 represent a commendable degree of effort, serious consideration, and investment on the part of the submitting stakeholder groups. Each provides useful, imaginative ideas. While no consensus could have been anticipated at this stage of the process, it is encouraging to see the active participation reflected in these thoughtful contributions to the Council process.

The proposals range from relatively complete and comprehensive concepts, to narrow, partial treatment of specific areas, fleets, or sectors. The systematic way in which each of the eight proposals is broken into key topics by the analysts is excellent and should facilitate meaningful Council comparisons. Each proposal is in the early stages of development, making a rigorous review of each by the SSC premature. However, **it would be extremely useful to see the authors apply the literature review to each of these proposals to highlight the potential positive and challenging elements they variously contain, informing further development of these proposals.** We again note the frequent misapplication of the terms bycatch and prohibited species catch. The error in this circumstance must be corrected because these two distinct categories of removal are actually proposed to be formally managed as discrete elements of the QS program (i.e., bycatch allocations and prohibited species catch allowances).

Section 4 is an extensive treatment of state-water fisheries management that may accompany any of several different structural forms a Federal groundfish quota shares program might take. The information contained in this section is excellent, although its immediate relevance to the topic of GOA Trawl Bycatch/PSC Management is unclear. Indeed, the tabular representations of various forms of State Water Management in the face of any given Federal QS program raises many questions specific to PSC accounting. There does not appear to be any treatment of trawl avoidance of PSC or groundfish bycatch; the state does not have PSC limits, but could consider creating them.

Section 5 is a treatment of the various forms of, and barriers to, the concept of one or more Community Fishing Associations (CFAs). This section presents both theoretic and case-study descriptions of how CFAs might participate in fishing activity to further inform consideration of one of the stakeholder proposals. This is excellent information, although many questions would have to be addressed before such an approach could be tailored to the GOA trawl fisheries.

Finally, the Appendix contains a very helpful table that contrasts a suite of programmatic performance elements as applies to the submitted proposals. However, this material is provided without further explanation or interpretation, both of which would enhance the presentation.

#### **C-5 (c) Initial review of GOA Rockfish Chinook Cap Rollover**

The SSC received a presentation on the initial draft EA/RIR by Sam Cunningham (NPFMC). There was no public comment. The document is a follow-on of the proposed GOA Amendment 97 Chinook Salmon PSC Avoidance action, evaluating an addendum that would address the concept of PSC rollovers. The June 2013 action serves as the analytical baseline against which the suite of alternatives in this supplement is contrasted. The document is clear, well written, and relatively concise.

The author has provided a succinct and helpful definition differentiating bycatch from PSC. However, application of this definition is not adhered to in the document. It is important to maintain this regulatory distinction throughout the document.

PSC is never to be utilized, but is to be “... avoided to the extent practicable.” An allowance is made to accommodate unavoidable interceptions. The analysis consistently makes the error of assigning use rights to PSC; it is an maximum allowance, not a property use right, and cannot therefore be said to be stranded. There are several places in the document where a rephrasing is necessary. The linguistic inclination adopted by the author (e.g., PSC is a tool to be used) dilutes the message that avoidance is essential to realizing the optimum yield objective of the MSA and the Council’s efforts to manage on an ecosystem-wide basis. This critique extends to the interpretation of PSC removals under each of the alternative descriptions.

The characterization in the draft of the downstream effects of this action is limited to the groundfish sectors. There are, of course, downstream effects on users of the Chinook salmon lost to PSC. The document lacks identification of possible end users of Chinook salmon (commercial, subsistence, personal use, and sport) and at least a qualitative evaluation of the nature of impacts these users are likely to face. In particular, the impacts assessment section of the RIR needs a qualitative acknowledgment of what was/would be the value of the Chinook salmon savings. Numerous communities within Alaska and along the West Coast depend upon, and sustain uses and users in each of these categories, and these effects should be characterized in the rollover discussion, as well as in the larger document.

In the section reporting Chinook salmon PSC performance, it is relevant to note that GOA CVs have historically had low levels of observer coverage. This could bias interpretation of the PSC estimates. This should be reflected in the text and sector-attributed PSC performance tables. While mention is made in footnote 13, this point is critical to the readers’ understanding of these reported PSC performance indicators. It should not be relegated to a footnote. The low level of observer coverage also speaks to the difficulty of obtaining the data necessary to manage the proposed PSC limits in the GOA non-pollock trawl fisheries. The document appears to presuppose more precision in the management system than seems reasonable, as for instance, in the discussion of rollovers.

Under the Alternative 4 Rollover discussion, “...without the uncertainty buffer incentive, the RP CV sector would be just as well off taking all of the 1,200 Chinook salmon that it is permitted, as it would be when limiting Chinook PSC to the greatest extent practicable.” This is an important finding that should be highlighted for the reader and the Council.

The SSC recommends summarizing the positive and negative elements of the alternatives in the document. It would be useful to set out in a tabular form the major features of each alternative and the advantages and disadvantages of the alternatives.

**The SSC recommends integration of this Addendum (after the necessary corrections are made) into the main GOA Chinook PSC in the Non-Pollock Trawl Management document, at which point the Addendum will be ready for release to the public.**

The SSC also had several specific comments and follow-up questions for the authors as follows. In the RIR treatment of groundfish harvest, the analysis employs economic indicators that present concerns for comparative performance between the CVs, CPs, and inshore processing sectors. CVs, by definition, do not process. Ex-vessel equivalent value has traditionally been the leveling measure because wholesale value is determined by a number of factors. The SSC recommends replacing these CV wholesale tables with those that show processor first wholesale value (or correctly labeling them) and supplement the report with ex-vessel value performance measures for the CV sector.

In the treatment of catch attribution, it might be worthwhile to more fully explain how trip target assignment can change based upon species-preponderance in the catch.

In the discussion of “Interaction with the uncertainty pool mechanism,” on page 40, there seems to be a contradiction. Clarification is needed, as the mandate that “... 160 fish must have been truly saved” and the suggestion that “... some of the RP CV sector’s avoided PSC ... are taken in the non-RP CV fall fisheries during Year ” are discordant.

In 4.3.3 Alternative 3, “The Council chose to consider holding back precisely 160 Chinook salmon in the RP CV sector because that is the amount of Chinook in the sector’s uncertainty buffer.” Keeping those 160 Chinook allowances within the sector prevents a scenario where the PSC that is marked for possible “use” in case of high-PSC during the following year is, instead, caught by the non-RP CV sector in the fall. But what about the issue just cited regarding post-transfer overages?

Continuing with the Alternative 3 rollover, the draft asserts: “Consider the example where the RP CV sector takes 1,000 Chinook salmon before October 1. If all but 160 of the remaining 200 Chinook PSC allowances are rolled into the non-RP CV sector, the next Chinook recorded on a Rockfish Program trip would bring the sector’s remaining PSC to 159. Catch accounting – and the agents responsible for administering the uncertainty pool – would have to track that this was, in fact, only the 1,001st Chinook salmon taken in the sector.” What happens in this case? This is a critical question, left unanswered in the draft.

#### **C-6 (b) BSAI Chinook Salmon Report**

The SSC received a presentation from Diana Stram (NPFMC) on an updated analysis of BSAI Chinook salmon stock status, AEQ, and PSC rates. Public testimony was provided by Art Nelson (Bering Sea Fisherman’s Association). This report was requested by the Council at its April 2013 meeting and largely updates analyses that were reported on at the Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative Chinook Expert Panel symposium in 2012. The report also summarizes fishing and PSC performance by sectors as requested by the Council. The SSC had previously reviewed and approved the methodology for calculating AEQs and PSC rates so did not comment on this aspect of the report.

The SSC greatly appreciates the work of NMFS, Council, and ADF&G staff in bringing together disparate Chinook salmon run strength, AEQ, and PSC information into a single report that summarizes the impact of PSC on runs of Chinook salmon in western Alaska. The SSC had the following comments on the report:

- **The report does an excellent job of addressing the Council motion and request to review the status of Chinook salmon stocks in Alaska, update genetic stock identification efforts, and provide updated AEQ analysis and PSC harvest rates relative to actual PSC and relative to**

**current cap levels. Summaries of vessel PSC rates were also found to be useful in confirming that efforts of IPAs to reduce PSC of Chinook salmon should be effective at the vessel level.**

- We suggest that this type of report be produced periodically to update the SSC and Council on the performance of Chinook salmon stocks and on efforts to reduce PSC in the BSAI groundfish fisheries.
- While we applaud the inclusion of stock-specific run size information in the document, stock status information in the report could be improved in the future by adding information on harvests of Chinook salmon in the various state-managed terminal fisheries (subsistence, commercial, and recreational), as well as whether Amounts Necessary for Subsistence (ANS) are being met or not.
- Sufficiency of sampling of Chinook salmon PSC for lengths should be evaluated in light of the sampling design for genetics, and sampling rates for lengths be adjusted if necessary.

APPROVED:\_\_\_\_\_

DATE:\_\_\_\_\_

Draft MINUTES

215th Plenary Session  
North Pacific Fishery Management Council  
Anchorage Hilton Hotel, Alaska

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ATTACHMENTS:

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| 2. Time Log                   | 5. BSAI and GOA Specs |
| 3. AP Minutes                 | 6. Newsletter         |

DRAFT MINUTES  
NPFMC MEETING  
October 2013

The North Pacific Fishery Management Council met in October in the Hilton Hotel in Anchorage. The following Council, SSC and AP members, and NPFMC staff attended the meetings.

Council Members

Eric Olson, Chair  
John Henderschedt, Vice Chair  
Jim Balsiger  
Cora Campbell/Nicole Kimball  
Craig Cross  
Ed Dersham  
Duncan Fields

Dave Hanson  
Roy Hyder  
Dan Hull  
David Long  
Bill Tweit  
RADM Tom Ostebo/LT Tony Kenne

NPFMC Staff

Gail Bendixen  
Sam Cunningham  
Jane DiCosimo  
Peggy Kircher

Steve MacLean  
Sarah Marrinan  
Jon McCracken  
Chris Oliver

Maria Shawback  
Diana Stram  
David Witherell

Scientific and Statistical Committee

The SSC met from September 30<sup>th</sup> through October 1<sup>st</sup> at the Hilton Hotel, Anchorage AK.

Members present were:

Pat Livingston, Chair  
*NOAA Fisheries—AFSC*

Alison Dauble  
*Oregon Dept. of Fish and Wildlife*

George Hunt  
*University of Washington*

Steve Martell  
*Intl. Pacific Halibut Commission*

Terry Quinn  
*University of Alaska Fairbanks*

Robert Clark, Vice Chair  
*Alaska Department of Fish and Game*

Sherri Dressel  
*Alaska Department of Fish and Game*

Gordon Kruse  
*University of Alaska Fairbanks*

Franz Mueter  
*University of Alaska Fairbanks*

Kate Reedy-Maschner  
*Idaho State University Pocatello*

Jennifer Burns  
*University of Alaska Anchorage*

Anne Hollowed  
*NOAA Fisheries—AFSC*

Seth Macinko  
*University of Rhode Island*

Lew Queirolo  
*NOAA Fisheries—Alaska Region*

Farron Wallace  
*NOAA Fisheries—AFSC*

Advisory Panel

The AP met from October 1 – 4, 2013, Anchorage Hilton Hotel, Alaska. The following members were present for all or part of the meetings (absent ~~stricken~~):

Ruth Christiansen  
Kurt Cochran  
John Crowley  
Jerry Downing  
Tom Enlow  
~~Tim Evers~~  
Jeff Farvour  
Becca Robbins-Gisclair

John Gruver  
Mitch Kilborn  
~~Alexus Kwachka~~  
Craig Lowenberg  
Brian Lynch  
Chuck McCallum  
Andy Mezirow  
Joel Peterson

Theresa Peterson  
~~Neil Rodriguez~~  
Lori Swanson  
Anne Vanderhoeven  
Ernie Weiss

Appendix I contains the public sign-in register and a time log of Council proceedings, including those providing reports and public comment during the meeting.

## **A. CALL TO ORDER**

Chairman Eric Olson called the meeting to order at approximately 8:03 am on Wednesday, October 2, 2013.

Mr. Bill Tweit participated in the entire meeting in place of Phil Anderson, WDF Director.

The agenda was approved as written.

## **B. REPORTS**

The following reports were given: B-1 Executive Director's Report, Chris Oliver; B-2 NMFS Management Report (including update on LAPP Cost Recovery, Flow Scale analysis/regulations update), Mary Furuness and Jim Balsiger; B-3 ADF&G Report (including review of BOF Statewide Pacific cod proposals), Karla Bush; B-4 USCG Report, Tony Kenne; B-5 USFWS Report, written report from Doug McBride; and B-6 Protected Species Report, Steve Maclean.

The reports were given and questions were answered from the Council members. Many federal employees were not available due to the furlough and the shut-down of the federal government, however written materials had been provide and reviewed. Public comment was taken on all B items.

## **COUNCIL DISCUSSION/ACTION**

Mr. Olson noted that the Council should discuss MSA issues later under the staff tasking agenda item.

### **Board of Fisheries Proposals**

**Mr. Fields moved, which was seconded, that the Council not comment at this time on specific BOF proposals, but that the Council provide staff to answer questions and provide information as requested including documents prepared and provided to the Council under item B-3.** Mr. Fields spoke to the motion, highlighting specific comments from public testimony regarding the Council making comments to the BOF, and that it is an area of concern. He stated that staff should be on hand to provide impacts on federal fisheries and prior Council actions. The Council might be able to help provide resources the State of Alaska may not have. Discussion ensued, and it was generally agreed that Council staff should not make comment to the BOF, but should be there to answer questions should additional information be requested. After brief discussion, it was agreed that the motion addresses stakeholder concern, and the **motion passed without objection.**

Mr. Hull briefly discussed retained and discarded species, which came up under B-2, and noted that any action to be taken should be considered under C-1, the Observer Program.

### **LAPP Cost Recovery**

**Mr. Henderschedt moved that the Council request NMFS provide one additional opportunity to the Council and public to comment on the program prior to publishing the proposed rule. The motion was seconded.** Mr. Henderschedt acknowledged work and outreach that has been completed, and that

correctly identified issues and concern that lack resolution. He noted that impacts of how this program is implemented do not negatively affect how we manage fisheries. He stated NMFS should evaluate all possible remedies in identifying what fisheries qualify as LAPPs and find an alternative solution to identifying “person” who can receive a permit. He is concerned that the definition could reduce the Council’s opportunity to work cooperatively with permit holders on other management challenges. (Did I get this right?) There was brief discussion regarding the legal opinion and the Council’s ability to get a definition. It was generally agreed that either at the December or February meeting under the B reports, the Council would be able to hear an update and make comments. **The motion passed without objection.**

#### Board of Fisheries Issues

Mr. Dersham noted that during public comment the Council heard that the Council should comment on upcoming BOF finfish proposals, and it was generally agreed the item would be discussed under the Trawl Bycatch agenda item.

Mr. Cross commented on testimony that the Council provide comment to BOF about when to bring up scallop proposals and when the Council can provide comment on proposals. There was discussion regarding timing opportunities, and it was generally agreed that the Council could make comments on BOF Scallop Agenda Change Requests (ACRs) at its December meeting. Mr. Dersham noted the joint BOF/Council protocol establishes timing so that the Council can comment on issues.

#### Government Shutdown

Dr. Balsiger briefly discussed NMFS’ ability to have staff on standby in event of need to protect life and property and to make sure no overfishing occurs, but that is the extent of personnel. IFQ permits cannot be issued, and there are potential issues that may not allow the normal opening of these fisheries.

### **C-1 Observer Program**

- (a) Report from NMFS on information requests
- (b) Observer program: 2014 annual deployment plan
- (c) Receive OAC report and take action as necessary
- (d) EM discussion ~~and possible review of EFP~~

#### ***BACKGROUND***

##### ***(a, b) NMFS Report and Annual Deployment Plan***

*At this meeting, the Council will review the draft 2014 Annual Deployment Plan (ADP), and provide recommendations to NMFS for the final 2014 ADP. During the Council’s first performance review of the restructured observer program in June 2013, the Council made six specific recommendations and requests for the development of the 2014 ADP. The agency published a draft 2014 ADP in early September, which was distributed to the Council. The agency also wrote a letter to the Council responding directly to the six information requests.*

*In June 2013, the Council also requested that NMFS provide additional information on three specific issues for review at this meeting, separate from the ADP. This information comprised 1) more detailed information on program costs and potential for cost savings; 2) revisions to allow the Council and public to better understand coverage changes by fisheries between 2012 and 2013; and 3) an evaluation of the reliability of indices of Chinook salmon genetic information in the GOA. The first two items will be addressed in the agency’s presentation to the Council, and the last has been included in an appendix to*

*the 2014 ADP, along with a proposed alternative approach to salmon genetic sampling in the GOA.*

*Finally, the Joint Groundfish Plan Teams also reviewed the 2014 ADP.*

(c) *Receive OAC report and take action as necessary*

*The Observer Advisory Committee (OAC) met in Seattle on September 18-19, to review the 2014 ADP. The meeting report includes comments and recommendations on the NMFS ADP letter, the 2014 ADP, and NMFS' letter on the 2014 EM pilot project (see (d), below).*

(d) *EM discussions ~~and possible review of EFP~~*

*In April, the Council approved formation of an Electronic Monitoring (EM) Working Group to evaluate alternative EM approaches, with a consideration of tradeoffs among achieving monitoring objectives, timelines, and other factors (e.g., costs, disruption to fishing practices). Only two people responded to the solicitation for appointment to the working group. The Council Chair and the working group's Chair deferred a further decision on how to proceed with the working group to a full Council discussion.*

*The Council has also received further information from NMFS on next year's proposed EM pilot project under the restructured program, whereby the agency proposes to encourage participation in the pilot program by moving 14 vessels that volunteer into the zero selection category. The agency is looking for guidance from the Council as to whether to limit this opportunity exclusively to vessels in the vessel selection pool, or to include all vessels in the partial coverage category.*

*Finally, the Council has been informed that an EM experimental fishing permit (EFP) application is being developed by the Alaska Longline Fishermen's Association. Support for EM development in 2014 through such an EFP process has been referenced in the Senate's markup of the appropriations bill, however this bill has not yet been approved. In the meantime, under our regulated EFP process, the application will undergo the standard NMFS regional office and AFSC review process, which includes development of an appropriate NEPA analysis to support the EFP. Once this review is complete, the agency will bring the EFP to the Council for consultation.*

Diana Evans gave the report on this agenda item, and answered questions from the Council. NMFS staff were not available due to the federal government furlough. The AP gave its report, the SSC gave its report, and public comment was taken.

#### COUNCIL DISCUSSION/ACTION

**Mr. Hull moved, which was seconded, that the Council supports the overall provisions for observer coverage described in the 2014 Draft Annual Deployment Plan and the specific Observer Advisory Committee (OAC) recommendations on pages 3-5 of the September OAC report. The Council also recommends continuing the policies that allow vessels to make an annual selection for 100% coverage in the BSAI Pacific cod fishery, not displacing IFQ crew members, and conditional release of vessels to address space and safety concerns.**

**The Council requests NMFS consider the suggestions provided on page 6 of the OAC report regarding how to prioritize deployment of the 14 cameras available in the NMFS electronic monitoring pilot project in 2014.**

**The Council requests NMFS explore whether allowing clean-up IFQ trips in multiple regulatory areas is best addressed through a regulatory amendment to the Observer Program or the IFQ Program.**

**The Council requests that the tables showing preliminary catch data and data on observer coverage from the B-2 supplemental be updated with the entire 2013 data set and included in the June 2014 program performance review. In addition, these tables should show the percentage of catch observed using these same categories. The methods used to calculate total mortalities of halibut in metric tons should also be reviewed and refined in these tables.**

**The Council requests that the agency incorporate the SSC comments and recommendations on the 2014 ADP and the preferred review schedule for June 2014.**

Mr. Hull spoke to his motion, stating that the motion is based primarily on the OAC comments and AP recommendations. The Council recognizes that staff time is limited, and interest for exploring the tendering issue, as well as diminimus holding of IFQ vessels fishing in state waters will be facilitated by NMFS. Mr. Hull noted that the Council needs to understand how an EFP or EM pilot project will work and can work together before an EM workgroup needs to be formed. Mr. Hull answered questions of clarification. Dr. Balsiger noted that most NMFS staff has been furloughed; this issue remains a high priority.

Discussion continued. There was brief discussion regarding halibut mortality, and Mr. Hull noted that in the June 2014 review, current data on mortality would be considered and a decision will be made as to whether additional assessment will be necessary. Mr. Cross highlighted that the Council is asking NMFS to keep current observer policies with respect to the BSAI Pcod catcher vessel fleet – impacting the fleet as little as necessary.

There was discussion regarding the EM pilot program and generating more participation in the pool. Mr. Hull noted the OAC has been discussing the issue, and the committee had discussed waiting until NMFS had an implementation schedule for the pilot program to address EM logistics. Mr. Fields reminded the Council of the urgency of this issue – especially in regard to tendering issues and sampling protocols. He noted that Council should focus carefully on the review in 2014, and can then surgically make modifications as appropriate.

**Motion passed unanimously without objection.**

## **C-2 SSL EIS**

### ***BACKGROUND***

*In May, 2013 NMFS released a draft Environmental Impact Statement/Regulatory Impact Review/Initial Regulatory Flexibility Analysis for Steller Sea Lion Protection Measures for Groundfish Fisheries in the Bering Sea and Aleutian Islands Management Area. The analytical package is referred to as the Draft EIS. The Draft EIS provided an evaluation of the environmental, social, and economic effects of alternatives to the Steller sea lion protection measures for the Bering Sea and Aleutian Islands Management Area groundfish fisheries.*

*Public comment on the Draft EIS was solicited and accepted until July 16, 2013. On September 20, 2013 NMFS released the draft Comment Analysis Report (CAR) which contained NMFS' formal responses to the summarized comments received during the comment period. The draft CAR also serves as an*

*intermediate document that is intended to inform NMFS, the Council, and the public of the issues that NMFS feels needs to be addressed in the final EIS. The CAR will become chapter 12 of the final EIS.*

*At this meeting, the Council is scheduled to select a Preferred Alternative for the final EIS. The Council may wish to endorse its preliminary preferred alternative selected in April 2013, select one of the other alternatives evaluated in the draft EIS, or devise a new Preferred Alternative for analysis for the final EIS.*

Steve MacLean gave the staff report on this agenda item. Staff from NMFS and AFSC were unable to be in attendance due to the federal government furlough. The SSC and AP gave reports, and public comment was taken.

#### COUNCIL DISCUSSION /ACTION

**Mr. Tweit moved, which was seconded, that the Council adopt the following:**

**In accordance with the schedule for completion of the NEPA process laid out by the National Marine Fisheries Service and the Court, and to further meet its obligations under the Magnuson Stevens Act, the Council adopts Alternative 5, the current Preliminary Preferred Alternative as its Preferred Alternative. Based on the record, and using the best available scientific information including the scientific findings of the independent scientific reviews conducted by the CIE on behalf of NMFS and the Independent Scientific Review Panel convened by the States of Alaska and Washington, the Council believes that its Preferred Alternative will not result in jeopardy and adverse modification to SSL and their critical habitat.**

**NMFS has formally reinitiated consultation under Section 7 of the Endangered Species Act on the proposed action to change sea lion mitigation measures for the BSAI groundfish fisheries. The Council strongly recommends that NMFS provide a draft Biological Opinion (BiOp) that analyzes this Preferred Alternative, and that the draft BiOp be provided to the Council and its SSC for review and comment within the context of the existing schedule. In this analysis, the Council expects to see clear and specific responses to findings and conclusions made by the CIE and the independent scientific review convened by the States of Washington and Alaska regarding the 2010 Biological Opinion, as well as specific metrics and analyses regarding the effects of fishing on SSLs and their habitat in light of those findings and conclusions. This information is crucial for developing any reasonable and prudent alternatives to the Preferred Alternative, if needed. Receiving this information prior to final agency action is essential for the Council and the public to make informed comments and recommendations.**

**In adopting these two recommendations, the Council notes the following:**

- 1. In its letter of August 21, 2013, NMFS responded to the Council's request for additional information regarding the effects of fishing on SSLs and the metrics that would be used to evaluate the effects of the alternatives on SSL and their critical habitat, stating that there would be no new information provided to the Council at this meeting. NMFS cited several documents that might inform the Council's deliberations regarding selection of a preferred alternative. The Council has reviewed these documents and information sources and has taken them into consideration in making these recommendations.**
- 2. The Council on numerous occasions has requested that NMFS provide the analyses and specific metrics and performance criteria that will be used to determine the effects of fishing on SSL and their critical habitat. The Council has repeatedly stated that it is necessary for these to be incorporated into the EIS at its various stages of development in order to inform**

the public and the Council about the relative effects of the alternatives on SSLs. The Council has specifically requested this information be made available to assist in choosing a preferred alternative. To date, NMFS has declined to make this information available.

3. In making these recommendations, the Council notes that the existing schedule for completion of the EIS and rulemaking provides ample time to prepare the draft Biological Opinion, develop RPAs if necessary in a coordinated manner with the Council, and provide the opportunity for a meaningful public process. The Council believes that this is an important step as it will be the first opportunity for the public and the Council to review and comment on the analyses that will be used to assess the effects of fishing on SSL and their critical habitat, and to review and comment on the performance criteria and metrics that will be used to evaluate the effects of alternatives on SSLs.

Mr. Tweit spoke to his motion, noting that NEPA and ESA are different, but conservation is conservation, and the Council's primary chore should be to address primary needs while meeting fishing needs as stated by MSA. He stated the PPA has more negative economic impacts on communities, but not as much as others. This PPA will result in no jeopardy finding, but the PPA is responsive to performance measures. Using the information that is in front of the Council today, fisheries might be reshaped in an RPA development process and the Council requests the opportunity to review a Draft BiOp. Mr. Tweit answered questions from the Council members, specifically on timing and process.

Both Mr. Fields and Mr. Cross noted their agreement with the motion but also noted that there may not be time for a draft bi-op.

Dr. Balsiger stated that there is a court deadline for the EIS which is tied to the action the Council puts into regulations. There was discussion regarding direction the Council should take if the draft bi-op is not ready, or if there is a declaration of jeopardy, the Steller Sea Lion Mitigation Committee would meet and make recommendations before the Council discusses the issue in February 2014.

**Mr. Fields moved to amend the motion, which was seconded: Should the Council's preferred alternative be assessed to create adverse modification, and should NMFS, as it works to complete the bi-op, consider regulation changes to avoid adverse modification, the Council should identify a small group of Council members and industry that is available for agency consultation.**

Mr. Fields spoke to his motion, hoping that NMFS doesn't go back to status quo but that they look at other alternatives that can work. He stated that the current mitigation committee is too large to be strategic in a short period of time. There was discussion regarding committee process, and Dr. Balsiger stated a willingness to consider processes outside the regular Council schedule. It was generally agreed to move the discussion to staff tasking. **The motion was withdrawn with concurrence of the second.**

Discussion continued on the main motion. Dr. Balsiger noted that he will not be supporting the motion, although he does not disagree with most of the motion.

**Motion passed 8/3 by roll call vote with Balsiger, Fields, and Hyder in opposition.**

### **C-3 BSAI Crab Management**

#### ***BACKGROUND***

*The Crab Plan Team met September 17-20 to review draft BSAI Crab stock assessments and provide recommendations for OFL and ABC for 7 of the 10 stocks. There are 10 crab stocks in the BSAI Crab*

*FMP and all 10 must have annually established OFLs. Three stocks (AI golden king crab, Pribilof Island golden king crab and Adak red king crab) had OFLs and ABCs recommended in the spring. The remaining stocks will have OFLs and ABCs recommended at this meeting. Specifications for the Norton Sound red king crab stock has been moved to coincide with the fall assessment cycle. The stock assessments for these stocks; as well as the economic summary chapter, were mailed to the SSC and copies are available at the meeting for reference.*

Diana Stram provided the staff report on this agenda item and answered questions from the Council. The AP and SSC gave its reports, and there was no public comment on this agenda item.

#### COUNCIL DISCUSSION / ACTION

**Ms. Campbell moved, which was seconded, to adopt the BSAI CRAB SAFE, and adopt the SSC's recommendations for ABC/OFL's, for EBS Snow Crab, Bristol Bay Red King Crab, Eastern Bering Sea Tanner Crab, Pribilof Island Red King Crab, Pribilof Island Blue King Crab, and St. Matthew Islands Blue King Crab.**

Ms. Campbell spoke to her motion, and stated her appreciation for all those involved and the time and deliberation put into the assessments. She noted that the recommendation to move assessment timing did not go as smoothly as hoped, and the recent recommendation of the SSC to go back to the June OFL specifications will give further time to examine stock assessment model and data.

**Motion passed 9/0, Dersham and Long absent.**

#### **C-4 Groundfish Management**

##### **BACKGROUND**

###### **(a) Stock Structure Workshop Report**

*More than 70 people participated in a workshop on April 16, 2013, which was designed to assist the Council in developing a policy for spatial management of finfish and shellfish stocks under its management authority. Workshop participants reviewed and discussed information on application for groundfish, crab, and scallop stocks of spatial management (i.e., subarea allocations of annual harvest specifications (OFL, ABC, and/or TAC)) discussed case studies where subarea allocations have/have not been adopted based on these discussions, the following recommendations were suggested for the Council to consider in developing policy.*

###### **(b) BS Sablefish TAC Apportionment**

*In April 2013, the Council reviewed a discussion paper to revise sablefish TAC apportionments in order to attain higher optimum yield under the 2 million mt cap on BSAI Groundfish TACs starting in 2014. The paper described two potential approaches to reapportion BS sablefish trawl TAC, which is allocated 50% of the total BS sablefish TAC under the BSAI Groundfish FMP. The trawl fisheries take less than 10 percent of that allocation, and the fixed gear fisheries take less than 60% of that allocation.*

*In April, the Council encouraged stakeholders to work together to identify additional potential management approaches to Bering Sea sablefish to increase yield. Industry members have convened twice and will provide a report at this meeting.*

(c) Plan Team Reports

*During their meetings on September 10-13, 2013, the BSAI and GOA Groundfish Plan Teams recommended proposed groundfish harvest specifications for 2014 and 2015. The Teams also considered numerous informational reports, including the Observer Program Annual Deployment Plan and Stock Structure Workshop which will be reported under other agenda items. Team recommendations for the next two fishing years are based on rollovers of the published 2014 final harvest specifications, which were adopted by the Council in December 2012.*

(d) Proposed Harvest Specifications

*The Council is scheduled at this meeting to recommend proposed BSAI and GOA groundfish harvest specifications for the next two-year period to notify the public of likely outcomes for Council action to set final harvest specifications in December 2013. Following this practice, 2014 annual harvest specifications were published in the Federal Register in February 2013 (GOA) and March 2013 (BSAI) and will start the groundfish fisheries in January 2014. Proposed harvest specifications for 2015 will be adopted at this meeting and are set equal to the 2014 annual harvest specifications. Any proposed Prohibited Species Catch (PSC) limits for halibut, red king crab, Tanner crab, opilio crab, and herring and their gear type and target fishery apportionments, should be adopted by the Council at this meeting so that the final rule, based on final harvest specifications from December 2013, is a logical outgrowth of the proposed rule. Final harvest specifications will be based on stock assessments included in the respective Groundfish Stock Assessment and Fishery Evaluation Reports for the BSAI and GOA, which will be released in late November 2013.*

Diana Stram gave a report on the Stock Structure Workgroup, Jane DiCosimo gave the staff report on Bering Sea Sablefish TAC Apportionment, both Diana Stram and Jane DiCosimo gave the Groundfish Plan Team reports, as well as briefed the Council on proposed harvest specifications. The AP gave its report, and the SSC had given its report earlier. Public comment was taken.

COUNCIL DISCUSSION/ACTION

**Mr. Henderschedt moved, which was seconded, to recommend the following process for determining spatial management of stocks/assemblages:**

- 1. As soon as preliminary scientific information indicates that further stock structure separation or other spatial management measures may be considered, the stock assessment authors, plan teams (groundfish, crab, scallop), and SSC should advise the Council of their findings and any associated conservation concerns.**
- 2. With input from the agency, the public, and its advisory bodies, the Council (and NMFS) should identify the economic and management implications and potential options for management response to these findings and identify the suite of tools that could be used to achieve conservation and management goals. In the case of crab and scallop management, ADF&G needs to be part of this process.**
- 3. To the extent practicable, further refinement of stock structure or other spatial conservation concerns and potential management responses should be discussed through the process described in recommendations 1 and 2 above.**

**4. Based on the best information available provided through this process, the SSC should continue to recommend OFLs and ABCs that prevent overfishing of stocks.**

Mr. Henderschedt spoke stating that the motion reflects recommendations from the AP, SSC and Plan Teams, looks at new management tools and ensures basic conservation measures and regulatory requirements such as setting OFLs and ABCs remains in the purview of the SSC.

He noted that it is necessary to clearly justify reasoning for spatial management, with the purpose not for Council debate, but to be informed as to what management measures, or suite of management tools might be most effective. The process will also give the Council the ability to take comment from the public in evaluating spatial findings: by the time there is a need to act, a proper action has been identified. Mr. Henderschedt answered questions of clarification, and there was discussion regarding how the motion would be set into procedure in the Plan Teams and SSC. Mr. Henderschedt noted that a flexible outline would need to be established, and while all the elements are already in place, the advisory bodies need to be more deliberate in addressing these issues. He emphasized that the motion would not change what they do, but adds to what they consider.

**Mr. Fields moved to amend the motion by adding a single word in the second paragraph: sociological. The sentence would read, "...should identify the economic, sociological and management implications..." The amendment was seconded.**

Mr. Fields noted that the Council clarified that there are a variety of sciences, but Council should rely on other sciences relative to policy decision. **The amendment passed without objection.**

Discussion continued on the main motion, and Mr. Henderschedt noted that this motion is a blueprint or checklist as to how to leverage all the knowledge and expertise of all the parts of the process. The final decision relative to ABCs and OFLs, is the SSC's. However, he noted, there is value in addressing spatial management issues at an earlier point in stock structure of the Plan Teams and SSC.

**The amended main motion passed without objection.**

C-4 (b) BSAI Sablefish

COUNCIL DISCUSSION/ACTION

Mr. Hull noted that after hearing from the trawl sector and IFQ sector and the staff reports and the split AP report, **he moved to take no action on this issue at this time, but to try and address the root cause in the fixed gear fleet through the IFQ committee.** His motion was seconded. He noted that the IFQ Committee could address allowing increased harvest in the sablefish fish fixed gear fleet through use caps and adding D class shares. Committee tasking will be addressed under the staff tasking agenda item. Mr. Fields noted there is a continued under harvest in the trawl sector and the species is being underutilized. **Motion passed without objection.**

C-4 (d) Proposed Harvest Specifications

COUNCIL DISCUSSION/ACTION

**Mr. Cross moved, which was seconded by Mr. Fields, to adopt BSAI ABCs, OFLs and TAC numbers for 2014/2015 as noted in ATTACHMENT 5 .** Mr. Cross outlined the changes that are

different from the Advisory Panel's recommendations, noting that the motion accommodates the state water fishery for Pacific cod. **The motion passed without objection.**

**Mr. Cross also moved, which was seconded, the Council adopt the PSC numbers from the action memo on pages 10-13.** Mr. Cross noted the numbers were rolled over from last year's numbers. **The motion passed without objection.**

**Mr. Cross moved to adopt the ABCs OFLs, and TACs for 2014/2015 for the Gulf of Alaska as recommended by the Advisory Panel.** (And included as ATTACHMENT 3 to these minutes.) **The motion passed without objection.**

**Mr. Cross also moved, which was seconded, the Council adopt the Halibut PSC apportionments on pages 10 and 11 from the action memo.** Mr. Cross noted these numbers are preliminary and will change depending on BOF actions, on completion of plan team deliberations in November, and any regulations that will have effects on halibut in the GOA. **The motion passed without objection.**

**Mr. Hull moved, which was seconded, that Council request the groundfish plan teams provide a discussion about incorporating data from the restructured observer program into stock assessments.** The motion was seconded. Mr. Hull spoke to his motion, and noted that there is interest in how data from the observer program is incorporated, given changes in discard information from previous years. He noted the motion is a general statement in order to give the plan teams flexibility as to how they want to plan that discussion. **The motion passed without objection.**

#### **C-5 (a) GOA Trawl Bycatch Management**

##### ***BACKGROUND***

*In June 2013, the Council directed staff to prepare a discussion paper covering four specific topics. The paper was mailed to the Council in early September 2013.*

*The first section is a review of the research themes that appear in recent peer-reviewed literature on quota-based fishery management. The discussion presented in the paper attempts to draw out the conclusions and assertions that are most applicable to the Gulf of Alaska's groundfish trawl fisheries. This literature review is not meant to be a comprehensive summary of all catch share-related research; rather, it focuses on work that has been completed since the Council last considered elements and options for a quota-based program. Subsections discuss the impact of quota-based management on economic outcomes, social considerations, ecological outcomes, and program design.*

*The second section provides a structured summary of the stakeholder proposals that had been presented to the Council as of June 2013. The elements of each proposal are outlined in a format that identifies how it would approach the Council's "Tier 1" decision points (allocation, area, duration, and transferability), to the extent that those aspects are addressed. Not all proposals were made with the intention of describing every aspect of a potential management structure; missing Tier 1 issues are omitted in those cases. Each summary also notes how the proposal would address the overarching goal of providing the fleet with tools to avoid or minimize prohibited species catch.*

*The third section examines the aspects of a groundfish management program where federal and State of Alaska decision processes are interrelated. Some GOA groundfish fisheries are also prosecuted in state waters, and some vessels fish in both state and federal waters. Also, the State manages separate fisheries for some GOA groundfish species – or may elect to do so in the future. The paper identifies points in the program design process where Council action would need to be coordinated with, or reactive to, State*

*decisions. The paper notes several design elements that would allow management and reporting aspects of the program to function as both State and federal agencies intend.*

*The final section attempts to outline the Council's role in developing a Community Fishing Association (CFA) program structure. The Council's vision for a CFA has not yet been defined, and the Magnuson-Stevens Act does not define CFAs. This paper frames the discussion around experiences with community-held quota in two other regions (Pacific, New England), as well as the MSA definition of a Fishing Community.*

Darrell Brannan and Sam Cunningham gave the staff report on this agenda item and answered questions from the Council. The AP and SSC reports were taken, and public comment was heard.

#### COUNCIL DISCUSSION/ACTION

Commissioner Campbell moved, and was seconded by Mr. Tweit:

**The Council requests that staff provide a discussion paper reviewing the program structure described below using the decision framework provided in the June 2013 'roadmap' document and the Council's purpose and need statement. The paper should evaluate whether and how the elements of this design address the objectives in the Council's purpose and need statement. The intent is to receive feedback characterizing: 1) how the fishery would operate under the new design; 2) how well it may meet the Council's stated objectives; and 3) which second-tier decisions are necessary to transform the program structure into alternative(s) for analysis. The paper should also include information on bycatch reduction results from other trawl catch share programs in the North Pacific and other regions.**

#### **GOA Trawl Bycatch Management Program**

##### **1. Bycatch management**

**The primary objective of this action is to improve incentives for PSC reduction and PSC management, achieved in several ways through this program design.**

- a. **Reduced PSC:** The Council intends to adopt a program to: (1) minimize Chinook salmon bycatch, and (2) achieve more efficient use of halibut PSC, allowing some efficiency gains to provide additional target fishery opportunity while leaving some halibut PSC savings in the water for conservation and contribution to exploitable biomass.
- b. **Duration of shares:** A portion of target species share allocations (maximum 25%) will be evaluated for retention based on achievement of performance targets relative to bycatch and other Council objectives after a set period of time (3 - 10 years). The time period and the criteria used to evaluate performance will be established in regulation.
- c. **Cooperative management:** A system of cooperative management is best suited to managing and reducing bycatch (such as, hotspot program, gear modifications, excluder use, incentive plan agreements) while maximizing the value of available target species. Cooperatives are intended to facilitate a flexible, responsive, and coordinated effort among vessels and processors to avoid bycatch through information sharing and formal participation in a bycatch avoidance program.
- d. **Gear modification. Option:** gear modifications for crab protection.

##### **2. Observer coverage**

**All trawl catcher vessels in the GOA will be in the 100% observer coverage category.**

**3. Areas**

**Western Gulf, Central Gulf, West Yakutat**

**4. Sector allocations of target species and PSC**

**Allocations for the trawl CP and CV sectors for WG and CG Pacific cod (Am 83), CGOA rockfish program (Am 88), and GOA pollock (Am 23) are maintained. Am 80 target sideboards and GOA flatfish eligibility are maintained. Allocate halibut and Chinook salmon PSC caps between the CP and CV sectors.**

**5. Allocated species**

**Target species are pollock and Pacific cod. PSC species include halibut and Chinook salmon.**

**6. Program structure for trawl catcher vessel fishery**

**Voluntary cooperative structure**

- a. **Allocate target species (pollock, Pacific cod) at the cooperative level, based on aggregate catch histories associated with member vessels' LLPs.**
- b. **Apportion halibut PSC and Chinook salmon PSC limits to each cooperative on a pro rata basis relative to target fisheries of GOA trawl vessels in the cooperative such as, pollock Chinook salmon PSC cap divided based on pollock landings; non-pollock Chinook salmon cap divided based on non-pollock landings (excluding rockfish); halibut PSC apportioned in proportion to the cooperative's allocation of target species.]**
- c. **Participants can choose to either join a cooperative or operate in a limited access pool [sector-level, non-transferable target allocations and PSC]. Harvesters would need to be in a cooperative with a processor by a specified date prior to the season to access a transferable allocation of target species and PSC.**
- d. **Initial (2 years) cooperative formation would be based on the majority of a license holder's historical landings (aggregate trawl groundfish deliveries, excluding Central GOA rockfish harvested under a rockfish cooperative quota allocation) to a processor.**
- e. **Each cooperative would be required to have a private cooperative contract. The contract would require signatures of all harvesters in the cooperative and the processor (option: and community in which the processor is located). The contract would include clear provisions for how the parties may dissolve their contract after the first two years. If a harvester wants to leave that cooperative and join another cooperative, they could do so if they meet the requirements of the contract.**
- f. **Additional contract elements (such as, bycatch management, active participation, mechanism to facilitate entry, community provisions) may be required to ensure the program is consistent with Council objectives.**

**Option: Each processor controls a portion of PSC within a cooperative and negotiates terms of access through private agreement. The processor would activate the incremental PSC through NMFS, making it accessible to the cooperative. PSC made available by these agreements cannot be used by processor-owned vessels.**

**7. Fishery dependent community stability**

- a. **Consolidation limits**
  - **Vessel caps and limits on the percentage of the total allocation that a person can hold (accessible only through a cooperative).**
  - **Processor caps in each area (WG and CG).**

- b. **Target species quota would be regionalized (WG or WY/CG designation) based on historical delivery patterns.**

**Option: Target species CG quota that has historically been landed in Kodiak would have a port of landing requirement to be delivered to Kodiak; CG quota not historically landed in Kodiak would be regionalized (WG or WY/CG).**

- c. **Require individuals or entities to meet fishery participation criteria in order to be eligible to purchase an eligible trawl license with associated history.**

#### **8. Transferability**

- a. **(Annually) Full transferability for annual use within the cooperative. Cooperatives can engage in inter-cooperative agreements on an annual basis.**
- b. **(Long-term) The LLP is transferable, with the associated history of the target species (which, when entered into a cooperative, brings with it a pro rata share of PSC). Target species history is severable and transferable to another eligible license.**

#### **9. Gear conversion**

**Upon further development, the Council could include gear conversion provisions that allow Pacific cod trawl allocations to be fished with fixed gear, although any harvest would continue to be deducted from the vessel's annual trawl quota account and would not affect the fixed gear Pacific cod sector allocations.**

Ms. Campbell spoke to the motion, noting it took the form of an outline of a potential development design that might work. She noted the analysed proposals varied, and the shared elements are incorporated into this framework program design. The Council can direct public comment and focus input on elements of this program design. She continued, stating that the primary objective of this action is to provide incentives for PSC reduction and improve PSC management. A cooperative structure is the best strategy for achieving that objective, for sharing information, providing a way for cooperative agreements, and creating an avenue of formal participation.

Ms. Campbell noted she does not intend to revisit sector allocations; where PSC isn't allocated, decisions would need to be made. Allocations of both target species and PSC will be made to cooperatives. Allocated target species will be limited to Pacific cod and pollock. She continued, stating PSC avoidance and cooperation is not maximized in a race for fish, which is why the motion goes with a program that allocates target species. Secondary species will continue to be managed under MRAs.

She continued, noting that it is up to the Council to help define the cooperative management structure, cooperative formation requirements and other elements that need to be included in cooperative agreements, as well as reporting requirements to monitor progress. Ms. Campbell further defined elements of the motion and highlighted specific provisions, and answered questions of clarification from the Council.

Mr. Cross thanked the Commissioner for the motion and the direction, and noted that the framework is open for comment from industry and stakeholders. Mr. Dersham stated that it is not yet time to involve the Alaska Board of Fisheries, but that the motion states our concerns and the BOF will need to be consulted at a later date as the options are refined. Mr. Tweit noted that hard caps do not achieve the best

objectives, and that this motion provides a better way and a structure to implement and refine tools to reduce bycatch.

Mr. Hull stated that there is ample opportunity for the public and stakeholders to comment on elements that may or may not work and to offer input. Mr. Fields echoed that it is an opportunity for involvement and development by stakeholders. He noted he remained concerned about the economic health of Kodiak. Mr. Henderschedt stated that this motion has a platform on which the industry, Council, and stakeholders can work together to develop measures to manage bycatch.

**The motion passed with Dr. Balsiger abstaining.**

### **C-5 (b) GOA Trawl data collection**

#### *BACKGROUND*

*The Council reviewed the GOA Trawl Data Collection RIR/IRFA at the June meeting, selected a preliminary preferred alternative, released the document for public review, and scheduled final action on the proposed amendment for October 2013. This action will collect employment data and specific cost data associated with the harvesting and processing of GOA trawl caught groundfish. The Council's stated intent is to implement this data collection program and collect data before fishing begins under the proposed "GOA Trawl Bycatch Management" program. Implementation of data collection before that program is implemented would provide the Council, analysts, and the public better historical information to assess the impacts of the proposed amendment.*

*At this meeting the Council is scheduled to take final action. Based on the preliminary preferred alternative, the data collection program would apply to harvesters and processors that catch or process groundfish harvested with trawl gear from the Central or Western GOA. Trawl catcher vessels would be required to report information on the harvesting crew and crew compensation. In addition, the vessel owners would be required to report information on fuel cost and usage, and gear purchases that are fully expensed during the year. Catcher/processors that currently submit the Amendment 80 EDR would be required to submit additional information that identifies their harvesting crew and the crew's compensation. The one GOA Trawl catcher/processor that is not currently required to submit the Amendment 80 EDR would be required to complete that annual survey. Finally, shorebased and floating processors would be required to submit information on the number of processing crew, man-hours, and payments to processing crews (excluding managers, foreman, and other non-processing employees). The preliminary preferred alternative would also include the number of employees and payments to those employees, for foreman, managers, and other non-processing employees at the plant. Kodiak based processors would also be required to submit data on their use of electricity and water supplied by the community.*

Darrell Brannan gave the staff report on this agenda item and answered questions from the Council. The AP gave its report, and public comment was taken.

#### **COUNCIL DISCUSSION/ACTION**

**Mr. Tweit moved, which was seconded, that the Council adopt Alternative 2 as its preferred alternative, and the Council deems proposed regulations that clearly and directly flow from the provisions of this motion to be necessary and appropriate in accordance with section 303(c). The Council authorizes the Executive Director and the Chairman to review the draft proposed**

**regulations when provided by NMFS to ensure that the proposed regulations to be submitted to the Secretary under section 303(c) are consistent with these instructions.**

Mr. Tweit spoke to his motion, noting that it marks a new step in the Council's ability not only in implementing the EDR but setting a model for future in gathering information before major action. The cost to industry comes before the economic gains and efficiency, but the Council has been structured to minimize reporting burden to industry. He noted the verification process is to be included in the program and will be completed by respective agencies for those programs. Mr. Tweit answered questions of clarification from Council members. In regards to the second part of the motion, Mr. Tweit noted that draft proposed regulations that are not 303(c) regulations would be proposed by NMFS under its authority at section 305(d). Also, the Executive Director and the Chairman would retain their ability to withhold submission of the FMP amendment and/or proposed regulations and take action back to the Council if the Executive Director and Chairman determine that the section 305(d) draft proposed regulations are not in keeping with Council intent for the action.

Mr. Cross noted that he supports the motion and that the Council is getting ahead of the curve. He is concerned about the definitions of CP's and harvesting crew.

Ms. Kimball spoke to the national standards and noted that the motion would provide better data than the Council would have access to otherwise, which is the intent of National Standard 7.

Ms. Kimball requested to discuss confidentiality, as brought up by the Seafood Coalition, under the staff tasking agenda item.

**Motion passed unanimously by roll call vote.**

Mr. Tweit requested the Council support the AFSC efforts in developing volunteer surveys focused on community data, and be kept informed on the project.

### **C-5 (c) GOA Rockfish Chinook Cap Rollover**

#### ***BACKGROUND***

*In June 2013, the Council took final action on management measures to limit prohibited species catch (PSC) of Chinook salmon in the Gulf of Alaska (GOA) non-pollock trawl fisheries, and set an annual PSC limit of 7,500 Chinook salmon in the Western and Central GOA. Attainment of this hard cap will close the fishery. The hard cap is apportioned annually for the three identified trawl sectors as follows:*

- Central GOA Rockfish Program Catcher vessels: 1,200 Chinook salmon*
- Non-Rockfish Program Catcher vessels: 2,700 Chinook salmon*
- Catcher/Processors: 3,600 Chinook salmon*

*At the time of final action, the Council initiated a related action that will consider allowing unused Chinook salmon PSC to be rolled over from the Central Gulf of Alaska Rockfish Program's catcher vessel (CV) sector to support other CV fisheries that occur later in the year.*

*A draft of the analysis was mailed to the Council in mid-September 2013. The Executive Summary is attached as Item C-5(c)(1). New information in this document is primarily located in the RIR. The EA summarizes what was presented in June 2013, since none of the alternatives under consideration would*

*allow an annual amount of Chinook salmon PSC that is greater than the levels previously analyzed. An IRFA will be completed after the Council identifies a preliminary preferred alternative for this action.*

*The ‘no action’ alternative would result in a final recommendation that is identical to the Council’s preferred alternative for the related action, as voted on at the June 2013 meeting. If an action alternative is selected, it would be added to the Council’s final recommendation for management measures to address Chinook salmon PSC in the Central and Western GOA non-pollock trawl fisheries.*

*Selecting the ‘no action’ alternative would apportion 1,200 Chinook salmon PSC to the CV sector of the Central GOA Rockfish Program fishery, resulting in a 2,700 Chinook PSC annual hard cap for all other non-pollock CV activity. Both CV sectors would retain the ability to earn a “buffer” of additional PSC for the year following one in which that sector performed to a defined standard of Chinook avoidance.*

*Alternatives 2 and 3 would make some amount of the Rockfish Program CV sector’s unused Chinook PSC available to the non-Rockfish Program CV sector on October 1. That amount would depend on how much of the Rockfish Program CV sector’s 1,200 Chinook apportionment has been used by that date; these alternatives and their suboptions differ in how much of the unused PSC may be rolled over. Under either alternative, all sectors would again remain eligible to earn a PSC buffer in the following year if their Chinook avoidance meets a certain standard.*

*Alternative 4 would not limit the amount of unused Chinook PSC that could be rolled over from the Rockfish Program CV sector to other CV fisheries, nor would it set a specific date on which the rollover would occur. If the rollover is to occur before the end of the Rockfish Program fishery (November 15), all Rockfish Program cooperatives must have “checked out” of the Program fishery. In addition, selecting Alternative 4 would make the Rockfish Program CV sector ineligible to earn a PSC buffer by achieving a certain Chinook avoidance standard in the preceding year.*

*This “trailing” analysis primarily considers whether or not incorporating a Chinook PSC rollover might reduce the efficacy of the “uncertainty pool” mechanism that the Council has already selected for its final recommendation. The document also examines the extent to which the Council’s current preferred alternative might relatively disadvantage some CV fisheries relative to others.*

Sam Cunningham gave the staff report on this issue and answered questions from the Council. The AP gave its report, and public comment was taken.

#### COUNCIL DISCUSSION /ACTION

**Ms. Kimball moved, which was seconded, to release the analysis for public review, with the addition of adopting Alternative 5 as the Preliminary Preferred Alternative: Rollover all Chinook PSC but 50 or 100 fish remaining in the Rockfish Program CV Chinook cap on October 1. Any salmon remaining when the rockfish fishery closes will be released to the other CV non-pollock fisheries on November 15. No uncertainty buffer would apply to the rockfish program CV sector.**

Ms. Kimball spoke to the motion noting that providing a PPA will focus public comment in the future and meets the Council’s objectives. She noted that it is critical to provide a rollover within the cap that Council set at the June 2013 meeting. Ms. Kimball answered questions of clarification. It was noted that the Council is not constrained by a PPA and there was general discussion regarding choosing a PPA so early in the process, but it was generally agreed that doing so can focus public comment. Ms. Kimball noted that this document can stand alone, and be included with a larger package at a later date.

**The motion passed without objection.**

## **C-6 Bering Sea Salmon Bycatch**

(a) *SeaShare report on the salmon donation program*

*In conjunction with discussions of salmon bycatch measures, the Council requested information on the SeaShare prohibited species bycatch donation program. A document prepared by SeaShare providing information on program function, what portion of salmon and halibut are distributed within Alaska and other information as relevant to discussion of program participation is attached as Item C-6(a)(1). Jim Harmon will be available to provide a presentation of the report and program overview at the meeting.*

(b) *Review Chinook Salmon Report*

*In April 2013, the Council requested that staff compile a report including the following general elements (the full Council motion from April is attached as Item C-6(b)(1)):*

- 1. A review of the status of Alaska Chinook salmon stocks, including subsistence, sport, and commercial fishery restrictions and whether escapement goals have been met.*
- 2. An updated adult-equivalency (AEQ) analysis incorporating the most recent genetic data on stock of origin (2011) and where possible PSC harvest rate analyses for Chinook salmon stocks. It was further requested that the AEQ analysis include an estimate of the impacts of bycatch at the current cap levels (47,591 and 60,000) and at actual bycatch levels in 2011 and 2012.*
- 3. Measures of fishing performance including sector and vessel specific bycatch rates by season and estimated use of excluder devices on trawl nets for salmon avoidance.*
- 4. Description and/or presentation of the incentive mechanisms contained within the IPAs.*

*A staff discussion paper which addresses the first three items of the Council's request was made available on September 17<sup>th</sup> and is attached as Item C-6(b)(2). Representatives from the sector specific incentive program agreements (IPAs) will provide information to the Council during the meeting to address the 4<sup>th</sup> request. These reports on bycatch management performance measures are being considered at this time in the context of the ongoing interest and actions in front of the Council to minimize salmon bycatch and to allow an opportunity to evaluate this issue with updated information on directed salmon fisheries and with the most recent genetic information, AEQ analysis and examination of individual vessel performance. Information included in the staff report provides both an update of what was previously available to the Council at final action in 2009 for Amendment 91 (Bering Sea Chinook PSC Management Measures action) as well as information and analyses that were not available in the 2009 analysis. The latter includes calculated AEQ impact rates by stock grouping at current levels and cap levels, vessel-specific bycatch comparison, and voluntary excluder usage.*

Diana Stram gave the staff report on this agenda item. John Linderman of ADF&G updated the staff on (?), John Gruver industry report on the Inshore Salmon Savings Plan, Joe Bursch, Amanda Sterne and Stephanie Madsen gave the APA Chinook Incentive Plan, The AP gave its report, and public comment was heard. Jim Harmon gave an update on the Sea Share salmon donation program.

## **COUNCIL DISCUSSION/ACTION**

**Ms. Campbell made the following motion, which was seconded by Mr. Hull:**

**The Council requests a discussion paper that evaluates the regulatory changes needed to incorporate Bering Sea chum salmon bycatch avoidance into the Chinook salmon Incentive Plan Agreements (IPAs). The objectives of this action are to prioritize Chinook salmon bycatch avoidance, while preventing high chum salmon bycatch and focusing on avoidance of Alaska chum**

salmon stocks, and allowing flexibility to harvest pollock in times and places that best support those goals. The paper should include an evaluation of the necessary changes to the IPA objectives and reporting requirements in regulation, and identify both the effects of such a change and whether there are elements of a rolling hotspot system (RHS) that the Council should consider retaining or adding to the regulations that define IPA requirements (such as, institutionalizing fleet-wide information sharing; requiring an RHS within the IPA; establishing an adjustable floor on the base rate, etc.).

The Council requests the discussion paper also evaluate possible measures to refine Chinook salmon bycatch controls in the Bering Sea pollock fisheries. These include:

- 1) Requiring modification of IPAs to include restrictions or penalties targeted at vessels that consistently have the highest Chinook salmon PSC rates.
- 2) Requiring use of salmon excluder devices at times of year in which Chinook salmon encounter rates are relatively high (regulatory or through IPAs).
- 3) Requiring a lower base rate beginning September 1 (regulatory or through IPAs).
- 4) Provisions to shorten the pollock season to end when pollock catch rates significantly decline and Chinook salmon PSC rates increase in October (regulatory or through IPAs).
- 5) Closing the fishery to a sector (or cooperative) if the sector's (or cooperative's) weekly Chinook salmon PSC rate exceeds a specified rate in September and/or October (regulatory or through IPAs).
- 6) Changing the accounting of the Chinook salmon PSC limit to begin with the start of the pollock B season (June 10) and continue through the A season of the subsequent year.

This evaluation should also include information on potential revisions to the annual reporting requirements, combined for chum and Chinook salmon measures, based on suggestions in the Council's October staff report, such as, frequency of excluder use, variability in individual vessel bycatch rates over the season and years, and numbers and rates of bycatch by month.

The Council requests that the AEQ and impact rate analysis be conducted on a regular basis, using updated genetic information and actual bycatch levels, and presented to the Council as a regular report. The Council also recommends that the observer program evaluate and implement ways to improve the sample size of Chinook salmon length data, to improve the confidence in estimates of salmon ages spatially and temporally for AEQ analyses.

Ms. Campbell spoke to the motion, noting that it is appropriate to combine chum and Chinook bycatch because measures taken to reduce one species may affect another. The Pollock sectors have developed a proposal and it is up to the Council to provide further direction. Ms. Campbell spoke to the rolling hot spot program and noted that it doesn't prioritize Western chum or Chinook. Chum avoidance through and IPA gives more flexibility and provides the ability to adapt to changing conditions quickly, allows for increased priority of Chinook salmon into the fall season. She noted her expectation of staff is to meet with affected stakeholders and NMFS as they draft the next discussion paper and moves forward with adding chum into the IPAs.

She highlighted that there are multiple years of historical salmon low returns and it is the Council's responsibility to make changes to the salmon bycatch reduction plan. She noted that a critical part of Amendment 91 is that incentives are more important than the cap. She would like to have more information of difference of bycatch rates of individual vessels, and information on excluder use and the choices being made. Ms. Campbell outlined specific details and answered questions of clarification.

**Mr. Henderschedt moved to amend provision 1, add “relative to other vessels fishing at the same time” at the end of the sentence. The amendment was seconded.**

Mr. Henderschedt noted that measuring opportunity, fitting into a rotation schedule, and fishing in October or not, has been discussed as choices that should be reviewed in the discussion paper. However, he noted it should not be limited to just October fishery, and choices should be relative to how other vessels fish at the same time, under the same conditions throughout the season. He stated that the discussion should not focus only on October, but decision making throughout seasons. There was discussion regarding the levels of decision making. **The amendment passed 6/5, with Balsiger, Campbell, Fields, Hull and Long in opposition.**

**Mr. Henderschedt moved to amend provision 6: to  
option a, Begin with the start of the pollock B season, June 10  
option b, October 1, and continue through the A season, (or September 30 and continue through the A season of the subsequent year. )  
The amendment was seconded by Mr. Tweit.**

Mr. Henderschedt spoke to the motion, noting that the chances for unintended consequences are high. In 2011, one of the things that drove the bycatch in October was efforts to avoid chum. He stated that a way to avoid trade-off is to time the chum fisheries with when the Chinook runs are lowest.

**Mr. Fields moved to amend the amendment, which would add an Option C, September 1, and continue through A season of the subsequent year. The amendment was seconded.** Dr. Stram reviewed catch information and rates, and answered questions from the Council as to how the calendar dates would affect the action. **The amendment to the amendment passed without objection, as did the amendment.**

**Mr. Fields moved to amend the second to last paragraph adding, “ In addition, the staff’s evaluation should include a discussion of the feasibility of reporting contributions to the Sea Share program in numbers of fish. The motion was seconded.** Mr. Fields spoke to his motion stating that is burdensome for SeaShare to report numbers of fish, but from the production side, it would be much easier to do so. Mr. Fields noted that the processors can note how they contribute to the program. There was discussion regarding voluntary reporting, and charity vs. bycatch management. While all agreed that SeaShare is a valuable program, there was discussion over adding another requirement to a charitable donation. Mr. Hyder noted that the information is already available in pounds. Discussion continued, and **the amendment failed, 3/8, with Hyder, Fields and Olson voting in favor.**

Mr. Hull commented that the presentation, testimony, and discussion paper has been very informative, and thanked the staff and public. He noted he remains very concerned about the salmon stocks at the low levels and thinks that the motion is the best and quickest way to take action and the best path forward.

Mr. Henderschedt noted the motion clearly articulates the Council’s priorities relative to bycatch management, including how IPAs can improve. He acknowledged that there have been successes to date, and there are further improvements to be made. Mr. Fields also thanked the industry, public and stakeholders. He noted the Council is not moving along on status quo track, and is supporting the motion because the Council is moving toward regulatory change. Mr. Fields noted he will be considering in the future a cap on chum salmon.

**The amended main motion passed without objection.**

## **D-1 a Aleutian Islands Pacific Cod Processing**

### **BACKGROUND**

*In April 2013, the Council reviewed a discussion paper addressing the implications of pending SSC action to set separate ABCs in 2014 for Bering Sea and Aleutian Islands Pacific cod. In addition, the discussion paper included an updated summary of the December 2009 AI Pacific cod processing sidebar analysis. After reviewing that discussion paper, the Council tasked staff to prepare a new discussion paper to evaluate the impacts of reserving a portion of the AI Pacific cod directed fishing allowance in Area 541/542 for the catcher vessel sectors with a regionalized delivery requirement to shoreplants in the AI.*

Jon McCracken gave the staff report on this agenda item and answered questions from the Council. The AP gave its report, and public comment was heard.

### **COUNCIL DISCUSSION/ACTION**

**Mr. Cross moved to postpone further action on this issue until the February 2014 or a time to be determined by Council staff. The motion was seconded.** Mr. Cross noted that this issue needs to be addressed because the AI cod fishery is important for the communities of Adak and Atka, but there is too much information missing to continue. Information from TAC setting and decisions from Alaska BOF still need to be made and there is no clear direction as to how Steller sea lion decisions may impact the fishery. He stated that the Council should wait to continue work on the discussion paper until other variables are resolved. There was discussion regarding timing, and it was generally agreed to continue discussion on timing under the staff tasking agenda item. Dr. Balsiger noted that a date should be specified so the agenda item remains in consideration. Mr. Fields noted he will reluctantly support, stating that the issue should not be bounced around for many years. **The motion passed without objection.**

## **D-1 (b) GOA Sablefish Pots**

### **BACKGROUND**

*A proposal to amend the regulations implementing the sablefish Individual Fishing Quota (IFQ) Program to redefine legal gear in the Gulf of Alaska (GOA) was recommended to the Council by its IFQ Implementation Committee and Advisory Panel (AP) during the 2009 call for IFQ proposals. In February 2010, the Council requested a discussion paper on this proposal to allow the use of pots to retain sablefish IFQs in the GOA to be scheduled after Council action was completed on several other higher priority proposals. The Council also decided to appoint a gear committee to advise it on a wide range of management issues related to the proposed action.*

*In April 2012, the Council approved the formation of a gear committee composed of affected stakeholders to assist in the development of the requested discussion paper and make recommendations to the Council.*

*In June 2013, the Council reviewed a draft discussion paper that was prepared by staff without the benefit of committee guidance on the above issues to move the proposal forward. The Council issued a call for nominations for a Gear Committee to be comprised of persons who may be affected by potential deployment of single or longline pots in the GOA sablefish IFQ fishery. The Council charged the committee with developing implementation strategies to allow the use of pots in the GOA sablefish IFQ fishery to mitigate negative impacts of whale depredation on sablefish caught on longline gear. The committee will assist staff in expanding information in the next draft of the paper on a variety of topics*

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*related to the use of sablefish pot gear in the Gulf. Agency staff with expertise on management of the sablefish IFQ fishery, marine mammal depredation and gear avoidance techniques, and sablefish biology, surveys, and stock assessments will assist the committee.*

Jane DiCosimo gave the staff and committee report on this agenda item. The AP gave its report and public comment was taken.

COUNCIL DISCUSSION/ACTION

**Mr. Hull moved, which was seconded by Mr. Dersham, to have the staff develop an expanded discussion paper on use of pots of in the GOA sablefish IFQ fishery, and that the analysis include the topics of concern and recommendations identified in the minutes of the September 30, 2013 GOA Gear Committee. In addition to the topics brought forth by the Gear Committee, the following topics should also be included for analysis:**

- **The cost of gear conversion from longline to pot gear**
- **Vessel demographics: vessel size by area and Quota Share size by area**
- **Halibut bycatch by different pot configurations**
- **Information on the biodegradability of twine used for escape ports at sablefish fishing depths**
- **A wider range of gear location methods than only AIS as found in the committee report.**

Mr. Hull noted that there was a consensus in the Committee to find a way to make pot fishing feasible for sablefish in GOA. He noted his intent with having a discussion paper draft was to have a problem statement and options for analysis. Discussion ensued regarding the bulleted points noting that some of them are not very specific. Mr. Hull encouraged input through the Committee. **The motion passed without objection.**

**D-2 Staff Tasking**

Chris Oliver reviewed the items of importance that have been flagged for discussion throughout the meeting. Jane DiCosimo discussed scheduling D2(f) Halibut/Sablefish IFQ proposals. Diana Evans gave the Ecosystem Committee report and answered questions from the Council. Lori Swanson gave the AP report, and public comment was taken. Mr. Oliver reviewed the 3 meeting outlook.

COUNCIL DISCUSSION/ACTION

**Mr. Fields moved, which was seconded, to approve the minutes of the previous meeting. Motion passed unanimously.**

**Steller Sea Lion Issues**

Mr. Tweit noted that it is uncertain that the Council would receive a draft bi-op before the February meeting, but that it may be prudent for the Council Chairman and Executive Director to track the development. If issues arise, the SSL Mitigation Committee could meet prior to the February meeting for review, or if there are materials available the Committee could review and to provide recommendations.

**Bering Sea Canyons**

It was generally agreed that due to the shutdown, the Bering Sea Canyons Workshop needs to be postponed, and that it is more important to have a good workshop and a meaningful one than it is to have at the present time. Mr. Henderschedt noted the workshop should be rescheduled and it is not necessary to gather more data for the workshop, but to evaluate what is now known.

#### GOA Trawl Bycatch

Mr. Olson noted that the issue should be brought back at the April meeting, as well as hosting a Community Fishing Associations' workshop to discuss the proposal and solicit input and benefit from the expertise of other communities who have implemented community protections. There was discussion regarding appropriate times for outreach efforts. It was generally agreed that the Chairman and Executive Director would discuss scheduling options and work with staff to include interested stakeholders in a workshop during the February meeting in Seattle.

#### Amendment 91

Mr. Olson noted that April would be the best time for final action for the amendment. Mr. Fields noted that the Council should be prepared to develop an outreach plan, and as information and opportunities develop for outreach, the Council should take advantage and participate in outreach. It was agreed that the Council would look for appropriate outreach opportunities.

#### Halibut Use Caps in Sablefish Fishery

Mr. Hull reviewed the IFQ Implementation Committee tasking, and recommended holding a meeting prior to the December Council meeting to review proposals. Mr. Hull briefly outlined the four proposals that would be tasked for review by the committee. It was generally agreed the committee meeting would be held the Monday or Tuesday before the Council meets in December.

#### MSA Reauthorization

Mr. Olson noted that the Council will continue as outlined from the Council Chair's Committee process, and may need to form an executive committee to form a response to a specific issue. Mr. Olson noted the Council may look for other opportunities to formalize a Council position.

#### Observer Advisory Committee

Mr. Hull reviewed issues that the OAC will be discussing over the next few meetings, and reviewed tasking specifics. He noted the OAC will not need to meet prior to the December council meeting. Mr. Hull answered questions regarding specific issues. Dr. Balsiger noted that the Observer staff will be busy preparing for the December meeting, but other issues that need comment can be addressed as necessary, and it is not necessary to have an OAC review.

#### Ecosystem Committee

Mr. Tweit moved, which was seconded, the following:

**1. The Ecosystem Committee is tasked with further development of a vision statement for maintaining productive ecosystems and sustainable long-term fisheries that would incorporate the components described in the Committee minutes. The Committee should provide the Council with an analysis of the respective value of an ecosystem-based fishery management framework (refining our current management approach) in contrast to a more comprehensive ecosystem-based**

**management framework that includes additional factors and considers social-ecological systems. The Committee should include an evaluation of the implications of each approach for both near-term and long-term Council actions.**

**2. The Council requests a history of the development of the PSEIS ecosystem-based management policy during the presentation of the PSEIS SIR.**

**3. The Ecosystem Committee should track the following:**

- a) Development of a PSSA designation in the AI.**
- b) Funding levels for research in the Arctic, relative to impacts to ongoing research and stock assessment work in the BSAI and GOA.**
- c) The development of the Bering Sea FEP discussion paper.**
- d) Bering Sea canyons and coral conservation issues (including revisiting the discussion of research and conservation closures following the BS canyons workshop).**

Mr. Tweit spoke to his motion, noting that the Committee noted a vision statement is necessary to move forward and provide guidance for ecosystem based management. Mr. Tweit reviewed the Ecosystem Committee's discussion regarding different options and components. There was general discussion, and Mr. Tweit noted that the Committee could meet prior to the December meeting, and further define a vision statement to focus the Council's recommendations. **The motion passed without objection.**

#### Charter Halibut Management

Mr. Dersham updated the Council on the Charter Halibut Committee, and noted that it will be meeting two times before the December meeting. He reviewed tasking for the committee, and noted that the intention is to be able to make recommendations to the Council in December on Halibut Management, regardless of the management structure of GHF or CSP.

#### Data Confidentiality in the Limited Access Privilege Programs

Mr. Henderschedt discussed the proposed rule having to do with the confidentiality of data. He noted that the Council has a vested interest in data quality and a collaborative and cooperative approach to collecting industry data. He requested the Council provide a letter to NMFS that could reflect the Council's interests. Ms. Campbell noted that the State of Alaska may have concerns should NMFS take a different approach to the data confidentiality, because the state has specific regulations relating to fisheries and release of records.

#### AI Cod Processing

It was generally agreed that this agenda item would be agendaed in February.

#### Red King Crab Proposal

Mr. Olson noted the Council may want to put a proposal on the agenda for June 2014 in Nome, Alaska. Hearing from a broader set of stakeholders would benefit the process. Mr. Fields noted the issues are related to an LLP recency issue as well as elimination of the exemption of vessels 32' and under to have an LLP. Mr. Tweit noted that a background document related to the issues would be helpful.

#### CDO proposals

**Mr. Fields moved the Council initiate a discussion paper adopting a problem statement and considering proposed regulatory changes for exemptions that will: 1. Promote the development of a CDQ village directed cod fishery. 2. Allow CDQ and IFQ halibut harvesters, under 46' in length, to retain CDQ Pacific cod in excess of 20% MRA. The motion was seconded.**

Mr. Fields noted that he is talking about a class of vessels for the recommendations. Mr. Tweit noted he will be supporting the motion and will be paying attention to VMS requirements. He noted it is a creative and useful step forward. Mr. Olson noted that this is not an allocation issue, and will be supporting the issue. **The motion passed without objection.**

*Flatfish Flexibility*

Mr. Henderschedt noted the Council should be prepared to adopt ABC buffers. Council needs to establish what portion of the balance between the ABC and TAC of those species would be available through flatfish flexibility program, and would need to address the issue at the annual specification process in December.

*GOA Pot Cod Fishery*

**Mr. Fields moved to request a brief discussion paper that evaluates changes in participation, harvest patterns, and permit use in GOA pot cod fisheries since implementation of LLP reduction. The motion was seconded.** Mr. Fields spoke to his motion noting that the Council heard in public comment that it is an issue of concern to that gear group. **The motion passed without objection.**

Chairman Olson announced appointments to the Charter Halibut Committee, SSC and noted that they will be soliciting nominations for the AP and SSC in the Newsletter. The Chairman thanked those for participating, and the meeting adjourned at 12:41 pm.

# MEETING ATTENDEE SIGN-IN SHEET

October, 2013 N.P.F.M.C. MEETING

PLEASE REGISTER ATTENDANCE FOR MEETING RECORDS

PLEASE PRINT - THANK YOU!

NAME	AFFILIATION
Frank Kelly	City of WMA/Alaska
Heather McCarty	McCarty & Assoc. Inc.
Stephen Taufen	Groundswell Fisheries Movement
Simone Swetz Jr.	City of St. Paul
BRENT PAINE	UCB
Dale Tremaine	Sea Alaska
Jon Standaert	Deep Sea Fishermen's Union
Bob Olsen	FWA-Seattle
Jon Warranduk	Oceanq
Todd Loomis	Ocean Peace, Inc.
Jeff Stephan	UFMA
Steven Mayall	EPHC
Danna Puhar	Arctic Station
CRASH LOWENBERG	BSPEC
Mark Upton	US Secretary
Kris Nerosz	Tenile Seafoods
Vince O'SHEA	PSPA
Michael Lako	Alaska Observers Inc.

# MEETING ATTENDEE SIGN-IN SHEET

OCT

, 2013

N.P.F.M.C. MEETING

PLEASE REGISTER ATTENDANCE FOR MEETING RECORDS

PLEASE PRINT - THANK YOU!

NAME	AFFILIATION
Lauri Thompson	Alaska Salmon Alliance
Jan Standaert	Deep Sea Fishermen's Union
PAUL MacGREGOR	AT-Sea Processors Assn.
BL Alveron	FVUA - Seattle
Arnold Dryan	Access Alaska
Jerry Minge	PPSI - PPLD
Pat H. Bur	White Mountain / Kanawest Inc.
Linda Kozak	Kozak + Assoc.
Molly Dixoner	ASOC
Lauri Roberts	APICDA
Becca Robbins Gislair	VRDFA
Chuck McCallum	GOAC3
Heather Mann	MTC
Peta L. Bu	WHTA
Charles Saichen	ER & R
Mark F. Van	US Shoppers
Bern Stewart	Peninsula Fishermen's Coalition
Grey Koczicka	K'm Salmon Mgmt Working Group

# MEETING ATTENDEE SIGN-IN SHEET

OCT, 2013 N.P.F.M.C. MEETING

PLEASE REGISTER ATTENDANCE FOR MEETING RECORDS

PLEASE PRINT - THANK YOU!

NAME	AFFILIATION
TERRY HAINES	FISHHEADS
JOE PLESHA	TRIDENT
GLENN REED	PSPA
Rob Sanderson Jr	CCTHITA
SINCLAIR WILT	WESTWARD SEAFOODS
Mark Vpton	US Seafoods
MARCOS ALDEN	WESTWARD FISHING
Pete G. Burr	Kurud Id
Ray/Rush	KRSMWG
PAUL BEANS	MTN. VILLAGE
Matthew W. Key	Mt. Village
Charlotte Weaver	Mountain Village
Sylvia Ettefah	Unalaska Fleet Corp
Loren Peterson	Azacharak Village Corp.
Mike Szymanski	FFI

**Time Log**  
**North Pacific Fishery Management Council**  
**Meetings held in Anchorage, Alaska at Hilton Hotel**  
**October 2-8, 2013**

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**October 2, 2013**

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<b>Time of Day</b>	<b>Subject</b>
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08:05	Call to Order
08:15	Chris Oliver, B-1 ED Report
09:12	Darrell Brannan, B-2 Update on LAPP cost recovery
09:17	Diana Evans, Catch Estimates Observer Program
10:11	Karla Bush, B-3 ADFG report
10:53	Tony Kenne, B-4 USCG Report
11:05	Steve MacLean, B-6 Protected Resources report
11:15	Greg Williams, IPHC
11:38	Public comment, B reports
11:38	Craig Lowenberg
11:47	Jim Stone
11:49	Jeff Steele
11:53	Chad See
12:00	Break for Lunch
01:13	Brent Paine
01:22	Steve Taufen
01:27	Jeff Stephan
01:40	Stephanie Madsen
01:44	Donna Parker
01:47	Julie Bonney
02:14	Fields motion on BOF proposals
02:47	Diana Evans, C-1 Observer Program
03:44	Questions of the NMFS report
03:58	Evans continue C-1
04:30	Recess

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**October 3, 2013****Time of Day      Subject**

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09:59	Call to Order
10:07	Dan Hull C-1 Motion
10:07	10:05
01:01	Steve MacLean C-2 SSL
01:24	Public comment on C-2
01:24	Dave Fraser
01:39	John Warrenchuck and Mike Levine
01:53	John Gauvin
01:53	Chad See
02:19	Action on C-2 SSL
02:19	Motion
02:24	Bill Tweit
03:01	Recess

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**October 4, 2013****Time of Day      Subject**

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08:04	Call to order
08:04	Balance of SSC Report
09:15	Diana Stram, C-3 Crab Management
10:06	Becca Robbins AP report
10:06	no public comment
10:10	Groundfish Specifications
10:20	Jane DiCosimo, C-4(c) Groundfish Specs
10:51	Diana Stram CPT comments
11:48	Lori Swanson, AP report C-4C
11:52	Break for Lunch
02:01	C-4 public comment
02:02	Jason Anderson
02:08	Merrick Burden
02:14	Henderschedt motion on C-4a
02:51	C-4(b) Sablefish TAC
02:56	Start Recording [02:56]
02:56	Jane DiCosimo, C-4 (b)
03:00	Report from Chad See
03:14	Jason Anderson Report
03:19	Lori Swanson AP report on C-4b
03:31	Lenny Hertzog
03:31	Public comment
03:42	Lori Swanson
03:47	Action on C-4 B
03:58	Recess

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**October 5, 2013**

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**Time of Day                      Subject**

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08:03	Call to order - John Henderschedt
08:05	C-5 GOA Trawl, Darrell Brannan & Sam Cunningham
09:51	AP report on C5
09:55	Public Testimony on C5, Jim Richardson
10:03	Pat Branson, Denby Lloyd
10:07	Mark Fina Lori Swanson
10:26	Heather Mann
10:44	Ernie Weiss
10:49	Chuck McCallum
10:55	Robert Sanderson
10:58	Beth Stewart
11:06	Bob Kruger
11:14	Terry Haines
11:21	Julie Bonney
11:37	Jeff Stephan
11:47	Jody Cook
11:52	Break for Lunch
01:00	Halibut Report
01:46	Glenn Reed
01:46	Continue Public Comment C-5
02:00	Heather McCarty, Mike Okoniewski
02:21	Theresa Peterson Becca Robbins Gisclair
02:32	Stephan Taufen
02:38	Bill Fejes
02:56	Council motion on C-5a, Cora Campbell
02:58	Council discussion on motion
04:05	AP Report on C5b, Lori Swanson
04:16	Bob Kruger
04:19	Julie Bonney
04:20	Terry Haines
04:33	C-5(c) GOA Chinook Byc, Sam Cunningham
05:12	AP report
05:14	Public Comment on C5c, Julie Bonney
05:21	Bob Krueger
05:32	Kimball motion C5c
05:32	Recess for the day

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**October 6, 2013**

<b>Time of Day</b>	<b>Subject</b>
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09:00	Call to order
09:01	C-6 BSAI Salmon Bycatch, Diana Stram
09:17	John Linderman, ADFG
10:11	Diana Stram - AEQ analysis, IPAs
01:03	John Gruver Inshore salmon savings lan
02:06	Joe Bursch
03:19	Stephanie Madsen APA chinook Incentive Plan
03:59	Amanda Sterne
04:18	AP report on C6, Becca Robbins Gisclair
04:26	Public Comment on C6
04:26	Brandon Ahmasule
04:26	Greg Roszicka
04:32	Victor Lord
04:40	Brent Paine
05:04	Recess

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**October 7, 2013**

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**Time of Day                      Subject**

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08:58	Call to order
08:59	continued Public Comment on C6
08:59	John Gruver
09:03	Dan Martin
09:10	Paul Beans
09:14	Matthew Watsky
09:17	Charlotte Weaver
09:26	James Mize
09:26	Sylvia Ettefagh
09:29	Donna Parker
09:53	Art Nelson
10:06	Art Ivanoff
10:13	Becca Robbins Gisclair
10:21	Sky Starky
10:26	Jim Harmon
10:50	C-6(c) IPA Reports BSAI Chum
10:50	Diana Stram
10:56	John Gruver, James Mize, Stephanie Madsen, Karl Haflinger
11:43	AP report on C-6 c, Becca Robbins Gisclair
11:47	Lunch break
01:03	Public Comment on C-6(c)
01:03	Roy Ashenfelter
01:09	Brent Paine
01:11	Becca Robbins Gisclair
01:13	Art Nelson
01:15	D-1 testimony out of order
01:15	April Dromeka, APICDA
01:30	Cora Campbell motion on C-6(b, c)
01:30	D-1(a) AI Pcod Processing, Jon McCracken
03:13	Lori Swanson, AP report
03:17	Public Comment D-1a
03:17	Lori Swanson
03:22	Chad See
03:29	Jan Jacobs
03:31	Frank Kelty
03:35	Todd Loomis
03:40	Dave Fraser
03:53	Clem Tillion
03:59	Matt Upton
04:35	D-1(b) Sablefish Gear Committee, Jane DiCosimo
04:44	AP report on D1b, Lori Swanson
04:49	Public Comment on D1b
04:49	Jeff Stephan
04:57	Lenny Hertzog
05:03	Recess

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**October 8, 2013**

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**Time of Day                      Subject**

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09:00	Call to order
09:00	D-2 Staff Tasking, Chris Oliver
09:02	Jane DiCosimo - IFQ committee proposals
09:17	Diana Evans, Ecosystem Committee
10:07	AP report on D2, Lori Swanson
10:33	Public Comment on D2
10:33	Lori Swanson
10:35	Becca Robbins Gisclair, Chuck McCallum
10:38	Linda Kozak
10:40	Mike Levine
10:47	Adem Bockmann
10:54	Heather McCarty, Ernie Weiss, Mateo Paz Soldan, Frank Kelty
10:58	Simeon Swetzoff
11:00	Chad See
11:12	George Pletnikoff
11:12	Ernie Weiss, Paul Gronholdt
11:17	Anne Vanderhoeven, Troy Urkinmon, Angel Drubnoka, Angie Fontz
11:18	Jeff Kauffman
11:25	Julie Bonney
12:07	Council Discussion on D2
12:42	Meeting Adjourned

**DRAFT**  
**ADVISORY PANEL MINUTES**  
**October 1 – 4, 2013**  
**Anchorage, Alaska**

The following members were present for all or part of the meetings (absent ~~stricken~~):

Ruth Christiansen	Becca Robbins-Gisclair	Andy Mezirow
Kurt Cochran	John Gruver	Joel Peterson
John Crowley	Mitch Kilborn	Theresa Peterson
Jerry Downing	<del>Alexus Kwachka</del>	<del>Neil Rodriguez</del>
Tom Enlow	Craig Lowenberg	Lori Swanson
<del>Tim Evers</del>	Brian Lynch	Anne Vanderhoeven
Jeff Farvour	Chuck McCallum	Ernie Weiss

**C-1 Observer Program**

The AP recommends the Council adopt the OAC recommendations captured in pages 3 – 6 of the OAC report. *Motion carried 18/0*

- The OAC report includes the rationale for the recommendations.
- This includes the comments on the NMFS letter on the EM pilot program listed on page 6.

The AP recommends the Council ask NMFS to collect data on number of sets and hauls made by vessels carrying observers, the number of sets or hauls sampled, and the percent of each observed set or haul sampled. *Motion carried 18/0*

- This information could help in understanding the data from the observer samples.
- It is not expected to be expensive or burdensome to collect. Note this could not be verified with the Agency due to federal shutdown.

**C-2 SSL EIS Final Action**

The AP recommends the Council select its Preliminary Preferred Alternative as its preferred alternative for the SSL EIS. The AP recommends the Council request that the Agency provide a draft biological opinion to the Council prior to the February 2014 Council meeting. The draft BiOp should provide clear and definitive information to allow the Council to understand what elements of the PA do not create JAM and what adjustments are needed to any elements that may cause JAM. The draft BiOp should also allow the Council to discern what combinations of elements in each AI subarea are allowable. The timing of the draft BiOp should allow the Council to have full participation in crafting the final RPAs. *Motion passed 17/1*

**C-3 BSAI Crab SAFE Report**

The AP recommends the Council approve the 2013 BSAI Crab SAFE report and the 2013/2014 OFL and ABC specifications as recommended by the SSC. *Motion carried 18/0*

## C-4 Groundfish Specifications

### a) Stock Structure

The AP recommends the Council establish a process for addressing stock structure concerns raised by the Plan Teams as part of the harvest specifications process. This process should encompass the following:

- A) Clearly identify the problem that justifies a need for spatial management. i.e., Is this a yield issue? Is it a conservation of genetic diversity issue? Has a new stock been identified?
- B) Identify the possible tools that may be appropriate for dealing with the concern. These may include industry's ability to adjust harvest on a spatial scale, specification of OFLs, ABCs, or TACs, or other tools.
- C) This process should allow time for input by in-season management, stakeholders, and the Council before final SSC recommendations are made on harvest specifications

*Motion carried 17/0*

- Public needs to understand what the problem is, and why action is needed. Stock structure alone may not require management action.
- Industry has demonstrated the ability to respond to spatial concerns.
- Input from management and fishermen will help all decision-makers understand the possible unintended effects of spatial management.

### b) Sablefish TAC apportionment

*The following motion failed on a 9/9 vote*

*AP recommends that Council direct staff to develop an expanded discussion paper analyzing a broad range of options aimed at maximizing the utilization of all sablefish in the BSAI fishery. Included in the analysis would be an evaluation of use caps, effects on CDQ participation in the fishery, adjustment of the trawl and fixed gear TAC apportionment, underutilized sablefish harvest by sector and gear type, and potential entry level opportunity in the sablefish fixed gear fishery.*

#### Minority Report

*BSAI Sablefish TAC Apportionment: The minority felt that an expanded discussion paper regarding an evaluation of potential options aimed at increasing the utilization of Sablefish in the BSAI is appropriate at this time.*

- *Additional analysis is required to provide information capable of achieving an adequate response to this issue.*
- *Regulations regarding use caps and sector allocations in the BSAI may no longer accurately reflect current industry conditions, and restrict some industry participants from increasing their harvest of otherwise non-harvested sablefish.*
- *Employing a broader scope to examine possible actions will help avoid adverse consequences to sectors, current and future industry participants, and CDQ fisheries.*
- *Additional analysis on potential factors impeding full utilization should also be addressed.*

*Signed by: Becca Robbins Gisclair, Ruth Christiansen, Ernie Weiss, Jeff Favour, Theresa Peterson, Chuck McCallum, Brian Lynch, John Crowley, Joel Peterson.*

**C-4 (b) continued**

Rationale against the motion:

- This is a very complex issue and only provides more fish to the few vessel owners that are at the IFQ use cap in the Bering Sea fixed gear sablefish fishery. The Council has much bigger issues of greater importance to address.
- There is unharvested TAC in both the trawl and fixed gear Bering Sea sablefish fishery. Moving TAC from one sector to another does not address the root problem.
- The Council is already considering a change in use caps to address this issue.
- There are other options for fixed gear participants, including leasing CDQ fish.
- As proposed, this could fund a new fishery (entry level) for fixed gear using TAC allocated to the trawl sector.

**c) Groundfish harvest specifications**

BSAI:

The AP recommends that the Council adopt the ABC, OFL and TAC numbers for 2014 and 2015 contained in the attached spreadsheet.

*Motion passed 18/0*

The AP recommends that the Council adopt the PSC limits and apportionments contained in Tables 10 to 13 in the Action Memo for the BSAI for 2014 and 2015.

*Motion passed 18/0*

- These TAC numbers make some slight adjustments, but primarily roll over last year's numbers as a placeholder.
- The AP adjusted the industry proposal slightly down for pollock and up for Alaska plaice .
- Catch to date is 21,600 mt for plaice and went to PSC in May. There is a viable market for these fish and it is important to fund the fishery adequately

GOA:

The AP recommends that the Council adopt the SSC recommendations for ABC and OFLs for the GOA proposed specifications for 2014 and 2015, and:

Roll over the TACs from Table 2 of the final specifications for 2013/2014 (attached) with the following changes

- 1) Shallow-flatfish in WYAK to 4,299 MT
- 2) Shallow flatfish in SEO to 1,092 MT
- 3) Rex sole in WYAK to 823 MT

For the 2014 and 2015 proposed TACs.

Adopt the tables (pages 10 and 11 in the action memo) that reflect:

- 1) 2013/2014 halibut PSC limits, allowances and apportionments.
- 2) 2013/2014 halibut PSC trawl limits between the trawl gear deep-water species fishery and the shallow-water species fisheries.
- 3) Apportionment of the “other H&L fisheries” 2013 and 2014 halibut PSC allowance between the H&L catcher vessel and catcher processor sectors.

For the proposed 2014 and 2015 specifications.

*Motion passed 18/0*

- This primarily rolls over the numbers from last year for now and adjustments can be made in December when we have more information available.

## **C-5 GOA Trawl Issues**

### **a) Updated discussion paper on GOA trawl bycatch management.**

The AP recommends the Council accept the revised proposals received by the AP (Groundfish Forum and Pacific Seafoods) for inclusion in future discussion and analysis along with the current suite of proposals.

*Motion passed 18/0*

- The current suite of proposals has merit and its worth continuing to analyze all of them.
- The revised proposals flesh out some important details from the previous proposals.
- There are still details which need to be further developed in many of the proposals and we expect to see additional revisions as we move through the process.
- The fleet needs tools to reduce bycatch and it is important to continue to move this process forward.

The AP recommends the Council request an expanded discussion paper which compares the current/revised suite of proposals to the Council’s goals and objectives.

*Motion passed 18/0.*

- While the proposals are still works in progress, comparing the current proposals to the Council’s goals and objectives will assist us in measuring the proposals against the Council’s stated goals and objectives.
- This comparison should assist us in narrowing the range of proposals under consideration.

### **b) GOA trawl data collection**

The AP recommends the council take final action and adopt the Preliminary Preferred Alternative.

*Motion passed 18/0*

- Adopting a data collection program now before the new trawl management program is in place makes sense to collect pre-program data.
- The consistency between this data collection program and that utilized in the Bering Sea will be helpful to industry in collecting and reporting data.

**C-5 continued**

**c) GOA rockfish Chinook cap rollover**

The AP recommends the Council add:

Alternative 5. Rollover all Chinook PSC but 50 fish remaining in the Rockfish Program CV Chinook cap on October 1. No uncertainty buffer would apply to the Rockfish Program CV sector.

*Motion passed 18/0*

- A rollover provision is critical to the operations of this fishery. It is important that we develop a plan that works
- Utilizing an uncertainty buffer in the rockfish program makes things complicated.
- For ease of managing the fishery, we need something simple and clean.
- This alternative combines several approaches and is worth analyzing.

**C-6 BSAI Salmon Bycatch**

**a) SeaShare report on Salmon Donation Program**

The AP received a report on the SeaShare PSC donation program.

**b) BSAI Chinook salmon report and industry Chinook IPA reports**

The Advisory Panel recognizes the continued importance of maintaining low Chinook salmon bycatch by the Bering Sea pollock fishery. The AP has determined that the Amendment 91 IPAs are working as intended and are reducing Chinook bycatch at all levels of abundance. The Performance Standard at 47,591 and the 60,000 hard cap are accomplishing their role in establishing incentives as originally designed by the unique nature of Amendment 91. Therefore, the AP recommends the Council take no further action on Amendment 91 at this time.

*Motion passed 13/5*

- Industry IPAs have been a factor in recent low Chinook bycatch numbers; they are working.
- The industry is doing a lot to avoid bycatch, at a cost in terms of higher fuel use, lower value products.
- Industry is developing salmon excluders and developing new fishing styles that are effective at reducing bycatch.
- Amendment 91 has only been in effect for two years. It is too early to revisit.

**Minority Report**

*A minority of the AP supported this substitute motion:*

*The AP recommends the Council request an expanded discussion paper which investigates methods to further reduce bycatch, including the overall cap level and placing limitations on late September through October fishing. The discussion paper should include additional information on Western Alaska stock status including detailed descriptions of the restrictions imposed on commercial and subsistence salmon fisheries in the region over the last 5 years, total subsistence harvests and whether amounts necessary for subsistence have been met.*

## C-6 (b) continued

### **Minority report continued:**

*Chinook salmon stocks are in a state of crisis throughout Western Alaska. Subsistence harvests have been dramatically reduced and commercial harvests virtually eliminated for Chinook salmon. Despite these reductions and the extreme sacrifices made by in-river users, escapement goals are not being met. In this context, it's critical that all sources of mortality are reduced. In a time when every fish counts, bycatch in the pollock fishery has an impact. Coming close to the Amendment 91 cap limits in these conditions of stock abundance would be devastating to Western Alaska stocks. It is therefore imperative that we take a look at what can be done to further reduce bycatch as both a matter of conservation and equity.*

*Becca Robbins Gisclair, Theresa Peterson, Andy Mezirow, Jeff Farvour, Chuck McCallum*

### **c) Industry IPA reports for BSAI chum salmon**

The AP supports the IPA/RHS proposals and recommends the Council request a discussion paper which further evaluates the following:

- Modifications needed to Amendment 91 and Amendment 84 to adopt this type of proposal.
- What components of the rolling hot spot program are critical and could be placed into regulation while still providing flexibility for the industry to adapt the program to new information?
- Improved reporting requirements.
- Potential approaches for combining reporting requirements for chum and Chinook IPAs.

*Motion passed 18/0*

- The AP appreciates industry's work to develop IPA's which are responsive to the Council's requests and supports moving forward with these.
- The IPA presented by industry focuses chum salmon bycatch reduction on the time period when mature Western Alaska stocks are more present in the bycatch and provides mechanisms for balancing chum and Chinook salmon avoidance.
- A discussion paper will help clarify the regulatory process for adopting this approach via amendments to Amendment 84 or 91.
- Forwarding the proposal will provide an opportunity for public and Council review, along with information on regulatory process which can inform our path forward on chum salmon bycatch bycatch measures.

## **D-1 Miscellaneous issues**

### **a) Discussion paper on AI Pacific cod processing**

The AP recommends the council request staff to bring back a discussion paper to develop a problem statement.

Issues that should be addressed include:

- A history of both shoreside and offshore processing of all species in the Aleutian Islands.
- What protections currently exist and may be required to provide for community stability?

- Dependence of the communities on cod and other fishery-related operations
  - Proposed scale of processing in the communities
  - The impact of the AI TAC split on creating a race for fish
  - Considerations to mitigate harm from any potential action on other stakeholders
- Historic and relative dependence by all fishery sectors on Aleutian Island fisheries  
The effect competition among processors on CV operations  
Other opportunities available for affected stakeholders.

**b) GOA Gear Committee report on implementing a sablefish pot fishery**

The AP recommends that the Council direct staff to develop an expanded discussion paper on the use of pots in the Gulf Of Alaska sablefish IFQ fisheries, and that the analysis include the topics of concern and recommendations identified in the minutes of the September 30 meeting of the Gulf of Alaska Gear Committee. In addition to the topics brought forth by the Gear Committee, the following topics should also be included for analysis:

- The cost of gear conversion from longline to pot gear
- Vessel demographics: vessel size by area and Quota Share size by area
- Halibut bycatch by different pot configurations
- Information on the biodegradability of twine used for escape ports at sablefish fishing depths
- A wider range of gear location methods than only AIS as found in the committee report.

*Motion passed 17/0*

**D-2 Staff Tasking**

The AP recommends that the Council initiate a discussion paper, adopting a problem statement, and considering proposed regulation changes or exemptions that will: 1) promote the development of a CDQ village directed Pacific cod fishery; and 2) allow CDQ and IFQ halibut harvesters to retain CDQ Pacific cod in excess of the 20% MRA, as proposed in the handout by the CDQ groups.

*Motion passed 17/0*

- Current regulations applicable to vessels targeting Pcod with hook and line gear are prohibitive for the CDQ village fleets.
- The CDQ groups believe easing certain regulations will make the development of the fishery viable, particularly as the halibut quotas they currently fish continue to decline.
- Regulatory precedence has been set with similar sized vessels in jig fisheries having been exempted from VMS and LLP requirements.
- It would be most efficient and conservative to allow retention of CDQ Pcod when the village fleet targets CDQ and/or IFQ halibut.

The AP acknowledges the request submitted in writing by Melvin Grove Jr and recommends that the Council take no further action on this item.

*Motion passed 17/0*

Advisory Panel Proposed BSAI OFL and ABC Recommendations (metric tons) for 2014 - 2015

AP Minutes  
October 2013

Species	Area	2013				2014				2015			
		OFL	ABC	TAC	Catch	OFL	ABC	TAC		OFL	ABC	TAC	
Pollock	EBS	2,550,000	1,375,000	1,247,000	1,146,604	2,730,000	1,430,000	1,249,000		2,730,000	1,430,000	1,249,000	
	AI	45,600	37,300	19,000	2,916	48,600	39,800	19,000		48,600	39,800	19,000	
	Bogoslof	13,400	10,100	100	57	13,400	10,100	100		13,400	10,100	100	
Pacific cod	BSAI	359,000	307,000	260,000	178,388	n/a	n/a	n/a		n/a	n/a	n/a	
	BS	n/a	n/a	n/a	169,840	352,470	300,390	243,100		352,470	300,390	243,100	
	AI	n/a	n/a	n/a	8,548	22,500	16,900	7,381		22,500	16,900	7,381	
Sablefish	BS	1,870	1,580	1,580	548	1,760	1,480	1,480		1,760	1,480	1,480	
	AI	2,530	2,140	2,140	702	2,370	2,010	2,010		2,370	2,010	2,010	
Yellowfin sole	BSAI	220,000	206,000	198,000	101,596	219,000	206,000	198,000		219,000	206,000	198,000	
Greenland turbot	BSAI	2,540	2,060	2,060	1,097	3,270	2,650	2,060		3,270	2,650	2,060	
	BS	n/a	1,610	1,610	818	n/a	2,070	1,610		n/a	2,070	1,610	
	AI	n/a	450	450	279	n/a	580	450		n/a	580	450	
Arrowtooth flounder	BSAI	186,000	152,000	25,000	18,515	186,000	152,000	25,000		186,000	152,000	25,000	
Kamchatka flounder	BSAI	16,300	12,200	10,000	7,500	8,300	7,100	7,100		8,300	7,100	7,100	
Northern rock sole	BSAI	241,000	214,000	92,380	55,401	229,000	204,000	92,450		229,000	204,000	92,450	
Flathead sole	BSAI	81,500	67,900	22,699	15,317	80,100	66,700	22,699		80,100	66,700	22,699	
Alaska plaice	BSAI	67,000	55,200	20,000	19,982	60,200	55,800	23,700		60,200	55,800	23,700	
Other flatfish	BSAI	17,800	13,300	3,500	1,467	17,800	13,300	3,500		17,800	13,300	3,500	
Pacific Ocean perch	BSAI	41,900	35,100	35,100	26,460	39,500	33,100	33,100		39,500	33,100	33,100	
	BS	n/a	8,130	8,130	1,573	n/a	7,680	7,680		n/a	7,680	7,680	
	EAI	n/a	9,790	9,790	8,209	n/a	9,240	9,240		n/a	9,240	9,240	
	CAI	n/a	6,980	6,980	6,614	n/a	6,590	6,590		n/a	6,590	6,590	
	WAI	n/a	10,200	10,200	10,064	n/a	9,590	9,590		n/a	9,590	9,590	
Northern rockfish	BSAI	12,200	9,850	3,000	1,892	12,000	9,320	3,000		12,000	9,320	3,000	
Blackspotted/Rougheye rockfish	BSAI	462	378	378	324	524	429	429		524	429	429	
	EBS/EAI	n/a	169	169	173	n/a	189	189		n/a	189	189	
	CAI/WAI	n/a	209	209	151	n/a	240	240		n/a	240	240	
Shortraker rockfish	BSAI	493	370	370	333	493	370	370		493	370	370	
Other rockfish	BSAI	1,540	1,159	873	653	1,540	1,159	873		1,540	1,159	873	
	BS	n/a	686	400	146	n/a	686	400		n/a	686	400	
	AI	n/a	473	473	507	n/a	473	473		n/a	473	473	
Atka mackerel	BSAI	57,700	50,000	25,920	16,031	56,500	48,900	25,379		56,500	48,900	25,379	
	EAI/BS	n/a	16,900	16,900	8,899	n/a	16,500	16,500		n/a	16,500	16,500	
	CAI	n/a	16,000	7,520	7,012	n/a	15,700	7,379		n/a	15,700	7,379	
	WAI	n/a	17,100	1,500	120	n/a	16,700	1,500		n/a	16,700	1,500	
Skates	BSAI	45,800	38,800	24,000	19,643	44,100	37,300	24,000		44,100	37,300	24,000	
Sculpins	BSAI	56,400	42,300	5,600	4,323	56,400	42,300	5,600		56,400	42,300	5,600	
Sharks	BSAI	1,360	1,020	100	100	1,360	1,020	150		1,360	1,020	150	
Squids	BSAI	2,620	1,970	700	235	2,620	1,970	500		2,620	1,970	500	
Octopuses	BSAI	3,450	2,590	500	132	3,450	2,590	500		3,450	2,590	500	
<b>Total</b>	<b>BSAI</b>	<b>4,028,465</b>	<b>2,639,317</b>	<b>2,000,000</b>	<b>1,620,216</b>	<b>4,193,257</b>	<b>2,686,688</b>	<b>1,990,481</b>		<b>4,193,257</b>	<b>2,686,688</b>	<b>1,990,481</b>	

Advisory Panel Proposed GOA OFL, ABC, and TAC Recommendations (metric tons) for 2014 - 2015

Species	Area	2013				2014			2015		
		OFL	ABC	TAC	Catch	OFL	ABC	TAC	OFL	ABC	TAC
Pollock	W (61)		28,072	28,072	6,173		25,648	25,648		25,648	25,648
	C (62)		51,443	51,443	41,988		47,004	47,004		47,004	47,004
	C (63)		27,372	27,372	11,357		25,011	25,011		25,011	25,011
	WYAK		3,385	3,385	2,917		3,093	3,093		3,093	3,093
	Subtotal	150,817	110,272	110,272	62,435	138,610	100,756	100,756	138,610	100,756	100,756
	EYAK/SEO	14,366	10,774	10,774	0	14,366	10,774	10,774	14,366	10,774	10,774
Total		165,183	121,046	121,046	62,435	152,976	111,530	111,530	152,976	111,530	111,530
Pacific Cod	W		28,280	21,210	13,587		29,470	22,103		29,470	22,103
	C		49,288	36,966	23,574		51,362	38,522		51,362	38,522
	E		3,232	2,424	313		3,368	2,526		3,368	2,526
	Total	97,200	80,800	60,600	37,474	101,100	84,200	63,150	101,100	84,200	63,150
Sablefish	W		1,750	1,750	1,003		1,641	1,641		1,641	1,641
	C		5,540	5,540	4,285		5,195	5,195		5,195	5,195
	WYAK		2,030	2,030	1,910		1,902	1,902		1,902	1,902
	SEO		3,190	3,190	2,593		2,993	2,993		2,993	2,993
	Total	14,780	12,510	12,510	9,791	13,871	11,731	11,731	13,871	11,731	11,731
Shallow-Water Flatfish	W		19,489	13,250	152		18,033	13,250		18,033	13,250
	C		20,168	18,000	2,962		18,660	18,000		18,660	18,000
	WYAK		4,647	4,647	1		4,299	4,299		4,299	4,299
	EYAK/SEO		1,180	1,180	2		1,092	1,092		1,092	1,092
	Total	55,680	45,484	37,077	3,117	51,580	42,084	36,641	51,580	42,084	36,641
Deep-Water Flatfish	W		176	176	22		176	176		176	176
	C		2,308	2,308	126		2,308	2,308		2,308	2,308
	WYAK		1,581	1,581	4		1,581	1,581		1,581	1,581
	EYAK/SEO		1,061	1,061	3		1,061	1,061		1,061	1,061
	Total	6,834	5,126	5,126	155	6,834	5,126	5,126	6,834	5,126	5,126
Rex Sole	W		1,300	1,300	98		1,287	1,287		1,287	1,287
	C		6,376	6,376	3,129		6,310	6,310		6,310	6,310
	WYAK		832	832	0		823	823		823	823
	EYAK/SEO		1,052	1,052	-		1,040	822		1,040	822
	Total	12,492	9,560	9,560	3,228	12,362	9,460	9,242	12,362	9,460	9,242
Arrowtooth Flounder	W		27,181	14,500	779		26,970	14,500		26,970	14,500
	C		141,527	75,000	13,164		140,424	75,000		140,424	75,000
	WYAK		20,917	6,900	49		20,754	6,900		20,754	6,900
	EYAK/SEO		20,826	6,900	68		20,663	6,900		20,663	6,900
	Total	247,196	210,451	103,300	14,060	245,262	208,811	103,300	245,262	208,811	103,300
Flathead Sole	W		15,729	8,650	569		16,063	8,650		16,063	8,650
	C		26,563	15,400	1,556		27,126	15,400		27,126	15,400
	WYAK		4,686	4,686	0		4,785	4,785		4,785	4,785
	EYAK/SEO		1,760	1,760	-		1,797	1,797		1,797	1,797
	Total	61,036	48,738	30,496	2,125	62,296	49,771	30,632	62,296	49,771	30,632

## Advisory Panel Proposed GOA OFL, ABC, and TAC Recommendations (metric tons) for 2014 - 2015

Species	Area	2013				2014			2015		
		OFL	ABC	TAC	Catch	OFL	ABC	TAC	OFL	ABC	TAC
Pacific Ocean Perch	W		2,040	2,040	436		2,005	2,005		2,005	2,005
	C		10,926	10,926	8,484		10,740	10,740		10,740	10,740
	WYAK		1,641	1,641	1,537		1,613	1,613		1,613	1,613
	W/C/WYAK	16,838				16,555			16,555		
	SEO	2,081	1,805	1,805	0	2,046	1,775	1,775	2,046	1,775	1,775
	E(subtotal)										
	Total	18,919	16,412	16,412	10,457	18,601	16,133	16,133	18,601	16,133	16,133
Northern Rockfish	W		2,008	2,008	2,164		1,899	1,899		1,899	1,899
	C		3,122	3,122	2,360		2,951	2,951		2,951	2,951
	E		-	-	-		-	-		-	-
	Total	6,124	5,130	5,130	4,524	5,791	4,850	4,850	5,791	4,850	4,850
Shortraker Rockfish	W		104	104	39		104	104		104	104
	C		452	452	376		452	452		452	452
	E		525	525	246		525	525		525	525
	Total	1,441	1,081	1,081	661	1,441	1,081	1,081	1,441	1,081	1,081
Dusky Rockfish	W		377	377	215		354	354		354	354
	C		3,533	3,533	2,597		3,317	3,317		3,317	3,317
	WYAK		495	495	3		465	465		465	465
	EYAK/SEO		295	295	7		277	277		277	277
	Total	5,746	4,700	4,700	2,822	5,395	4,413	4,413	5,395	4,413	4,413
Rougheye and Blackspotted Rockfish	W		81	81	20		83	83		83	83
	C		856	856	385		871	871		871	871
	E		295	295	188		300	300		300	300
	Total	1,482	1,232	1,232	593	1,508	1,254	1,254	1,508	1,254	1,254
Demersal shelf rockfish	Total	487	303	303	209	487	303	303	487	303	303
Thornyhead Rockfish	W		150	150	216		150	150		150	150
	C		766	766	449		766	766		766	766
	E		749	749	221		749	749		749	749
	Total	2,220	1,665	1,665	886	2,220	1,665	1,665	2,220	1,665	1,665
Other Rockfish (Other slope)	W		44	44	194		44	44		44	44
	C		606	606	425		606	606		606	606
	WYAK		230	230	65		230	230		230	230
	EYAK/SEO		3,165	200	44		3,165	200		3,165	200
	Total	5,305	4,045	1,080	728	5,305	4,045	1,080	5,305	4,045	1,080
Atka mackerel	Total	6,200	4,700	2,000	1,241	6,200	4,700	2,000	6,200	4,700	2,000
Big Skate	W		469	469	71		469	469		469	469
	C		1,793	1,793	1,807		1,793	1,793		1,793	1,793
	E		1,505	1,505	61		1,505	1,505		1,505	1,505
	Total	5,023	3,767	3,767	1,939	5,023	3,767	3,767	5,023	3,767	3,767
Longnose Skate	W		70	70	37		70	70		70	70
	C		1,879	1,879	972		1,879	1,879		1,879	1,879
	E		676	676	365		676	676		676	676
	Total	3,500	2,625	2,625	1,374	3,500	2,625	2,625	3,500	2,625	2,625
Other Skates	Total	2,706	2,030	2,030	1,409	2,706	2,030	2,030	2,706	2,030	2,030
Sculpins	GOA-wide	7,614	5,884	5,884	1,241	7,614	5,884	5,884	7,614	5,884	5,884
Sharks	GOA-wide	8,037	6,028	6,028	793	8,037	6,028	6,028	8,037	6,028	6,028
Squids	GOA-wide	1,530	1,148	1,148	147	1,530	1,148	1,148	1,530	1,148	1,148
Octopuses	GOA-wide	1,941	1,455	1,455	191	1,941	1,455	1,455	1,941	1,455	1,455
Total		738,676	595,920	436,255	161,600	723,580	584,094	427,068	723,580	584,094	427,068

### **Catcher Processor Gulf Bycatch Incentive Program**

The catcher processor sector has developed this paper in response to the Council's request for stake holder input concerning an appropriate bycatch incentive program in the Gulf of Alaska trawl fisheries. The paper represents the discussions within the sector of possible measures to include in a program. The sector has **not** reached a consensus on these issues. The paper is intended only to show the Council the scope of discussions and the general program structure that the sector believes may beneficially address its bycatch concerns.

### **Rationale for the program structure - regulatory bycatch measures and cooperative bycatch measures**

The Council has clearly indicated that performance-based PSC avoidance measures will be a component of any Gulf trawl bycatch program. The Council has suggested that performance based measures should be administered at the individual vessel level to ensure that all participants undertake efforts to avoid PSC. While the use of individual performance based measures can create effective incentives, if poorly designed, they may not achieve broader objectives. In the development of a performance based program, the Council should take care to avoid creation of individual incentives that might result in poorer PSC performance overall.

Two concerns with individual performance measures should be considered. First, the measures should not deter vessels from sharing information across a fleet to achieve the PSC avoidance. Since the actions to avoid PSC may change over time with fishing conditions (such as hotspots and target concentrations), it is important not only that a fleet share information, but that it develop means for timely information sharing. Measures that create an incentive to withhold bycatch information from others could lead to poorer bycatch performance. While performance-based measures can lead to improved PSC performance, in some cases individual competition arising from those measures can impede the development of PSC improvements leading to poorer overall PSC performance.

Similarly, measures should create an incentive for development of technologies (such as excluders) for PSC avoidance. Past practices have demonstrated that the development of new technologies are most likely if undertaken at the fleet level where costs can be dispersed across several vessels. Given the potential for individual performance based measures to lessen incentives for sharing costs and information to avoid PSC, the Council should consider developing a program that mitigates these effects.

A carefully developed cooperative program can overcome these incentives, while maintaining a meaningful vessel level performance based component. Such a program structure needs to have a fleet level incentive for information sharing that outweighs any disincentive created by the vessel level performance measures. Cooperative programs also have an inherent benefit for information sharing by creating an institutional structure for undertaking that sharing. A program could be developed that rewards cooperative members collectively for acceptable bycatch performance. A cooperative bycatch performance incentive could be created by either an inseason or annual reward for acceptable PSC performance. Such a provision could be a bonus for acceptable PSC performance that is shared pro rata by all cooperative members. An individual performance measure could be imbedded in that structure by giving the best performing individuals a slightly larger share of the cooperative's reward. For example, some percentage of the cooperative's reward could be allocated based on vessel performance. This

performance based incentive would need to be large enough to be meaningful, but small enough not to overshadow the incentive for information sharing.

Using a cooperative structure has an added benefit in that it is flexible. Gulf fisheries are currently a series of overlapping target fisheries. Under a new cooperative structure, it is anticipated that target fishery seasons will be extended, with more overlaps. In addition, PSC avoidance capability is likely to change under the revised program. Relying on a cooperative to set and administer individual incentive provisions is more likely to result in an acceptable incentive structure, since changes in that structure can be made based on experience without regulatory action. Given the lack of experience administering individual performance measures, it is possible that the first effort to define such a measure could be less than perfect. Allowing a cooperative to negotiate and administer the measure would allow for rapid correction of any such errors.

Cooperative administration also can encourage experimentation needed for PSC avoidance developments. PSC avoidance often requires some trial-and-error. At the simplest level, a vessel may do a single tow to determine PSC rates at a particular time and location. Exempting this test tow from a reward system (or at least establishing a system that does not discourage it, is likely necessary to penalize it) is a necessary component of any effective reward system. Regulations establishing penalties and rewards cannot possibly identify this type of experimentation and address the disincentive for their use that may arise from general rules that reward performance.

#### **A80 CP Trawl Co-op management measures for PSC**

- ***Possible performance standards and incentives currently under discussion***
  - A80 CP co-op sets performance standards for PSC rates based on actual fishing conditions, past history, and achievability by target fishery (*see halibut rate and mortality Tables in Chapter 4 from Amendment 95 EA for example*) – used for implementing individual performance rewards
  - Incentive measures (*in development*)
  - CPs receive pro-rata share of halibut and salmon, under co-op mgmt., based on agreed upon formula (*TBD*)
  - Possible A80/Rockfish Program cost recovery payments tied to PSC usage (inverse relationship)
- ***Cooperative communication***
  - Monitor PSC by vessel, fishery, time and area
  - Daily call-in to discuss PSC, ongoing communication on grounds
  - Information sharing between sectors, coops
  - Seastate program monitors vessels' fishing locations and bycatch data, and disseminates daily (as in whiting fishery)
- ***Reporting to the Council***
  - Annual Report to Council, detailing bycatch avoidance measures and progress (similar to Seastate presentation on whiting )

- Cooperatives to inform Council on measures taken to date and what's in the pipeline, ie salmon excluders, BS and GOA halibut excluder)
- **Possible PSC measures**
  - Chinook:
    - 200% observer coverage
    - Video monitoring in factory
    - whole haul instead of basket sampling
    - Seashare program participation
    - genetic sampling for Auke Bay lab
    - use of cameras on headrope and/or along body of net to see where salmon is with respect to water column
    - NMFS cooperative research program on salmon excluder panels
    - Industry experimentation with salmon flaps and panels
  - Halibut
    - 200% observer coverage
    - Basket sampling
    - Ongoing use and refinement of excluder devices and gear modification
    - EFP for Deck sorting to reduce mortality
    - Cameras on headrope and intermediate
    - Test tows
    - Spread out effort (avoid chumming in halibut)
- **Gear Development**
  - Continue trawl gear modifications presently in use to reduce bycatch
  - Continue to investigate new gear modifications, camera systems, EM
  - EFP for Halibut Deck Sorting program
  - NMFS cooperative research program on salmon excluders

NMFS Regulatory management changes necessary to reduce footprint, bring greater efficiency to harvesting for resultant reduction in halibut take and mortality

- **Hard cap allocations between sectors**
- **Allocate halibut to each co-op as one aggregate amount: not divided into either SW or DW; not divided into 5 seasonal apportionments; not divided between WGOA or CGOA**
  - *Rationale: Captains can fish when target is most aggregated, ie rex sole in the end of April or May, to reduce halibut (conversely may avoid fishing rex sole in May to avoid Chinook)*
- **Enforce MRAs on trip to trip/offload to offload basis**
  - *Rationale: When marketable species which are on MRA "bycatch status" are caught before there is adequate basis species, the amt in excess of the allowable MRA is discarded. However, the vessel will "top off" at the end of the trip to catch that same marketable species. This results in the Captain towing twice in the same area, to catch*

*an amt of fish that has been 1) discarded previously in the trip and 2) doubles PSC catch because the same tow is made twice for one total amt of fish.*

- **Allow Deck sorting in the Gulf fisheries where feasible**
  - *Rationale: getting halibut off the deck within 20 minutes greatly reduces the mortality. Catcher vessels sort at sea, and have lower mortality as a result. Afford same benefit to CPs (and to the resource). Decreased halibut mortality allows greater arrowtooth harvest which helps to better achieve OY and removes more arrowtooth from the GOA biomass so that halibut have less competition for food.*

### **Catcher processor program structure**

Catcher processor sector members have actively participated in the industry stakeholder discussions with the shoreside sector. The following provisions, elements, and options are patterned after the stakeholder group's submission to the Council to aid in integrating the provisions into a single document in the future. The format, presentation, or absence of competing options for a provision should not be interpreted as suggesting that the sector has reached consensus on any provision.

### **Sector allocations**

Pollock (620/630) – The target fishery shall be prosecuted exclusively by the inshore sector with an ICA set aside for the offshore sector as currently defined by Amendment 23 – offshore sector is regulated through the current MRAs.

Pacific cod (CG) Allocations as currently defined and managed for trawl CP and CV sectors for Western/Central Pacific cod by Amendment 83

CGOA rockfish – Primary, Secondary, PSQ allocations as currently defined by Amendment 88 (the rockfish program)

### **CGOA Flatfish**

Option 1: No allocation

Option 2: Allocate rex sole, arrowtooth, and/or deepwater flatfish (as defined in the TAC sheet) based on:

- a) Sector total catch/trawl total catch (allocates entire TAC)
- b) Sector total catch/ABC (allocates only a portion of the TAC),
- c) Arrowtooth as total/abc

Under either option, sector catch is the trawl catch of eligible LLPs that apply for sector under the program. For CP LLPs that apply for the inshore sector, any catch of the vessel (including catch processed onboard) will count toward the LLP's allocation. For CP LLPs that apply for the offshore sector, only catch that is processed onboard will count toward the LLP's allocation.

Based on sector catches from:

Option 1: 2010-2012

Option 2: 2008-2012

Option 3: 2003-2012

Option 4: 1998-2004

#### WGOA rockfish

Option 1: No allocation

Option 2: Allocate Pacific ocean perch, northern rockfish, and dusky rockfish to the offshore sector based on A80 sideboards for Pacific ocean perch and northern rockfish with the remainder allocated to the inshore. For dusky rockfish recalculate A80 sideboard based on catches of dusky alone. Black rockfish, blue rockfish, and dark dusky, yelloweye, and widow rockfish were removed from pelagic shelf rockfish complex since implementation of the sideboards and are now managed by the State of Alaska.

#### WYak rockfish

Option 1: No allocation

Option 2: Allocate Pacific ocean perch, northern rockfish, and dusky rockfish to the offshore sector based on A80 sideboards for Pacific ocean perch and northern rockfish with the remainder allocated to the inshore. For dusky rockfish recalculate A80 sideboard based on catches of dusky only, since black rockfish, blue rockfish, and dark dusky rockfish were removed from pelagic shelf rockfish complex and are now managed by the State of Alaska.

Sablefish - (excluding CGOA rockfish program sablefish allocation)

Long-nose skate

Big skate

Other species could be allocated after consideration of data and circumstances.

## 2 Sector PSC Apportionments

### 3.1 Halibut

The annual PSC limit will be apportioned between the following sectors and areas:

Offshore sector Gulfwide

Allocations to each sector/area will be based on relative historical PSC usage from:

Option 1: 2010-2012

Option 2: 2008-2012

Option 3: 2003-2012

Option 4: 1998-2004

Option 5: Allocation to the offshore sector will be based on the Amendment 80 sideboards, plus the history of any qualifying vessel the history of which is not included in the Amendment 80 sideboard.

### 3.2 Chinook

Apportionment to the inshore and offshore sectors will be based on the current apportionment to the pollock fishery and Council's June 2013 motion.

A review of Amendment 80 and Central Gulf rockfish program sideboards may be appropriate.

### **Catcher processor cooperative program**

#### Eligible catcher processors

Those A80 vessels, and their replacement vessels, defined by Column A of Table 31 CFR part 679, and the LLP currently issued to them.

#### Allocation of groundfish history and apportionment of PSC limits within the catcher processor sector

Target species:

All allocations from the Central Gulf rockfish program will be maintained (including primary, secondary and PSC).

For distribution of allocations within the catcher processor sector other allocated target species, catch history is based on total catch during the qualifying period, with each eligible license receiving history based on catch of the vessel it is assigned to relative to the total catch of all vessels in the sector. All history will be attributed to the LLP license identified by the vessel owner at the time of implementation. To assign history to a license, that license must have gear, operation type, and area endorsements permitting that history.

Allow offload to offload MRA management for certain species when on bycatch status, to minimize regulatory discards:

Options: pollock, cod, other non-allocated species as determined

Note: Cod management needs special consideration because of the small allocation to the sector.

#### Halibut PSC:

Apportionment of halibut to LLP licenses under the Central Gulf rockfish program will continue as prescribed by that program.

The remainder of the sector's PSC will be apportioned within the sector to the following target species:

Pacific cod

Rex sole

Arrowtooth flounder

WGOA and WYAK rockfish

(A complete list of species should be developed after examining PSC usage and rates)

based on the average use of halibut PSC in each target species within the CP sector from the years \_\_\_\_, expressed as a percent of the total halibut PSC allocation to the sector (i.e., same general allocation system used for A80).

Each eligible license will then be assigned a share of the sector's available halibut PSC based on its catch of those target species equal to its proportion of the sector's qualified catch history of the target species. (Note – Halibut PSC apportionments may be made for targets that are not allocated under this program.)

Chinook PSC:

The sector's Chinook PSC will be apportioned within the sector to the following target species:

Central Gulf Rockfish (Pacific ocean perch, northern rockfish, and dusky rockfish) in the aggregate

Western Gulf rockfish (Pacific ocean perch, northern rockfish, and dusky rockfish) in the aggregate

Pacific cod

Rex sole

Arrowtooth flounder

(A complete list of species should be developed after examining PSC usage and rates)

based on the average use of Chinook PSC in each target species from the years \_\_\_\_, expressed as a percent of the total Chinook PSC allocation to the sector.

Each eligible license will then be assigned a share of the sector's available Chinook PSC based on its catch of those target species equal to its proportion of the sector's qualified catch history of the target species. (Note – Chinook PSC apportionments may be made for targets that are not allocated under this program.)

The PSC apportionments will not change from year to year (i.e., will not fluctuate annually with target TACs).

Catch history used for allocation and eligibility purposes will be legal and documented catch. For the catcher processor sector WPR data shall be used to determine catch.

Cooperative provisions for the catcher processor sector

No later than November 1 of each year, an application must be filed with NOAA fisheries by the cooperative with a membership list for the year.

In order to operate as a cooperative, membership must be comprised of:

At least \_\_\_\_ separate entities (using the 10% AFA rule) and

At least \_\_\_\_% of the eligible LLP licenses.

Annually, each cooperative will receive allocations of each allocated target species equal to its members' LLPs aggregate share of the sector's target species allocation.

Annually, each cooperative will receive allocations of halibut and Chinook PSC equal to its members' LLPs aggregate share of the sector's halibut and Chinook PSC apportionments, respectively.

Annual allocations would be to the cooperative and will be transferable within the cooperative among its members without NOAA Fisheries approval.

Annual allocations to the cooperative will be transferable among Gulf catcher processor cooperatives.

Inter-cooperative transfers must be processed and approved by NOAA Fisheries.

The cooperative(s) would need to show evidence of binding private contracts and remedies for violations of contractual agreements would need to be provided to NOAA Fisheries. The cooperative would need to demonstrate adequate mechanism for monitoring and reporting prohibited species and groundfish catch. Participants in the cooperative would need to agree to abide by all cooperative rules and requirements. Cooperative members are jointly and severally responsible for cooperative vessels harvesting in the aggregate no more than their cooperative's allocation of target species and PSC mortality.

CP annual cooperative allocations may be transferred to CV cooperatives.

All transfers of annual cooperative allocations would be temporary, and history would revert to the original LLP at the beginning of the next year.

Permit post-delivery transfers of cooperative quota (annual allocations to cooperatives)

There would be no limits on the number or magnitude of post-delivery transfers. All post-delivery transfers must be completed by December 31st.

#### Catcher processor limited access fishery

The catcher processor limited access fishery is prosecuted by eligible catcher processor LLP participants who elect not to be in a cooperative.

Annually, the catcher processor limited access fishery will be allocated a share of the sector's allocation of each allocated target species equal the aggregate share of all LLPs that are not assigned to a cooperative.

Annually, the catcher processor limited access fishery will receive allocations of halibut and Chinook PSC equal to \_\_ percent of the aggregate share of the sector's halibut and Chinook PSC apportionments, respectively, of LLPs that are not assigned to a cooperative. Note: this provision is used to create an incentive for cooperative membership and participating in the PSC reduction measures required of cooperatives.

The catcher processor limited access fishery will be subject to all current regulations including all seasonal and deepwater/shallowwater complex fishery regulations and restrictions of the LLP and MRA limitations.

All vessels participating in the Gulf catcher processor fisheries will need to have an eligible catcher processor LLP with the appropriate gear, operation type, and area endorsement assigned to the vessel at the time of fishing.

Permanent transfers of an eligible license and its associated catch history would be allowed. Eligible LLP licenses and their associated catch history and eligibility endorsements would not be separable or divisible.

# North Pacific Fishery Management Council

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Certified: *Jan Bender*  
Date: *12/6/13*

**REPORT  
of the  
SCIENTIFIC AND STATISTICAL COMMITTEE  
to the  
NORTH PACIFIC FISHERY MANAGEMENT COUNCIL  
September 30<sup>th</sup> – October 1<sup>st</sup>, 2013**

The SSC met from September 30<sup>th</sup> through October 1<sup>st</sup> at the Hilton Hotel, Anchorage AK.

Members present were:

Pat Livingston, Chair  
*NOAA Fisheries—AFSC*

Robert Clark, Vice Chair  
*Alaska Department of Fish and Game*

Jennifer Burns  
*University of Alaska Anchorage*

Alison Dauble  
*Oregon Dept. of Fish and Wildlife*

Sherri Dressel  
*Alaska Department of Fish and Game*

Anne Hollowed  
*NOAA Fisheries—AFSC*

George Hunt  
*University of Washington*

Gordon Kruse  
*University of Alaska Fairbanks*

Seth Macinko  
*University of Rhode Island*

Steve Martell  
*Intl. Pacific Halibut Commission*

Franz Mueter  
*University of Alaska Fairbanks*

Lew Queirolo  
*NOAA Fisheries—Alaska Region*

Terry Quinn  
*University of Alaska Fairbanks*

Kate Reedy-Maschner  
*Idaho State University Pocatello*

Farron Wallace  
*NOAA Fisheries—AFSC*

## **C-1(b) Observer Program 2014 deployment plan**

A presentation was given by Craig Faunce (NMFS-AFSC) on the NMFS Annual Deployment Plan (ADP) for the North Pacific Groundfish Observer Program in 2014. Public testimony was provided by Bob Alverson (FVOA).

The SSC appreciates the extensive work done to initiate the revised observer program in 2013 and to develop the draft 2014 ADP. For years, the SSC has pointed out the bias that may occur by not placing observers on vessels according to a random sampling design. The new observer program has finally addressed this problem although several issues remain.

The 2014 deployment plan provides details on the deployment that attempts to obtain observation rates that constrain program costs and provide sample sizes for precisely observing catches at sea and dockside for groundfish fisheries in the Gulf of Alaska and Bering Sea/Aleutian Islands. The draft 2014 ADP also provides an initial review of successes and challenges of implementing the ADP based on data from a portion of the 2013 season. This will be an ongoing process to improve the program.

The SSC looks forward to a complete performance review of the 2013 season along with an evaluation of the efficiency of the current sample design with respect to coverage of catch and bycatch. A standard

set of performance measures should be developed for the purpose of evaluating how well the observer program is meeting its objectives (precision and accuracy of estimating catch, bycatch, and catch of prohibited species, collection of biological information, and ability to fulfill assigned tasks, including special projects). The review should also highlight any changes in the magnitude of sampling rates of harvests and other harvesting characteristics (such as discard rates) that deviate significantly from years prior to implementing the revised program.

Additional SSC comments on the 2014 ADP are:

- The revised Chinook salmon genetics sampling design for the GOA appears to be well suited for the fisheries in the GOA. This revised design should result in many more genetic samples taken at a lower cost than the Pella-Geiger sampling design, which was developed for systematically sampling a 100% observed bycatch of Chinook salmon in the BSAI.
- The trip selection process appears to be working well with respect to the implementation of a random sample of trips. The SSC recommends addressing the potential problems associated with self-selecting the order of trips and the ability of captains to opt out of carrying an observer without apparent penalty in a future ADP. There was also a potential bias detected in 2013 as it appears that trips delivering to tenders are not being observed. **This omission needs to be addressed with a regulatory change as soon as possible.**
- **Problems with the vessel selection process need to be addressed in the next ADP.** The registry of vessels to be potentially selected is based on prior year fishing activity, leading to potential bias in the selection of vessels to be observed. Perhaps a pre-registration system for vessels that will be fishing in the coming year could be implemented to resolve this sampling issue.
- Further research is needed on the use of EM technology as an auditing tool to reduce the “observer effect” (the alteration of harvesting behavior when an observer is onboard).
- Observer program personnel could look at other observer programs from around the world to see how they deal with the observer effect.
- Now that small vessels are being observed, an analysis should be conducted to compare the spatial distribution of catch and bycatch with that of larger boats.
- A list of vessels that opt out of observer coverage and their reasons for opting out could be maintained and published to determine representativeness of sampling.

### C-3 BSAI Crab Management

Diana Stram (NPFMC) presented the Crab Plan Team report and sections of the Crab SAFE. There was no public testimony. The SSC reviewed the SAFE chapters and information provided by the Plan Team with respect to the stock status information from 2012/2013 relative to total catch in that time period (Table 1). The SSC notes that no stock was subject to overfishing in 2012/2013. In addition, Tables 2 and 3 contain the SSC recommendations for 2013/2014 catch specifications.

Table 1. Stock status of BSAI crab stocks in relation to status determination criteria for 2012/13. Values are in thousand metric tons (kt).

Chapter	Stock	Tier	MSST	B <sub>MSY</sub> or B <sub>MSYproxy</sub>	2012/13 MMB	2012/13 MMB / MMB <sub>MSY</sub>	2012/13 OFL	2012/13 Total catch	Rebuilding Status
1	EBS snow crab	3	77.1	154.2	170.1	1.10	67.8	32.4	
2	BB red king crab	3	13.19	26.4	29.05	1.10	7.96	3.90	
3	EBS Tanner crab	3	16.77	33.54	59.35	1.77	19.02	0.71	
4	Pribilof Islands red king crab	4	2.61	5.22	4.03	0.77	0.90	0.013	
5	Pribilof Islands blue king crab	4	1.99	3.98	0.58	0.15	0.00116	0.00061	overfished
6	St. Matthew Island blue king crab	4	1.8	3.6	2.85	0.79	1.02 [total male catch]	0.82 [total male catch]	
7	Norton Sound red king crab	4	0.8	1.6	2.08	1.30	0.24	0.21	
8	AI golden king crab	5					5.69	3.12	
9	Pribilof Islands golden king crab	5					0.09	Conf.	
10	Adak red king crab	5					0.054	0.001	

MMB as estimated during this assessment for 2012/13 as of 2/15/2013.

Table 2. Maximum permissible ABCs for 2013/14 and SSC recommended ABCs for those stocks where the SSC recommendation is below the maximum permissible ABC as defined by Amendment 38 to the Crab FMP. Bold indicates where SSC recommendations differ from Crab Plan Team recommendations. Values are in thousand metric tons (kt).

Stock	Tier	2013/14 MaxABC	2013/14 ABC
EBS Snow Crab	3a	78.03	70.30
BBRKC	3b	7.07	6.36
Tanner Crab	3a	25.31	17.82
PIRKC	4b	0.759	0.718
PIBKC	4c	0.00116	0.00104
SMBKC	4b	1.23	0.45
Norton Sound RKC	<b>4a</b>	<b>0.26</b>	<b>0.24</b>
Adak red king crab	5	0.05	0.03

Table 3. SSC recommendations for 2013/2014 (stocks 1-7). Note that recommendations for stocks 7-10 represent those final values recommended by the SSC in June 2013. Bold indicates where SSC recommendations differ from September 2013 Crab Plan Team recommendations. Note diagonal fill indicated parameters not applicable for that tier level. Values are in thousand metric tons (kt).

Chapter	Stock	Tier	Status (a,b,c)	F <sub>OFL</sub>	B <sub>MSY</sub> or B <sub>MSYproxy</sub>	Years <sup>1</sup> (biomass or catch)	2013/14 <sup>2</sup> MMB	2013 MMB / MMB <sub>MSY</sub>	$\gamma$	Mortality (M)	2013/14 OFL	2013/14 ABC
1	EBS snow crab	3	a	1.58	154.2	1979-current [recruitment]	157.6	1.02		0.23(females) 0.386 (imm) 0.2613 (mat males)	78.1	70.3
2	BB red king crab	3	b	0.29	26.4	1984-current [recruitment]	25.0	0.95		0.18 default Estimated <sup>4</sup>	7.07	6.36
3	EBS Tanner crab	3	a	0.73	33.54	1982-current [recruitment]	59.4	1.77		0.34 (females), 0.25 (mat males), 0.247 (imm males and females)	25.35	17.82
4	Pribilof Islands red king crab	4	b	0.16	5.16	1991-current	4.68	0.91	1.0	0.18	0.90	0.72
5	Pribilof Islands blue king crab	4	c	0	3.99	1980-1984 1990-1997	0.28	0.07	1.0	0.18	0.00116	0.00104
6	St. Matthew Island blue king crab	4	b	0.18	3.1	1978-current	3.01	0.98	1.0	0.18	0.56 [total male catch]	0.45 [total male catch]
7	Norton Sound red king crab	4	a	<b>0.18</b>	<b>1.86</b>	1980-current [model estimate]	<b>2.27</b>	<b>1.22</b>	1.0	0.18 0.68 (>123 mm)	<b>0.26</b> [total male]	<b>0.24</b> [total male]
8	AI golden king crab	5				See intro chapter					5.69	5.12
9	Pribilof Island golden king crab	5				See intro chapter					0.09	0.08
10	Adak red king crab	5				1995/96– 2007/08					0.05	0.03

<sup>1</sup> For Tiers 3 and 4 where B<sub>MSY</sub> or B<sub>MSYproxy</sub> is estimable, the years refer to the time period over which the estimate is made. For Tier 5 stocks it is the years upon which the catch average for OFL is obtained.

<sup>2</sup> MMB as projected for 2/15/2014 at time of mating.

<sup>3</sup> Model mature biomass on 7/1/2013

<sup>4</sup> Additional mortality males, two periods: 1980-1985; 1968-1979 and 1986-2013. Females, three periods: 1980-1984; 1976-1979; 1983-1993 and 1968-1975; 1994-2013. See assessment mortality rates associated with these time periods.

## Snow Crab

Jack Turnock (NMFS-AFSC) presented results from this year's snow crab assessment. Survey estimates of both male and female biomass, as well as base model estimates of MMB at mating, decreased in 2012/13 compared to the previous year. The model structure of this year's base model differs from the September 2012 assessment in two ways: discard mortality was changed to 30%, and new growth data from Somerton (2012) was fit by sex within the model to estimate parameters of a linear growth function. Three alternative scenarios were explored. Model 2 used the new growth data but a 50% discard mortality as in previous years, while models 3 and 4 used the old growth data (with priors on growth parameters and a common intercept for both sexes) with a 30% and 50% discard mortality, respectively.

The SSC concurs with the CPT to use the base model for specification purposes for 2013/14, although we share CPT concerns over the poor fit to the female growth data. **Results from the assessment place the EBS snow crab stock in Tier 3a, with a mature male biomass at mating in 2013/14 that was estimated to remain above the current proxy for  $B_{MSY}$  ( $B_{35\%} = 154.2$  kt).** The SSC had some concerns over the current stock status. After a substantial increase in biomass in 2010/11 and 2011/12, both survey and model estimates of biomass have dropped substantially in the last two years and the model estimate is currently projected to stay just above  $B_{35\%}$ . This drop occurred in spite of conservative harvest levels and favorable environmental conditions for young crab (cold bottom temperatures). Earlier surveys, particularly in 2009/10, suggested a large pulse of small crab was entering the population, but the anticipated strong recruitment failed to materialize. For these reasons, and because of the continuing concerns over how growth is modeled, **we concur with the CPT recommendation to use a 10% buffer to set the ABC below maximum permissible. This results in an OFL for 2013/14 - as determined by the  $F_{35\%}$  control rule - of 78.1 kt (172.1 million lb) and an ABC of 70.3 kt (154.9 million lb).**

The SSC further endorses the Plan Team recommendations for improving the stock assessment as listed in CPT minutes and offers some additional suggestions. The SSC recommended in June 2013 to use a "best" estimate of discard mortality in addition to discard mortalities of 0.5 and 0.3. Based on their review of available information on discard mortality, the CPT recommended 0.3 as a "best" estimate; however, their estimate is still based on the maximum short-term mortality estimate and maximum injury rate, multiplied by 1.5 to account for unknown long-term mortality. The assumed level of discard mortality has a substantial impact on reference points (e.g.  $F_{35\%}$ ) and the SSC re-iterates its request from June 2013 to develop a "best" estimate of total handling mortality derived by adding the average annual short-term estimate (0.04) to the average injury rate, and multiplying the result by a factor corresponding to the best guess of additional long-term mortality.

The CPT and SSC previously recommended a 2-piece growth function, but the model failed to converge, hence a linear growth model by sex is used in the current assessment, using the growth data recommended by Somerton (2012). The model is reasonably consistent with observed male growth but not with observed female growth. The SSC recommends that the authors further examine how to best parameterize growth in the model to achieve a better fit to the growth data, maybe using a simple curvilinear or non-linear model rather than the suggested two-piece model.

Additional minor comments on the assessment follow:

- Some figures (e.g. Figure 4) have mis-labeled lines and there is a discrepancy between the units in the figure legend and in the y-axis label.
- The paragraph on the centroids of the cold pool in the middle of the section on "Mating ratio and reproductive success" is out of place and should be moved.

### **Bristol Bay Red King Crab**

This assessment was based on six alternative model scenarios. The base model for the alternatives, Scenario 0, was identical to the Scenario 7ac model used in the 2012 assessment, except that it was updated using the 2013 survey and 2012/13 fishery data, and used NMFS length-weight relationships. The author explored alternative ways to estimate effective sample sizes and molting probabilities. The SSC agrees with the author's and Plan Team's recommendation to use the proposed new methods for estimating effective sample size and molting probability. The author also explored the implications of alternative start dates (i.e., start in 1975, Scenario 1) and the incorporation of length / sex composition and survey biomass estimates from the BSFRF survey (Scenario 4). In response to an SSC request, the authors implemented a random walk approach for estimating natural mortality to evaluate the evidence for time blocks of high natural mortality. The SSC appreciates the responsiveness of the author to Plan Team and SSC requests. The SSC agrees with the Plan Team recommendation to use Scenario 4 as the basis for 2013/14 harvest specifications. The SSC agrees with the author that the results from Scenario 7 were informative and indicate that further exploration of the time blocks used for estimating elevated natural mortality is needed.

**The SSC appreciates the author's consideration of breakpoints for estimation of biological reference points.** This year's assessment contains a detailed statistical evaluation of the stock recruitment relationships. The authors provided several lines of evidence to support their selection of the 1984-2012 time period. **The SSC agrees with the author's recommendation for use of this time period for estimation of reference points for 2013/14.**

The author was responsive to SSC and Plan Team requests to conduct retrospective analyses. The previous evidence for overestimation at the end of the time series appears to be less evident in the new model.

**The SSC accepts the OFL recommendations of the Plan Team. Based on the results of Scenario 4, the stock is in Tier 3b resulting in an OFL of 7.07 kt (15.58 million pounds).**

The SSC agrees with the Plan Team that a 10% uncertainty buffer should be applied to determine ABC. The rationale for this decision is the lack of small crab in the survey since 2008. While the 2011 survey showed a very high catch of crab <60 mm CL at a single station, this high catch did not track into the 2012 or 2013 surveys.

**The SSC accepts the ABC recommendations of the Plan Team. Based on the results of Scenario 4, the stock is in Tier 3b resulting in an ABC of 6.36 kt (14.02 million pounds).**

#### **Recommended research:**

1. Shifts in the center of distribution of BBRKC can be a function of depletion of the stock, the crab closure area, shifts in larval drift, habitat selection, or fishing. The interpretation of which of these potential causes contributes to the selection of a time period should be investigated.
2. We suggest that the authors work with flatfish authors to come up with a consistent approach to treatment of biomass outside of the survey area.
3. Further study of maturity is needed.
4. The SSC suggests a re-evaluation of predation pressure on BBRKC.
5. The Plan Team should investigate the impact of dropping hotspots as per the CIE review.
6. The Plan Team should investigate the impact of corner stations for hotspots as per the CIE review.
7. The Plan Team should investigate the impact of re-tows as per the CIE review.

### **Tanner Crab**

With the acceptance of a new stock assessment model last year, the Tanner crab assessment was shifted in 2012 from Tier 4 to Tier 3, which resulted in a significant reduction in  $B_{MSY}$ . As a consequence, this stock

was found to no longer be overfished and was declared to be rebuilt in 2012. However, despite the specification of an ABC, the fishery remained closed this year owing to the State of Alaska harvest strategy.

The 2013 Tanner Crab assessment is clearly written. The SSC appreciates the summary of changes and detailed responses to previous Crab Plan Team and SSC comments. The model code was modified to improve user friendliness, computational speed, and presentation of output. Also, a few coding errors were discovered and corrected. Impacts of model coding fixes are clearly shown in tables and figures and the net effects are relatively minor. Several extant Crab Plan Team and SSC comments have not yet been addressed and the SSC looks forward to the progress on those in the next assessment. The Crab Plan Team again highlighted some of those in their report.

**The SSC agrees with the authors' and team's recommendation to use Model 01 (based on the 2012 base model including fixes to known errors in model code) for this year's specifications.** Last year, the SSC recommended adoption of a 3-year stair-step strategy to transition from the lower ABCs resulting from the previous assessment to the higher ABCs indicated by the 2012 assessment. Application of this stair step resulted in an ABC of 8.17 kt for 2012/2013. In this year's assessment, the authors noted that, if the third and final step were to be applied with a 10% buffer, the ABC would equate to a 40% harvest rate. The authors further noted that rates of this magnitude were associated with stock collapses during the history of this fishery. Owing to these concerns, the authors recommended re-starting the stair step transition at the first step (8 kt) for 2013/2014. The Crab Plan Team recommended continuing with the SSC approach and implementing the second step for 2013/2014, which would equate to an ABC of 17.82 kt. However, in so doing, the Plan Team also expressed concern about the uncertainty in this stock assessment and the stock status. The Plan Team indicated that they will reevaluate their ABC recommendations next year, rather than automatically applying the final stair step.

**The SSC agrees with the Crab Plan Team's recommendation to apply the second stair step for setting OFL and ABC for 2013/2014.** In doing so, the SSC noted that the State of Alaska harvest policy will reduce the TAC by 50% if a fishery is opened, given that next year will be the first year of a resumed fishery after a period of closure. So, there is an additional large buffer between ABC and TAC for 2013/2014. This will not be the case for 2014/2015.

**Over the long term, the SSC shares the author's and team's concerns about the control rule used to set OFL and ABC for Tanner crab and looks forward to additional advice from the authors and team in next year's assessment.** The SSC recommends conducting a management strategy evaluation (MSE) to determining the long-term consequences of alternative harvest rates on stock status and yield under various sources of uncertainty. The SSC understands that a MSE may not be feasible in the coming year, especially given additional planned work on the assessment model.

The Crab Plan Team provided a number of recommendations to the stock assessment authors, which the SSC supports. The SSC continues to note that some retrospective patterns in model estimated biomass remain. For instance, the model under-estimates the decline in male and females in the survey in the mid-1980s and overestimates them in recent years. On the other hand, legal males appear to be overestimated in recent years. There are patterns in other residuals. The SSC continues to encourage alternative model specifications to address these patterns. Possibly, inclusion of a time-varying growth function may address some of those retrospective patterns, as pointed out in previous comments. New growth studies on EBS Tanner crab remains a very high priority.

The SSC greatly appreciates the author's additional work on break-point analyses shown in the Appendix that largely address the SSC's previous comments on this matter. Two candidate periods for break points were identified: 1974-1975 and 1983-1987. The former was interpreted as a decrease in productivity,

whereas the latter was interpreted as an increase in density-dependent mortality. The team discounted the latter and pointed out that the 1974-1975 change point was quite similar to the 1976-1977 regime shift recommended by the SSC on an interim basis. This results in the use of recruitments from 1982 onwards for purposes of MSY estimation. However, as noted by the authors and team, the break point analysis did not lead to a compelling reason to differ from the regime shift-based break point recommended by the SSC. **Given this, the SSC continues to support the use of recruitments since 1982 for purposes of computing  $B_{MSY}$ .** The author listed additional work to be conducted on this topic in the future. The SSC looks forward to any new findings that may shed more light on this topic.

Finally, the SSC encourages the authors to continue to review model code for any lingering errors, and also encourages a thorough review and re-compilation of all data sources. The team raised some questions about the validity of the size composition data used in the assessment, however it would be wise to check and verify all data used in the assessment.

### **Pribilof Islands Red King Crab**

The fishery for red king crab in the Pribilof Islands district has been closed since 1999 due to concerns about low abundance, imprecise biomass estimates, and bycatch of Pribilof Islands blue king crab, which are classified as overfished. Fishing mortality since the closure of the directed fishery has been limited to incidental catches in other crab fisheries and in groundfish fisheries. The SSC supports the CPT recommendation to continue using the same base years as used previously (1991 to the current year) for determination of  $B_{MSY}$  for the Pribilof Islands red king crab stock. **The SSC also supports a Tier 4b designation for this stock, noting that the estimate of mature male biomass (MMB; 4.68 kt) is below  $B_{MSY}$  (5.16 kt). As in 2012, estimates of MMB were calculated in the assessment as a 3-year weighted moving average, centered on the current year and weighted by the inverse variance. Under the Tier 4b designation, the OFL for 2013/2014 is 0.90 kt.**

**The SSC agrees with the CPT recommendation to include additional uncertainty ( $\sigma_b = 0.4$ ) when calculating the ABC using the P\* approach, resulting in an ABC of 0.72 kt.** The SSC's support for this approach is based in large part on the recognition that the brief history of exploitation of this stock makes it difficult to identify an appropriate period of time suitable for establishing  $B_{MSY}$ , such that the true distribution of the OFL is poorly known. The SSC notes that large cohorts of young crab have not been observed since the mid-2000s and that estimates of bycatch in the groundfish fisheries were higher in 2012/13 than in previous years.

The SSC appreciates the author's responses to requests for CVs in tables of abundance estimates and confidence intervals in the table of weighted moving average estimates of abundance, and appreciates the improved estimates of discard catch for 2009/10-2012/13 based on a new methodology using State reporting areas.

### **Pribilof Islands Blue King Crab**

Retained catches for Pribilof Island blue king crab have not occurred since 1998/1999. Improved estimates of discard catch were calculated for 2009/10-2012/13 based on a new methodology using State reporting areas. Bycatch and discards have been steady or decreasing in recent years, but increased in the trawl fishery for 2012/13.

In this assessment, survey biomass estimates were updated to include an additional 20 nm strip on the eastern portion of the Pribilof District due to the change in the stock boundary. Stock biomass estimates decreased by more than 50% from 2012 to 2013, but the uncertainty in biomass estimates is extremely high due to low survey catches. Following the approach in the 2012 assessment, biomass estimates were based on a 3-year weighted average, centered on the current year and weighted by the inverse of the variance. The projected

mature male biomass (MMB) decreased substantially in this assessment, from 0.58 kt in 2012/13 to 0.28 kt in 2013/14, and remained well below the minimum stock size threshold.

**The SSC supports the CPT and author recommendations for management of Pribilof Islands blue king crab under Tier 4c to reflect the conservation concerns with this stock and to acknowledge the existing non-directed bycatch mortality. Following the advice of the CPT, the SSC recommends a modified Tier 5 calculation of average catch mortalities between 1999/2000 and 2005/2006, resulting in a total catch OFL of 0.00116 kt. Similarly, the SSC supports using a 10 percent buffer for the ABC calculation, resulting in an  $ABC_{max}$  of 0.00104 kt. The SSC discussed using a more conservative buffer (e.g., 20%) to further reduce the ABC due to concerns over the status of the Pribilof Islands blue king crab stock, but continues to recommend the 10% buffer for 2013/14. **The Pribilof blue king crab stock is overfished; however, overfishing did not occur during the 2012/2013 season.****

The MSY stock size ( $B_{MSY}$ ) is based on mature male biomass at the time of mating ( $MMB_{mating}$ ), which serves as an approximation for egg production. The MMB for 2013/14 was estimated at 0.28 kt. For 2012/2013,  $B_{MSYproxy} = 3.99$  kt of  $MMB_{mating}$  derived as the mean MMB from 1980 to 1984 and 1990 to 1997. The stock demonstrated highly variable levels of MMB during both of these periods. Compared to other BSAI crab stocks, the uncertainty associated with the biomass estimates for Pribilof Islands blue king crab is very high due to insufficient data and the small distribution of the stock relative to the survey sampling density, likely leading to uncertain approximations of  $B_{MSY}$ .

A revised rebuilding plan was approved by the Council in June 2012 and was submitted for review by the Secretary of Commerce in early 2013. The revised rebuilding plan closes the Pribilof Habitat Conservation Zone to Pacific cod pot fishing.

### **Saint Matthew Island Blue King Crab**

The author evaluated 11 alternative model configurations against the base model first used to provide harvest specifications in 2012. Alternative model configurations differed in their treatment of M, weighting of trawl survey and pot survey size-compositions, and trawl survey selectivity by crab stage. The author also provided a preliminary evaluation of a stage-transition matrix based on the growth study of Otto and Cummiskey (1990) on Pribilof and St. Matthew Island blue king crab. Results from alternative model scenarios do not provide a compelling reason to switch models. **Thus both the author and CPT recommended continued use of the base model for the 2013 harvest specifications using Tier 4b. The SSC agrees and also concurs with the team's recommendation to set the ABC to be 20% below the OFL instead of the more usual 10%.** The use of a larger buffer is recommended due to large uncertainty in stock abundance estimates owing to a retrospective pattern. With each year's new assessment, there is a decline in the estimates of abundance in prior years, suggesting that the stock is in poorer condition than the current-year model indicates. Additionally, there is a declining trend in abundance coupled to very large CVs in trawl survey estimates in recent years. In combination, these factors lead to higher than usual uncertainty in current year biomass estimates for this declining stock.

For next year's assessment, the SSC encourages the stock assessment author to focus on addressing the retrospective bias in the current assessment and offers the following recommendations:

- Develop a likelihood profile over a large range of Ms and provide diagnostics on model fits. Misspecification of M can lead to biases in abundance estimates.
- As suggested by the team, further work on a biologically defensible age-transition matrix may be fruitful. Alternative models should be developed using this approach.
- Investigate all other model assumptions to evaluate their potential contribution to the retrospective pattern.

### **Norton Sound Red King Crab**

The lead author, Toshihide Hamazaki (ADF&G), was available to answer questions on this assessment. In June 2013 the Crab Plan Team and SSC recommended that the assessment model be used to calculate ABC and OFL, and ABC and OFL values were determined for 2013-2014 because there is no survey for this stock. It was also recommended that the assessment schedule be changed from July 1 – June 30 to November 1 – October 31 to better accommodate the summer fishery.

Thus, an updated assessment was completed for this meeting to commence the new schedule. Updated data included the 2013 summer commercial fishery catch, the 2012/2013 winter commercial fishery catch, and standardized CPUE data with the 2013 summer commercial fishery observer data. Revised data included time series of the historical winter total subsistence catch (now including mortality of discards) and crab abundance estimates from the 1976-1991 NMFS survey (re-estimated from the original survey data). The model was revised to start in February instead of July. Some other minor changes were also made. Assessment results now calculate retained OFL and ABC for both winter (including subsistence) and summer fisheries.

The assessment authors had only about two weeks to complete the stock assessment and SAFE document, because CPUE data were not available until the end of summer. Initial results from the full model that used all the data were puzzling, showing very high recruitment in 2013, and resulting in very high projected legal biomass in 2014 (almost double that of the previous year). The authors then conducted a reduced model run without the 2013 observer data, which resulted in a slight decline in projected legal biomass in 2014.

The authors checked that the change of assessment schedule did not have an effect. There were no differences in fits to all data sources between the full model and the reduced model. Almost all parameter estimates and their standard errors (SE's) were similar. The exception was the last recruitment parameter, which was estimated to be 4.5 million in 2013 in the full model (more than twice as high as the next largest estimate) and 0.646 million in 2013 in the reduced model (lower than average; Table 12). The uncertainty (SE) for log recruitment in 2013 in the full model was 1.1, and it was higher in the reduced model (SE = 7.0; Table 11). The authors examined the observer data from 2013 in great detail and found nothing that would indicate an error in data collection. Over 50% of the sublegal crab were in the smallest length class, the highest percentage on record (Table 7). This apparent large recruitment event seems at odds with declining fishery CPUE; fishery CPUE in 2013 was the lowest of the past 12 years.

The Crab Plan Team chose the reduced model because it did not find the 2013 recruitment estimate to be credible. The SSC declined to follow this course because it could find no reason to reject the data, which was collected according to normal protocols. Instead, it encourages the stock assessment authors to further examine the data and stock assessment model to see if better understanding of the effect of the 2013 observer data can be found by the time of the next assessment cycle in May/June 2014. In addition, the SSC requests a sensitivity analysis of data weighting, with consideration of recent recruitment events. Effectively, this will put off the change in the assessment cycle until next year. Also, there will be a trawl survey next year that should help reconcile data conflicts and should substantially reduce the uncertainty in the 2013 recruitment estimate.

**In the absence of an accepted model from this new assessment, the SSC recommends using the assessment results from June 2013. This places Norton Sound RKC in Tier 4a, with an ABC of 0.24 kt and an OFL of 0.26 kt.**

### **Pribilof Island Golden King Crab**

This is a Tier 5 stock and it is not possible to determine stock status; therefore, it is unknown if the stock is overfished. Due to the limited number of participants in this fishery, catch information is confidential;

however, the author does indicate that the total catch did not exceed the OFL of 0.20 million lb. The OFL for 2014 was calculated as 90.7 t (0.20 million lb), and the ABC is based on a 10% buffer at 81.6 t (0.18 million lb). **The SSC supports the CPT recommendation of a 10% buffer to set the ABC below the maximum permissible.**

This year the assessment author also prepared an appendix proposing a Tier 4 biomass calculation for catch specifications. The crab plan team reviewed this appendix and recommends that alternative OFL and ABC specifications based on this approach be included in the 2014 assessment. **The SSC recommends including any auxiliary trend information that can be used to support Tier 4 recommendations.**

### **Adak Red King Crab**

The CPT discussed the Alaska Board of Fisheries proposals to establish an Adak red king crab district in order to prosecute a proposed red king crab fishery in the AI. The SSC agreed with the comments and concerns raised during the CPT discussion regarding these proposals and their associated implications for Adak red king crab management.

### **Economic SAFE**

A brief presentation of the Economic SAFE was provided by Diana Stram (NPFMC) on behalf of the AFSC Social and Economic Program staff. The subject SAFE is nicely presented, including interesting reporting on price projection modeling efforts. **The SSC believes it would be very valuable if the authors of the Economic SAFE report(s) could be present during the annual Council meeting cycle to provide the SSC with the opportunity to formally interact with them.** Over several consecutive years, the SSC has not received a “formal” presentation of the Economic SAFE, either for crab or groundfish. This puts the SSC at a disadvantage in conducting a meaningful review, as questions cannot be asked of the analyst, nor can recommendations be offered.

The SSC suggests that the AFSC undertake modifications to the Economic SAFE documents (again, ultimately for both crab and groundfish) to accommodate and reflect new Small Business Administration mandates to employ separate thresholds to determine the relevant size of the directly regulated entity for RFA. Effective July 22, 2013, an entity participating in commercial finfish fishing is small for RFA purposes if their total average annual gross receipts, from all economic activity, including that of all affiliates, worldwide, is \$19.0 million or less. Commercial entities participating in shellfish fishing are small for RFA purposes if their total average annual gross receipts, from all economic activity, including that of all affiliates, worldwide, is \$5.0 million or less. Previously, commercial fishing had a single threshold, making target species differentiation unnecessary. This is no longer true.

NMFS has provided initial guidance on application of these new standards. That advice will require identifying the principal commercial fishery source of gross receipts for each directly regulated entity. Council management actions will require analysis of these differential principal-source thresholds for each future action it proposes. The Economic SAFE is an excellent opportunity to provide one identifiable official source.

### **C-4 (a) Stock Structure Workshop Report**

Jane DiCosimo (NPFMC) provided a report on the Council workshop on spatial management held in Seattle on April 16, 2013. Public testimony was provided by Merrick Burden (Marine Conservation Alliance) and Jason Anderson (Alaska Seafood Cooperative). The purpose of the workshop was to improve the current process for determining spatial management by raising new ideas, issues to be addressed in the future, and potential actions. It was also a venue to discuss the need for and application of the stock structure template.

**Determination of stock structure is a scientific matter. It is one of the most fundamental and most important tasks of fishery scientists.** Information on stock separation may come from a variety of sources. Genetics can provide the clearest scientific basis in cases where analyses demonstrate little gene flow among stocks. While genetics can demonstrate that stocks are different, it cannot prove that stocks are the same. Thus, other scientific evidence is important. There is a rich scientific literature on the use of other biological information for stock separation, including statistical differences in morphometrics (e.g., body shape), meristics (e.g., number of vertebrae), growth rates, size/age of maturity, recruitment patterns, spawning areas, and migration routes as evidenced by mark-recapture studies. These biological considerations are specified in the stock structure template, which has been previously reviewed and approved by the SSC. **The stock structure template is based on accepted findings and common practices used in the field of fisheries science. Thus the determination of stock structure is a scientific matter obtained from biological information and based on commonly accepted scientific best practices. Moreover, this issue is intimately tied to the SSC responsibility to recommend ABCs and OFLs that prevent overfishing of each underlying stock. The MSFCMA clearly directs the SSC to establish annual catch limits. These limits include an assessment of the evidence for stock delineation and the biological reference points associated with sustainable management of stocks. Therefore, the SSC suggests a modification of the approach recommended by the Plan Teams.**

**The SSC feels that spatial stock management is a two-step process. The first step is the scientific matter of determining the stock structure. The second step is to determine the management response to these scientific findings.** Ideally, separate ABCs and OFLs would be specified for each stock. However, this is not always necessary or practical. There are cases where ABCs and OFLs might be reasonably specified for a collection of stocks, while still achieving conservation and management goals. The SSC recognizes that the NPFMC has a variety of tools that could be utilized to achieve sustainable management of stocks and we encourage input on alternative approaches to maintaining catches at a sustainable level. As soon as preliminary scientific information reveals that further stock separation may be indicated, the stock assessment authors, Plan Teams, and SSC should advise the Council so that remedial actions can be considered to avert conservation problems.

In summary, the SSC does not see a current problem to be addressed in determining stock structure. The stock structure template represents a defensible scientific approach using accepted methods for establishing the biological basis for stock separation. The next step, determining appropriate Council action, is one where other economic and management considerations are brought into the decision-making process. These discussions are typically included in the stock assessments, but they could be highlighted in Plan Team and SSC minutes so that these new issues come to the full attention of the Council family while the science is still being finalized and vetted. **The SSC does not support Option 2 in the joint Groundfish Plan Team report that suggests that the Plan Team should consider economic and management issues in identifying stock structure, which instead should only be based on best science.** The Council always has the option to request further information/analysis (e.g., risk analyses) to evaluate the full range of potential impacts of proposed and alternative actions in formulating its preferred action. The SSC agrees with the Plan Teams that there is a need to address these issues on a case-by-case basis. Finally, the SSC encourages the Council to include the members of the Crab and Scallop Plan teams in future discussions on this topic. The underlying stock structure of weathervane scallops and crab (e.g., EBS snow crab, Adak red king crab) and the possibility of needing increased spatial management have been recurring recent topics of discussion by plan teams and the SSC.

#### **C-4(c) Plan Team Report and Groundfish Harvest Specifications**

The SSC received a presentation from Jane DiCosimo (NPFMC) and Diana Stram (NPFMC) on the proposed harvest specifications for groundfish in both the BSAI and the GOA for 2014 and 2015. There was no public testimony. **The SSC recommends approval of these specifications.**

For the most part, the SSC supports the GPT recommendations, but also had comments and additional recommendations on some of the items presented that are provided below.

### **BSAI and GOA Pacific cod models**

The SSC received summaries from Diana Stram (NPFMC) for the Gulf of Alaska and Joint Plan Teams and from Jane DiCosimo (NPFMC) for the Eastern Bering Sea and Aleutian Islands on preliminary Pacific cod model explorations and Plan Team recommendations with regard to these models. Public testimony, primarily regarding the preliminary Aleutian Islands model, was provided by Chad See (Freezer Longliner Coalition) and Dave Fraser (Adak Community Development Corporation).

The SSC notes that all of the Pacific cod models are characterized by a large number of parameters and dome-shaped selectivities, features that were found to be associated with retrospective patterns and a higher risk of overfishing in the meta-analysis by Hanselman et al. (see separate section). The SSC has previously encouraged the authors to simplify the models when possible and appreciates the suggestion by Grant Thompson (AFSC) to consider omitting seasonal structure in one or more of these models in the future. With respect to this year's assessments, the SSC offers the following recommendations:

#### Gulf of Alaska

**We agree with the Plan Team recommendations regarding the suite of models to bring forward in December.** However, we note the large and increasing number of models and model variants being considered. While most of these models have a similar overall structure, the SSC cautions the analyst and Plan Team to carefully explore incremental changes to the model to evaluate their effects on model fits and reference points.

#### Eastern Bering Sea

**The SSC agrees with Plan Team recommendations regarding models to bring forward in December. In addition to the recommended model configurations, the SSC would like to see a model or models that fix survey catchability at  $Q=1$ .** We suggest presenting variants of model 2a (or 2b with mean  $Q=1$ ) and model 3a with  $Q=1$ . Our rationale for this request is based on the increasing evidence that catchability is higher and quite possibly much higher than the current standard assumption that selectivity in the 60-81 cm size range is 0.47, which is based on a limited study by Nichol (2007). Evidence from an unpublished study conducted in 2012 (Lanth) suggests that there is no difference in catchability between the low-opening (2.5 m) trawl used in the Bering Sea survey and the high opening (7 m) trawl used in the Gulf of Alaska survey. Moreover, observations of acoustic backscatter showed that Pacific cod tended to be near the bottom in the study area, consistent with a dive response to passing vessels commonly observed in other gadids. We note that the default assumption in most assessments is that survey catchability is 1, unless there is strong evidence to the contrary. The evidence to date consists of the vertical distribution of 11 tagged fish under undisturbed conditions over a period of one month (Nichol et al 2007).

#### Aleutian Islands

The SSC concurs with the Plan Team to drop Model 3 from consideration in the December assessment because of the unrealistic value for catchability estimated in the model. Hence, we recommend bringing forward results from models 1 and 2 (and any others at the authors discretion), as well as reference points based on Tier 5 considerations in the December assessment as the SSC has notified the Council that it intends to set separate ABCs for the Aleutians and the Eastern Bering Sea.

### **Flatfish models**

The Groundfish Plan Team reviewed three white papers at their September meeting: (1) aggregate stock assessment for northern and southern rock sole, (2) a transition to a Stock Synthesis model (SS3) for Dover sole, and (3) a transition to SS3 for flathead sole.

For the rock sole model, the primary benefit of using the aggregate northern–southern model is the ability to use a longer time-series of data (back to the 1980s). There was some concern, however, that the SS model fit to the survey abundance index is worse than the 2012 platforms (northern rock sole). Moreover, species composition is not available for the early part of the series. The observer program may be able to help apply species composition ratios to the haul-level. The Plan Team made several recommendations to proceed for the November assessment including: continue to develop SS models for aggregate northern and southern species, investigate empirical weight-at-age data to simplify model structure, investigate data weighting and improve fits to survey data, and find a method to calculate ABC for the aggregate model. Also, there is a need to explore likelihood profiles for the natural mortality rate, derive a prior distribution for  $M$  based on plausible values from similar flatfish, and report the total likelihood and components of the total likelihood for alternative model structures.

A new assessment author has assumed assessment responsibilities for Dover sole and flathead sole. For both Dover sole and flathead sole, new SS models are being developed to replace the previous assessment platforms. The SS models are able to accommodate many of the previous issues identified by the SSC, and the models also appear to match the 2011 models for both species; however, there were some discrepancies in the Dover sole model due to how data are treated within SS3. **The SSC recommends that the previous stock assessment platforms be updated with the most current data for comparison to the new SS models before transition to the new SS platform. The SSC also endorses the Plan Team recommendations to list maturity studies as a research priority due to the large differences in maturity rates between studies in different regions. The SSC also agrees with Plan Team recommendations pertaining to survey expansion, and to disregarding composition data from earlier survey years that had incomplete spatial coverage.**

### **Retrospective analysis workgroup**

The SSC commends the members of the working group for an excellent meta-analysis of retrospective patterns across 20 groundfish stocks, and appreciates the cooperation of all of the assessment authors who contributed. The analysis of patterns across stocks was very informative and suggested that models that are highly parameterized and use dome-shaped selectivities are associated with retrospective patterns that imply a higher risk. **We agree with the recommendations of the Plan Team that retrospective analyses extending back 10 years, and including Mohn's revised  $p$ , should routinely be presented in the assessments. Retrospective patterns should be taken into consideration when selecting a model and when communicating uncertainties associated with biomass estimates.** The SSC also notes that a strong retrospective bias should be one of the criteria considered when setting ABCs and could provide justification for recommending a higher or lower ABC.

### **Survey averaging workgroup**

The SSC agrees with the Plan Teams' recommendation that authors should compare their method of survey averaging with the random effects approach.

### **Stock recruitment workgroup**

Jane DiCosimo (NPFMC) reviewed the "Phase III" Report of the Joint Groundfish and Crab Plan Team/SSC Working Group on Assessment/Management Issues Related to Recruitment. The SSC appreciates the opportunity to review the stock recruitment working group report. This document will improve transparency

in decision making with respect to setting management tiers, recruitment time frames, and methods for estimating biological reference points.

The SSC discussed the strict criteria for determining reliability of the  $F_{MSY}$  pdf in topic B5, and questioned if currently Tier 1 stocks would meet these criteria. The SSC also emphasized that use of environmental variables to explain recruitment variability or in stock assessments need not be at the scale of regime shifts.

#### **ACL II discussion**

The Joint Plan Teams reviewed issues involved in implementing annual catch limits (ACLs) in the groundfish FMPs. The three main issues identified were:

1. Expanding/revising the role of scientific uncertainty in harvest control rules,
2. Establishing a numerical MSST; and
3. Accounting for total catch removals

The basis for the Joint Plan Team review was a report prepared by Grant Thompson in May 2011. Other information considered included the SSC review of the issue paper (June 2011), the Joint Plan Team's review of the document (August 2011, September 2012), excerpts from other SSC reports, as well as SSC comments on the Advance Notice of Public Rulemaking regarding NS1 guidelines. In their September 2013 meeting, the Joint Plan Teams provided new advice on issues 1 and 3, which the SSC supports. Regarding issue 3, the SSC continues to support steady progress toward full accounting of "other" removals. The Joint Plan Teams offered practical guidance in this regard. The SSC encourages further development of these analyses over a reasonable time frame.

#### **GOA DSR**

The SSC received the Plan Team report on the Southeast Demersal Shelf Rockfish (DSR) assessment. In light of the change in survey methodology from use of a submarine to use of a remotely operated vehicle (ROV) without the ability to do a side-by-side comparison, the SSC recommends authors review earlier comparisons of submarine and ROV equipment (O'Connell and Carlile 1994) for potential differences in coverage.

#### **Moving non-Southeast DSR into Other Rockfish**

The SSC agreed with the GPT and author recommendation that DSR remain in the Other Rockfish complex for areas of the GOA outside of the eastern Gulf. We also agree that for the November assessment the author should apply the survey averaging technique for smoothing survey biomass estimates in addition to the current method.

#### **C-5 (a) Discussion paper on GOA Trawl Bycatch Management**

The SSC received a presentation by Darrell Brannan (NPFMC consultant) and Sam Cunningham (NPFMC). Public testimony was provided by Rachel Donkersloot (Alaska Marine Conservation Council). The introduction to this paper sets out an ambitious task. Overall, the paper is nicely written, clear and concise, and it succeeds in presenting each promised element. However, the parts do not appear to comprise a coherent whole. The paper's title, GOA TRAWL BYCATCH MANAGEMENT is only partially and occasionally descriptive of the paper's content, partially because there are passages that address bycatch management and occasionally because the component chapters of the draft move from topic to topic without clear transitions and linkages. The SSC believes that we would have benefited from the initial staff discussion paper presented to the Council in June and the Council's comments/guidance based on that initial discussion paper. However, within the limits of the information presented to the SSC in the document under review, we offer the following observations.

The first substantive section (Section 2) provides a brief, recent, and selective literature review of the general subject area of “quota share-based” fisheries management. The review identifies several key elements of programmatic structures that are based upon apportioning catch-shares to stakeholders. Important observations and assertions about quota-share management, structural elements of several forms of shares management, and principal arguments and counter arguments pertaining to aspects of quota-share based programs within differing temporal and geo-political settings are highlighted by the authors. However, the SSC felt that this selective literature review only captured some aspects of quota-share based fishery management research contained in the contemporary literature and therefore did not provide adequate coverage of the subject.

The presenters informed the SSC that the literature review is unlikely to be edited and reviewed again even with our suggested changes to broaden the literature covered and to develop a stronger analysis of the pertinent findings. This is troubling because of inaccuracies and selective biases in the review. The suggestion that the review will be archived at this point effectively represents an explicit decision to memorialize these shortcomings (which otherwise could easily be addressed). In one example, the economic outcomes section treats fishing as a job with individuals weighing opportunity costs; this discussion ignores the range of cultural attachments, place-based identities, heritages, and many other elements that accompany the fisheries and for which there is an extensive peer-reviewed literature. Specific to catch shares, there is a broad literature on the effects on communities (e.g. Langdon, St. Martin, Macinko, McCay, Eythorsson, Lowe and Carothers, Hegelson and Palsson), however, in the current version, “sociocultural value on maintaining a fishing lifestyle” is only acknowledged in an unreferenced footnote.

**The SSC believes this literature review needs to be broadened before releasing the document to the public.** A detailed set of comments will be provided to the authors, but some of the SSCs concerns are elaborated below.

The review is supposedly confined to recent peer-reviewed literature and yet there are references to selected publications from as early as 2001 (e.g. Hartley and Fina, 2001; Copes and Palsson, 2001) and to non-peer-reviewed working papers (e.g., Grainger and Costello, 2012). Thus it is hard to determine by what process the vast body of potentially relevant literature was culled to produce the sample examined in the review. Further, it is frequently hard to tell when the authors are discussing assertions made by other authors and when they are presenting generally accepted findings or conclusions from world experience with catch share programs. More attention to phrasing could eliminate much of the potential confusion here (e.g., sentences that begin “authors X, Y, Z assert that...” or “authors in this camp generally conclude that...”).

The review contains numerous references to efficiency, productivity, and profitability and sometimes these terms appear to be used interchangeably. These terms are not synonyms and “efficiency” in particular is susceptible to much misuse in public policy settings. The essay by Saraydar (1989) would be particularly helpful in sorting out the confusion on display in the review and in the fisheries economics literature. Older literature is not invalid or irrelevant simply by virtue of its publication date and should not have been excluded.

The discussion of resource rent is jumbled with economic rent and is misleading due to the confusion in the literature relied upon. Resource rent is not “society’s opportunity cost of prosecuting the fishery” regardless of whether that phrase appeared in a publication. Here, the discussion in Bromley (2009) provides model clarity.

The problem of the truncated nature of the literature selected for review becomes glaring when the discussion turns to the so-called transitional gains trap. Here, the authoritative citation would be that of the originator of that phrase in the fisheries literature, Copes (1986), not the more recent works cited. Contrary to the

statement in the discussion paper (footnote 7), the transitional gains trap applies to all subsequent generations of purchasers (the gains are conferred on the initial recipients alone).

The discussion of stewardship effects ignores both established literature emphasizing the importance of the discount rate on personal conservation ethics (Clark, 1973) and recent experiences in the North Pacific involving high profile prosecutions of catch shareholders.

The suggestion that enforcement costs are lower under catch shares (p. 8) contradicts most world-wide experience.

The reference to MSA language defining catch shares as non-compensable privileges, not property, as a disclaimer is inappropriate and inaccurate. This language mirrors Congressional language in the Taylor Grazing Act regarding public lands grazing permits—in both cases Congress has gone to great lengths to be precise about what it is and isn't creating and such language is more than a disclaimer.

In general, the remainder of the discussion paper presents an initial look at several alternatives before the Council. These alternatives have been submitted by various stakeholders and are at various stages of development and specificity. At this early stage, the draft discussion paper does a good job at describing the policy choices inherent in many of the alternatives and these are beyond the scope of the SSC's responsibility or prerogative in the Council process. The procedural steps described appear appropriate as they pertain to what is identified as Tier 1, then Tier 2 level decision points. The eight proposals presented in Section 3 represent a commendable degree of effort, serious consideration, and investment on the part of the submitting stakeholder groups. Each provides useful, imaginative ideas. While no consensus could have been anticipated at this stage of the process, it is encouraging to see the active participation reflected in these thoughtful contributions to the Council process.

The proposals range from relatively complete and comprehensive concepts, to narrow, partial treatment of specific areas, fleets, or sectors. The systematic way in which each of the eight proposals is broken into key topics by the analysts is excellent and should facilitate meaningful Council comparisons. Each proposal is in the early stages of development, making a rigorous review of each by the SSC premature. However, **it would be extremely useful to see the authors apply the literature review to each of these proposals to highlight the potential positive and challenging elements they variously contain, informing further development of these proposals.** We again note the frequent misapplication of the terms bycatch and prohibited species catch. The error in this circumstance must be corrected because these two distinct categories of removal are actually proposed to be formally managed as discrete elements of the QS program (i.e., bycatch allocations and prohibited species catch allowances).

Section 4 is an extensive treatment of state-water fisheries management that may accompany any of several different structural forms a Federal groundfish quota shares program might take. The information contained in this section is excellent, although its immediate relevance to the topic of GOA Trawl Bycatch/PSC Management is unclear. Indeed, the tabular representations of various forms of State Water Management in the face of any given Federal QS program raises many questions specific to PSC accounting. There does not appear to be any treatment of trawl avoidance of PSC or groundfish bycatch; the state does not have PSC limits, but could consider creating them.

Section 5 is a treatment of the various forms of, and barriers to, the concept of one or more Community Fishing Associations (CFAs). This section presents both theoretic and case-study descriptions of how CFAs might participate in fishing activity to further inform consideration of one of the stakeholder proposals. This is excellent information, although many questions would have to be addressed before such an approach could be tailored to the GOA trawl fisheries.

Finally, the Appendix contains a very helpful table that contrasts a suite of programmatic performance elements as applies to the submitted proposals. However, this material is provided without further explanation or interpretation, both of which would enhance the presentation.

#### **C-5 (c) Initial review of GOA Rockfish Chinook Cap Rollover**

The SSC received a presentation on the initial draft EA/RIR by Sam Cunningham (NPFMC). There was no public comment. The document is a follow-on of the proposed GOA Amendment 97 Chinook Salmon PSC Avoidance action, evaluating an addendum that would address the concept of PSC rollovers. The June 2013 action serves as the analytical baseline against which the suite of alternatives in this supplement is contrasted. The document is clear, well written, and relatively concise.

The author has provided a succinct and helpful definition differentiating bycatch from PSC. However, application of this definition is not adhered to in the document. It is important to maintain this regulatory distinction throughout the document.

PSC is never to be utilized, but is to be “... avoided to the extent practicable.” An allowance is made to accommodate unavoidable interceptions. The analysis consistently makes the error of assigning use rights to PSC; it is an maximum allowance, not a property use right, and cannot therefore be said to be stranded. There are several places in the document where a rephrasing is necessary. The linguistic inclination adopted by the author (e.g., PSC is a tool to be used) dilutes the message that avoidance is essential to realizing the optimum yield objective of the MSA and the Council’s efforts to manage on an ecosystem-wide basis. This critique extends to the interpretation of PSC removals under each of the alternative descriptions.

The characterization in the draft of the downstream effects of this action is limited to the groundfish sectors. There are, of course, downstream effects on users of the Chinook salmon lost to PSC. The document lacks identification of possible end users of Chinook salmon (commercial, subsistence, personal use, and sport) and at least a qualitative evaluation of the nature of impacts these users are likely to face. In particular, the impacts assessment section of the RIR needs a qualitative acknowledgment of what was/would be the value of the Chinook salmon savings. Numerous communities within Alaska and along the West Coast depend upon, and sustain uses and users in each of these categories, and these effects should be characterized in the rollover discussion, as well as in the larger document.

In the section reporting Chinook salmon PSC performance, it is relevant to note that GOA CVs have historically had low levels of observer coverage. This could bias interpretation of the PSC estimates. This should be reflected in the text and sector-attributed PSC performance tables. While mention is made in footnote 13, this point is critical to the readers’ understanding of these reported PSC performance indicators. It should not be relegated to a footnote. The low level of observer coverage also speaks to the difficulty of obtaining the data necessary to manage the proposed PSC limits in the GOA non-pollock trawl fisheries. The document appears to presuppose more precision in the management system than seems reasonable, as for instance, in the discussion of rollovers.

Under the Alternative 4 Rollover discussion, “...without the uncertainty buffer incentive, the RP CV sector would be just as well off taking all of the 1,200 Chinook salmon that it is permitted, as it would be when limiting Chinook PSC to the greatest extent practicable.” This is an important finding that should be highlighted for the reader and the Council.

The SSC recommends summarizing the positive and negative elements of the alternatives in the document. It would be useful to set out in a tabular form the major features of each alternative and the advantages and disadvantages of the alternatives.

**The SSC recommends integration of this Addendum (after the necessary corrections are made) into the main GOA Chinook PSC in the Non-Pollock Trawl Management document, at which point the Addendum will be ready for release to the public.**

The SSC also had several specific comments and follow-up questions for the authors as follows. In the RIR treatment of groundfish harvest, the analysis employs economic indicators that present concerns for comparative performance between the CVs, CPs, and inshore processing sectors. CVs, by definition, do not process. Ex-vessel equivalent value has traditionally been the leveling measure because wholesale value is determined by a number of factors. The SSC recommends replacing these CV wholesale tables with those that show processor first wholesale value (or correctly labeling them) and supplement the report with ex-vessel value performance measures for the CV sector.

In the treatment of catch attribution, it might be worthwhile to more fully explain how trip target assignment can change based upon species-preponderance in the catch.

In the discussion of “Interaction with the uncertainty pool mechanism,” on page 40, there seems to be a contradiction. Clarification is needed, as the mandate that “... 160 fish must have been truly saved” and the suggestion that “... some of the RP CV sector’s avoided PSC ... are taken in the non-RP CV fall fisheries during Year ” are discordant.

In 4.3.3 Alternative 3, “The Council chose to consider holding back precisely 160 Chinook salmon in the RP CV sector because that is the amount of Chinook in the sector’s uncertainty buffer.” Keeping those 160 Chinook allowances within the sector prevents a scenario where the PSC that is marked for possible “use” in case of high-PSC during the following year is, instead, caught by the non-RP CV sector in the fall. But what about the issue just cited regarding post-transfer overages?

Continuing with the Alternative 3 rollover, the draft asserts: “Consider the example where the RP CV sector takes 1,000 Chinook salmon before October 1. If all but 160 of the remaining 200 Chinook PSC allowances are rolled into the non-RP CV sector, the next Chinook recorded on a Rockfish Program trip would bring the sector’s remaining PSC to 159. Catch accounting – and the agents responsible for administering the uncertainty pool – would have to track that this was, in fact, only the 1,001st Chinook salmon taken in the sector.” What happens in this case? This is a critical question, left unanswered in the draft.

#### **C-6 (b) BSAI Chinook Salmon Report**

The SSC received a presentation from Diana Stram (NPFMC) on an updated analysis of BSAI Chinook salmon stock status, AEQ, and PSC rates. Public testimony was provided by Art Nelson (Bering Sea Fisherman’s Association). This report was requested by the Council at its April 2013 meeting and largely updates analyses that were reported on at the Arctic-Yukon-Kuskokwim Sustainable Salmon Initiative Chinook Expert Panel symposium in 2012. The report also summarizes fishing and PSC performance by sectors as requested by the Council. The SSC had previously reviewed and approved the methodology for calculating AEQs and PSC rates so did not comment on this aspect of the report.

The SSC greatly appreciates the work of NMFS, Council, and ADF&G staff in bringing together disparate Chinook salmon run strength, AEQ, and PSC information into a single report that summarizes the impact of PSC on runs of Chinook salmon in western Alaska. The SSC had the following comments on the report:

- **The report does an excellent job of addressing the Council motion and request to review the status of Chinook salmon stocks in Alaska, update genetic stock identification efforts, and provide updated AEQ analysis and PSC harvest rates relative to actual PSC and relative to**

**current cap levels. Summaries of vessel PSC rates were also found to be useful in confirming that efforts of IPAs to reduce PSC of Chinook salmon should be effective at the vessel level.**

- We suggest that this type of report be produced periodically to update the SSC and Council on the performance of Chinook salmon stocks and on efforts to reduce PSC in the BSAI groundfish fisheries.
- While we applaud the inclusion of stock-specific run size information in the document, stock status information in the report could be improved in the future by adding information on harvests of Chinook salmon in the various state-managed terminal fisheries (subsistence, commercial, and recreational), as well as whether Amounts Necessary for Subsistence (ANS) are being met or not.
- Sufficiency of sampling of Chinook salmon PSC for lengths should be evaluated in light of the sampling design for genetics, and sampling rates for lengths be adjusted if necessary.

## MOTION

## Council Proposed BSAI OFL and ABC Recommendations (metric tons) for 2014 - 2015

Species	Area	2013				2014				2015			
		OFL	ABC	TAC	Catch	OFL	ABC	TAC		OFL	ABC	TAC	
Pollock	EBS	2,550,000	1,375,000	1,247,000	1,146,604	2,730,000	1,430,000	1,252,500		2,730,000	1,430,000	1,252,500	
	AI	45,600	37,300	19,000	2,916	48,600	39,800	19,000		48,600	39,800	19,000	
	Bogoslof	13,400	10,100	100	57	13,400	10,100	100		13,400	10,100	100	
Pacific cod	BSAI	359,000	307,000	260,000	178,388	n/a	n/a	n/a		n/a	n/a	n/a	
	BS	n/a	n/a	n/a	169,840	352,470	300,390	245,000		352,470	300,390	245,000	
	AI	n/a	n/a	n/a	8,548	22,500	16,900	7,381		22,500	16,900	7,381	
Sablefish	BS	1,870	1,580	1,580	548	1,760	1,480	1,480		1,760	1,480	1,480	
	AI	2,530	2,140	2,140	702	2,370	2,010	2,010		2,370	2,010	2,010	
Yellowfin sole	BSAI	220,000	206,000	198,000	101,596	219,000	206,000	200,000		219,000	206,000	200,000	
Greenland turbot	BSAI	2,540	2,060	2,060	1,097	3,270	2,650	2,060		3,270	2,650	2,060	
	BS	n/a	1,610	1,610	818	n/a	2,070	1,610		n/a	2,070	1,610	
	AI	n/a	450	450	279	n/a	580	450		n/a	580	450	
Arrowtooth flounder	BSAI	186,000	152,000	25,000	18,515	186,000	152,000	25,000		186,000	152,000	25,000	
Kamchatka flounder	BSAI	16,300	12,200	10,000	7,500	8,300	7,100	7,100		8,300	7,100	7,100	
Northern rock sole	BSAI	241,000	214,000	92,380	55,401	229,000	204,000	94,569		229,000	204,000	94,569	
Flathead sole	BSAI	81,500	67,900	22,699	15,317	80,100	66,700	22,699		80,100	66,700	22,699	
Alaska plaice	BSAI	67,000	55,200	20,000	19,982	60,200	55,800	23,700		60,200	55,800	23,700	
Other flatfish	BSAI	17,800	13,300	3,500	1,467	17,800	13,300	3,500		17,800	13,300	3,500	
Pacific Ocean perch	BSAI	41,900	35,100	35,100	26,460	39,500	33,100	33,100		39,500	33,100	33,100	
	BS	n/a	8,130	8,130	1,573	n/a	7,680	7,680		n/a	7,680	7,680	
	EAI	n/a	9,790	9,790	8,209	n/a	9,240	9,240		n/a	9,240	9,240	
	CAI	n/a	6,980	6,980	6,614	n/a	6,590	6,590		n/a	6,590	6,590	
	WAI	n/a	10,200	10,200	10,064	n/a	9,590	9,590		n/a	9,590	9,590	
Northern rockfish	BSAI	12,200	9,850	3,000	1,892	12,000	9,320	3,000		12,000	9,320	3,000	
Blackspotted/Rougheye rockfish	BSAI	462	378	378	324	524	429	429		524	429	429	
	EBS/EAI	n/a	169	169	173	n/a	189	189		n/a	189	189	
	CAI/WAI	n/a	209	209	151	n/a	240	240		n/a	240	240	
Shortraker rockfish	BSAI	493	370	370	333	493	370	370		493	370	370	
Other rockfish	BSAI	1,540	1,159	873	653	1,540	1,159	873		1,540	1,159	873	
	BS	n/a	686	400	146	n/a	686	400		n/a	686	400	
	AI	n/a	473	473	507	n/a	473	473		n/a	473	473	
Atka mackerel	BSAI	57,700	50,000	25,920	16,031	56,500	48,900	25,379		56,500	48,900	25,379	
	EAI/BS	n/a	16,900	16,900	8,899	n/a	16,500	16,500		n/a	16,500	16,500	
	CAI	n/a	16,000	7,520	7,012	n/a	15,700	7,379		n/a	15,700	7,379	
	WAI	n/a	17,100	1,500	120	n/a	16,700	1,500		n/a	16,700	1,500	
Skates	BSAI	45,800	38,800	24,000	19,643	44,100	37,300	24,000		44,100	37,300	24,000	
Sculpins	BSAI	56,400	42,300	5,600	4,323	56,400	42,300	5,600		56,400	42,300	5,600	
Sharks	BSAI	1,360	1,020	100	100	1,360	1,020	150		1,360	1,020	150	
Squids	BSAI	2,620	1,970	700	235	2,620	1,970	500		2,620	1,970	500	
Octopuses	BSAI	3,450	2,590	500	132	3,450	2,590	500		3,450	2,590	500	
Total	BSAI	4,028,465	2,639,317	2,000,000	1,620,216	4,193,257	2,686,688	2,000,000		4,193,257	2,686,688	2,000,000	

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# News & Notes

North Pacific Fishery Management Council

October 2013

## Council Elections and Appointments

The Council re-elected Eric Olson as Chairman, and John Henderschedt as vice-chair. Dr. Jim Balsiger administered the Oath of Office for new Council member Dave Long of Wasilla, AK, and for re-appointed member Duncan Fields, of Kodiak, AK. Long has participated in Alaska fisheries in a variety of gear types. Fields is serving his third 3 year term on the Council and is a fisherman and natural resources consultant.

## Other Appointments

The Council announced two new additions to the Charter Halibut Management Implementation Committee, which will meet twice before the December Council meeting: Steve Zernia and Daniel Donich.

## Upcoming Meetings

**Charter Halibut Management Implementation Committee:** October 25, 2013 1 pm teleconference (907 271-2986) with optional in-person meeting room: Council Conference Room 205, 605 W 4th Ave, Anchorage. December 9, 1 pm in-person meeting, Council Conference Room

**Groundfish Plan Team:** November 18-22, 2013, AFSC, Seattle

### IFQ Implementation

**Committee:** December 9, 2013, 8:30 am – noon (T), Council Conference Room 205, 605 W 4th, Anchorage

**Crab Modeling Workshop** January 14-17, 2014 Anchorage (Place TBD)

**Scallop Plan Team:** Teleconference in December, TBD; February 25-26, 2014 Homer (Place TBD)

**Crab Plan Team** May 5-7, 2014 Anchorage (Place TBD)



Photo: Mark Fina

## Bering Sea Salmon Bycatch

The Council received several reports related to salmon bycatch management measures in the Bering Sea pollock fishery. A report provided by the SeaShare food donation program describes the operation of the program and the voluntary donations of salmon and halibut PSC from the BSAI and GOA fisheries. The Council reviewed a staff discussion paper on the status of Alaskan Chinook salmon stocks, and an analysis of the impact of Chinook salmon adult equivalent (AEQ) bycatch on regional stocks of origin and vessel bycatch rates by sector in the pollock fishery. This was the first comprehensive analysis of impacts since the Council took action on the Amendment 91 Chinook salmon PSC management program in 2009. The Council's primary motivation in requesting this report (as well as separate reports from the IPAs on their incentive programs) was to consider bycatch management performance measures in the context of the ongoing actions to minimize salmon bycatch, and to evaluate this issue with updated information on directed salmon fisheries and with the most recent genetic information, AEQ analysis, and examination of individual vessel performance.

AEQ is a more accurate representation of the true impact to spawning salmon than the mortality in numbers of fish recorded in any one year due to the lagged effects of bycatch as salmon taken in the pollock fishery range in ages from 3-7 years and are not all returning to natal streams in that year. Results indicate that overall AEQ has declined considerably from the peak value in 2007. Furthermore, the estimated impact rates to western Alaska have declined in recent years from peaks in 2008 (for CWAK) and 2010 (for Upper Yukon). Currently aggregate impacts only can be estimated for western Alaska at the resolution of coastal

western Alaska and Upper Yukon. Using these recent genetic data results in estimated AEQ to coastal western Alaska that is similar to previous estimates (considered by the Council in 2009). Estimated AEQ attributed to the Upper Yukon is higher than previously estimated.

Overall, the pollock fleet bycatch rate (in Chinook salmon per ton of pollock) has declined annually, although some sectors continue to have disproportionately higher rates in some months. Data suggest some consistency in the worst bycatch vessels across all years.

The Council also received reports from each sector's Incentive Program Agreement (IPA) representative on their incentive mechanisms in place and program results to date. Program representatives also provided the Council with a proposal for incorporation of chum salmon into the existing IPAs to better manage chum and Chinook bycatch concurrently.

Following extensive reports and discussion, the Council requested a discussion paper that evaluates the regulatory changes needed to incorporate Bering Sea chum salmon bycatch avoidance into the Chinook salmon IPAs, and to evaluate possible measures to refine Chinook salmon bycatch controls in the Bering Sea pollock fishery. The Council requested consideration of explicit measures (either in regulation or within the IPAs) such as restrictions on vessels with consistently high Chinook bycatch rates, consideration of additional management measures in September and October, and requiring the use of salmon excluders when Chinook encounter rates are high.

To the extent possible, the Council will also consider additional outreach efforts as consideration of modifications to the program move forward in development. The full Council motion as well as the staff discussion paper are posted on the Council's website. Staff contact is Diana Stram.

## Call for SSC Nominations

At its October meeting the Council reviewed nominations to replace Dr. Jim Murphy (UAA) whose other obligations precluded his continued participation on the SSC. The Council received two excellent nominations in the field of fisheries/resource economics, and decided to appoint both Dr. Matt Reimer (UAA) and Dr. Chris Anderson (UW) for 2014, as well as for the December 2013 SSC meeting. Because SSC appointments are for one year for all SSC members, the Council is also accepting nominations for all other areas of expertise (biology/stock assessment, marine mammals, statistics, sociology/anthropology, or other relevant disciplines). SSC members shall be federal employees, state employees, academicians, or independent experts not employed by advocacy or interest groups. SSC members serve one year terms but may be reappointed indefinitely. The SSC advises the Council on all aspects of the decision making process, including stock assessments and annual specifications, protected species interactions, and adequacy of analyses supporting various management actions. For consideration, please submit resume and cover letter to the Council offices, ATTENTION: Chris Oliver, by **December 4**. Any additional SSC appointments for 2014 will be determined by the Council at its December 2013 meeting in Anchorage.

## GOA Trawl Bycatch Management

The Council reviewed a discussion paper that described the eight proposals presented during the June meeting, provided a literature review of recent work on catch share programs, described issues associated with linkages between State and Federal waters fisheries, and discussion of decision points that were considered as part of Community Fishing Association discussions in other regions. The Council proposed a general catch share program structure that provides a starting point for further stakeholder input. The motion requested that staff develop a new discussion paper reviewing that program framework. The specific feedback requested includes a discussion of how the fishery would operate under that design, how it meets the Council's stated goals and objectives, and identification of other decisions that may be needed to transform this concept into alternatives for analysis. The forthcoming paper will also include information on bycatch reductions that were achieved in other trawl catch share programs in the North Pacific and other regions. This discussion will focus on the magnitude of the reductions that were achieved, the structure of the fishery, and whether the reductions were mandated or achieved for other reasons.

The Council noted that, by focusing the discussion on this program design, it was not eliminating other program structures from consideration. Therefore, all proposals that have been presented to the Council are still available for consideration when it develops alternatives for analysis. Updated proposals are available on the Council's website.

The Council noted that its motion does not include a program structure for the trawl catcher/processor sector, as it did for the catcher vessels. A catcher/processor structure was not included because the proposal for that sector was just presented to the Council at this meeting, and the sector has not had time to determine if all members support that approach.

The Council's motion is available on the NPFMC website. The motion contains all the elements that staff are requested to consider in the discussion paper. That paper is scheduled to be presented at the April 2014 Council meeting in Anchorage.

The Council indicated an interest in holding a workshop session on Community Fishing Associations prior to the release of the requested discussion paper. Experts from other regions who have worked to develop CFA structures would be invited to share their experience with the public and the Council. This session is tentatively scheduled to take place during the February 2014 Council meeting in Seattle, WA. The final date, agenda, and list of presenters are yet to be determined. Staff contact is Sam Cunningham.

## GOA Trawl Data Collection

The Council took final action on its preferred alternative to collect baseline economic and employment data to better understand the fishery before a catch share program is implemented. This action would collect employment data from catcher vessels and catcher/processors that harvest GOA groundfish using trawl gear. Catcher vessels would be required to submit annual data for the aggregate payments to harvesting crew and the aggregate payments to the captain(s). They would also be required to provide a list of the crew license numbers or CFEC permit numbers for each harvesting crew member that worked on the vessel. Cost data would be collected on fuel usage and cost, gear costs, and excluder purchases. Catcher/processors would be required to continue to submit the Amendment 80 EDR as well as crew identifiers for the harvesting crew on the vessel. Crew identifiers would not be required for employees that only work as processors. The Amendment 80 EDR would be required to be completed by all trawl catcher/processors that operate in the GOA. Finally, processors that take deliveries of trawl caught groundfish would be required to submit monthly data on the average number of groundfish processing positions, processing employee man-hours, and total processing labor payments. Annual aggregate data would be required for the payments to foremen, managers, and other non-processing employees at the plant. Processors would also be required to submit monthly data on water and electric utilities purchased from the community provider in Kodiak.

The Council also requested to be updated on the voluntary data collection program proposed by the Alaska Fisheries Science Center staff. This data collection program focuses on obtaining data that will help describe the impacts of the "Trawl Bycatch Management Program" on communities.

Staff contact is Sam Cunningham.

The BSAI commercial crab fisheries will be delayed from the October 15th opening due to the government shutdown. CDQ fisheries will open as scheduled. Please check our website for updated information as it becomes available.

# BSAI Crab Specifications

The Council received the final 2013 Crab Stock Assessment Fishery Evaluation (SAFE) report and the SSC's OFL and ABC recommendations on 6 crab stocks for 2013/14 fishing year. The SSC had previously recommended OFLs and ABCs for 4 other stocks in the spring. There are 10 crab stocks in the BSAI Crab FMP and all 10 must have annually established OFLs and ABCs. Four stocks (AI golden king crab, Norton Sound red king crab, Pribilof Island golden king crab and Adak red king crab) had OFLs and ABCs recommended in the spring. The remaining stocks have OFLs and ABCs recommended in the fall. While the intent was to shift the timing of the Norton Sound red king crab assessment to the fall for better alignment with fishery timing, due to issues with the assessment model the SSC did not recommend the use of that model for 2013/14 specifications in order to move the assessment cycle for that stock to coincide with the other 6 fall assessments. Instead the model will be revised to address concerns with weighting and data issues and will be presented again in June for specifications. Pending model evaluations at that time the assessment may be further revised to coincide with the fall 2014/15 assessment cycle. Stocks with current biomass levels estimated above the  $B_{MSY}$  target include EBS snow crab and Tanner crab while stocks below  $B_{MSY}$  (but above  $\frac{1}{2} B_{MSY}$ ) are Bristol Bay red king crab, Pribilof Island red king crab, St. Matthew blue king crab and Norton Sound red king crab. The Pribilof Island blue king crab stock biomass remains well below its minimum stock size threshold (MSST, defined as  $\frac{1}{2} B_{MSY}$ ) and is still considered overfished. Stocks for which information is insufficient to determine their status include Aleutian Islands golden king crab, Pribilof Island golden king crab and Aleutian Island red king crab. Final specifications and the 2013 Crab SAFE report are posted on the Council's website. A technical modeling workshop will be held in January 2014 to further evaluate the future use of a generic modeling framework for BSAI crab models using Bristol Bay red king crab and Norton Sound red king crab models as candidates for comparison. Staff contact is Diana Stram.

## AI Pacific cod Regional Delivery

The Council reviewed a discussion paper on a catcher vessel apportionment of AI Pacific cod (area 541/542) with a regionalized delivery requirement to AI shoreplants. The paper also provided information on a potential waiver to the delivery requirement along with some of the challenges of a waiver program. The paper also explored measures to prevent stranding of AI Pacific cod due to insufficient harvesting capacity, as well as some of the difficulties with those measures. Finally, the paper provided historical catch and processing distribution across the various sectors and provided information on the current processing capacity of the Adak and Atka facilities.

After reviewing the discussion paper, receiving recommendations from the Advisory Panel and testimony from the public, the Council postponed further action on this given the uncertainty regarding: 1) establishing separate OFLs and ABCs for Pacific cod in the BS and AI during the 2014 fishing season; 2) changes to the AI Pacific cod fishery from the Steller sea lion mitigation measures; and 3) Board of Fish proposal that would increase the State water GHL Pacific cod fishery from 3% to 4.5% of the federal harvest. By postponing further action on this issue until February 2014, the Council will likely have a better indication of the available Federal harvest of AI Pacific cod, as well as catch restrictions in the AI Pacific cod fishery that are the result of the Steller sea lion mitigation measures. Staff contact is Jon McCracken.

## Policy on Spatial Management

The Council recommended a process for determining spatial management of stocks and stock assemblages for groundfish, crabs and scallops.

1. As soon as preliminary scientific information indicates that further stock structure separation or other spatial management measures may be considered, the stock assessment authors, plan teams (groundfish, crab, scallop), and SSC should advise the Council of their findings and any associated conservation concerns.
2. With input from the agency, the public, and its advisory bodies, the Council (and NMFS) should identify the economic and management implications and potential options for management response to these findings and identify the suite of tools that could be used to achieve conservation and management goals. In the case of crab and scallop management, ADF&G needs to be part of this process.
3. To the extent practicable, further refinement of stock structure or other spatial conservation concerns and potential management responses should be discussed through the process described in recommendations 1 and 2 above.
4. Based on the best information available provided through this process, the SSC should continue to recommend OFLs and ABCs that prevent overfishing of stocks.

The Council motion is posted on the website. Contact Jane DiCosimo (BSAI groundfish) and Diana Stram (GOA groundfish, BSAI crab and Alaska Scallop) for more information.

## Call for AP Nominations

The Council is calling for nominations to the Council's **Advisory Panel (AP)**. The AP is composed of representatives of the fishing industry and others interested in the management of the North Pacific fisheries, and provides advice from those perspectives. Members of these panels are expected to attend up to five meetings, three to six days in length, each year. There are 6 AP seats which serve three-year terms, and one special one-year appointment for charter halibut issues. AP members whose terms expire at the end of this year include: Ruth Christiansen, Kurt Cochran, Tom Enlow, Alexis Kwachka, Brian Lynch, and Neil Rodriguez. Tim Evers served a one-year appointment, and nominations are being accepted for that seat.

Letters of interest or nomination, along with a resume of experience, for persons wishing to be considered for the AP should be sent to the NPFMC, 605 W. 4th Avenue, #306, Anchorage, AK 99501, by 5:00 pm on **December 4**.

Appointments will be announced at the end of the next Council meeting the week of December 3 at the Hilton Hotel in Anchorage and will become effective in January 2014. For more information, contact the Council office.

## Steller Sea Lion EIS

Because NMFS staff were unavailable at this meeting due to the partial government shutdown, a presentation prepared by NMFS staff was presented by Council staff. The presentation included NMFS summary of their evaluation of the PPA forwarded by the Council in April, 2013, and a summary of the draft Comment Analysis Report (CAR). After the staff presentation and public comment, the Council approved a motion reiterating the selection of Alternative 5 (the PPA in the Draft EIS) as their Preferred Alternative for the final EIS. The motion also recommended that NMFS provide a draft Biological Opinion to the Council and the SSC for review and comment. The motion is available on the Council's website. Staff contact is Steve MacLean.

## Ecosystem Committee Workshop

The Council received a report on the Ecosystem Committee's recent workshop. The Council concurred with the Committee recommendation to develop an ecosystem vision statement, and tasked the Committee with further work to consider the relative merits of two options. The Council will consider either refining its current management practice into a cohesive ecosystem-based fishery management policy statement, or developing a more comprehensive ecosystem-based management statement, and the Committee will identify potential implementation plans for each approach. The Ecosystem Committee workshop report, and the Council motion, are posted on the website. Staff contact is Diana Evans.

## Proposed Groundfish Harvest Specifications

The Council recommended proposed harvest specifications for the Bering Sea Aleutian Islands (BSAI) and Gulf of Alaska (GOA) groundfish fisheries for 2014 and 2015. NMFS will publish proposed overfishing levels (OFLs), acceptable biological catches (ABCs), total allowable catches (TACs), and prohibited species catch (PSC) limits. The purpose of the proposed specifications is to allow the public an opportunity to review and comment on potential final specifications for those years that will be decided during the December 2013 meeting. The proposed harvest specifications for the next two years are based on rollovers of the harvest specifications currently in effect for the start of 2014, as no new information was available, with two exceptions for the BSAI. For Pacific cod, separate BS and AI specifications were recommended. For the EBS, 93 percent of the combined 2014 BSAI OFL and ABC published last year was used. For the AI, a Tier 5 estimate from last year's preliminary assessment was used as a placeholder, noting that a revised model will be considered in November 2013. For Kamchatka flounder the proposed 2014 OFL and ABC were obtained from the assessment author, using results from the preliminary Tier 3 assessment that was approved for use last year. In the GOA, changes to the apportionments for the Central and Western GOA other rockfish category as well as consideration of opening directed fisheries for octopus and skate species will be considered at final specifications. The Council also received numerous reports from the GOA and BSAI Groundfish Plan Teams on the results of research surveys, four working group reports, other research initiatives in support of stock assessments, and a plan for providing 5-year research priorities each year.

The Council also considered a proposal to revise management of sablefish quotas in order to harvest more of currently unharvested trawl apportionment. Recognizing this as primarily an IFQ use cap issue, the Council deferred consideration of this to the IFQ Implementation Committee.

The Groundfish Plan Team reports and Council recommendations for proposed harvest specifications for the BSAI and GOA are posted on the Council website. Contact Jane DiCosimo (BSAI) and Diana Stram (GOA) for more information.

## 2014 Observer Annual Deployment Plan

Following review, the Council expressed its support for the agency's draft 2014 Observer Annual Deployment Plan (ADP). As in 2013, the draft ADP sets a higher selection rate in the trip selection than the vessel selection pool, as a proxy for having a higher selection rate for PSC-limited fisheries; includes a provision to allow partial coverage vessels in the BSAI Pacific cod fishery to make an annual selection to have observers 100% of the time; and continues to reflect the Council's preferred policy of not requiring an observer to displace an IFQ crew member. The Council also endorses the alternative Chinook salmon sampling protocol that is proposed for 2014. The draft ADP is posted on the Council website.

The Council also received preliminary catch data under the new program (through August 30, 2013), and data on observer coverage. The Council requested that these tables be updated for the whole of 2013, and included in the June 2014 annual performance review with additional information. The Council discussed the need for a regulatory amendment to address tender activity in the GOA. This will be added to the previously-tasked regulatory amendment discussion paper, to scope out the main issues for analysis, including potential options and data quality implications. In addition, the Council is requesting further analysis of a proposal to exclude vessels from coverage if they have only a de minimus amount of IFQ quota remaining onboard, a) if they are going into a State fishery (ideally to be considered for the 2014 ADP), and/or b) as an overall tool to improve cost efficiency (to be reviewed as part of the annual performance review). Finally, the Council recognizes that the actual sampling rate in the vessel selection pool is a concern, and encourages further consideration of ways to redress the sampling rate.

The Council also reviewed a letter about the proposed design of the 2014 NMFS electronic monitoring (EM) pilot program, where NMFS intends to incentivize participation by moving fourteen participating vessels into the zero selection observer pool. The Council provided suggestions for the agency to consider regarding how to prioritize deployment of the fourteen cameras available. The Council's motion is available on the website. Staff contact is Diana Evans.

# Pot Gear in GOA Sablefish IFQ Fishery

The Council reviewed recommendations from its Gulf of Alaska Sablefish Gear Committee on a range of issues to allow the use of pot gear in the GOA sablefish IFQ fishery. Options for area management (entire GOA or Southeast area only) and pot gear restrictions (single pots or pot longlines; gear configurations; gear markings) are under consideration. While many committee recommendations were unanimous (allow pot longline gear only in entire GOA), whether to require pot gear to be removed from the fishing grounds when not being fished requires additional consideration. The committee comments and recommendations will be incorporated into an expanded version of a May 2013 discussion paper, which also will address the status of the sablefish stock, halibut bycatch issues, whale depredation, acoustic deterrent devices, social/economic effects in the context of the original design of the program, and lessons learned from the use of pot gear in the Bering Sea, Aleutian Islands, British Columbia, and the west coast. The Council requested that the expanded discussion paper be scheduled for review during its December 2013 meeting, after which the Council may identify a problem statement and alternatives for analysis.

## Halibut Issues

The Council scheduled the next meeting of the **IFQ Implementation Committee** on Monday, December 9, 2013 (T) to 1) review a May 2013 discussion paper on increasing the use caps for sablefish "A" (freezer vessel) QS and identify other approaches to maximize use of all sablefish IFQs; 2) review two proposals previously submitted to the

Council to revise Federal regulations to a) calculate maximum retainable allowances at the time of offload rather than during a fishing trip, as currently required, (submitted by the Petersburg Vessel Owners Association) and b) increase the halibut and sablefish IFQ vessel caps, as the amount of IFQs each vessel may harvest has declined over time under lower catch limits (submitted by Kodiak Vessel Owners Association); and 3) review a proposal to allow clean-up of IFQ trips in multiple regulatory areas as regulatory amendment to the observer program or the IFQ program based on NMFS advice.

The **Charter Halibut Management Implementation Committee** will convene on October 25 by teleconference to identify a range of management measures for analysis for implementation for 2014, under two management scenarios: 1) status quo Guideline Harvest Level (GHL) Program and 2) proposed Halibut Catch Sharing Plan (CSP).

A second in-person committee meeting in the Council conference room is scheduled for December 9, 2013 to 1) review an analysis of the proposed management measures from its October meeting and 2) make final recommendations for consideration. The Council recommendations would be considered by the IPHC in January 2014 for implementation under the IPHC annual management measures. It is uncertain at this date whether the GHL Program will remain in place in 2014 or be replaced by the CSP (the government shutdown makes implementation of the CSP more uncertain). The Council may recommend management measures for both scenarios.

Steve Zernia and Daniel Donich have been appointed to the committee to represent Area 3A. Also, the Council will seek nominations for a 1-year charter halibut sector seat for 2014. Tim Evers has stepped down from both Committees. The Council thanks him for his years of service. Contact Jane DiCosimo on halibut and sablefish issues.

## GOA Rockfish Chinook Cap Rollover

The Council received an initial review of a trailing action to refine the preferred alternative for management of Chinook salmon PSC in the GOA non-pollock trawl fisheries. In June 2013, the Council considered (but did not advance) an option to allow unused Chinook salmon PSC apportioned to the CV sector of the Central GOA Rockfish Program to "roll over" to support other GOA CV fisheries in the fall. Staff analyzed three alternatives, focusing on whether or not a rollover might hinder the achievement of the objectives expressed in the existing preferred alternative. The Council also considered a No Action alternative for the trailing action, which would leave the preferred alternative unaltered.

The Council selected a preliminary preferred alternative, which combines elements of two of the analyzed alternatives. Under the PPA, either 50 or 100 of the unused Chinook salmon PSC in the Rockfish Program CV sector would roll over to other non-pollock CV fisheries on October 1. Any Chinook PSC remaining in the Rockfish Program sector would roll over when the Rockfish Program closes on November 15. The Rockfish Program CV sector would not be included in the Uncertainty Pool incentive program, as defined in the Council's preferred alternative from the June meeting. Upon final action, any alternative selected by the Council would be included with the existing preferred alternative for the final rulemaking package. Staff contact is Sam Cunningham.

## Staff Tasking

In addition to discussing the relative priority of previously tasked projects, the Council initiated several new projects and clarified direction and tasking for its various committees. The Council tasked staff to do the following:

- hold a workshop, or set time during the February Council meeting, to receive presentations from other regions with experience working to develop Community Fishing Associations (CFAs);
- send a comment letter on the confidentiality of data collected by federal data collection programs, noting that the council is concerned with data quality and a cooperative approach to data collection, and potential ramifications relative to State laws on data confidentiality;
- prepare background materials on the license limitation program and participation in the Norton Sound red king crab fishery to evaluate the need for a recency requirement and elimination of the <32' exemption from the LLP program; and
- prepare a discussion paper on regulatory changes to encourage development of the CDQ Pacific cod fisheries in western Alaska.
- Prepare data tables showing participation in the GOA Pacific cod pot fishery in recent years.

**DRAFT NPFMC THREE-MEETING OUTLOOK - updated 10/11/13**

<b>Dec 9 - 17, 2013 Anchorage, AK</b>	<b>Feb 2 - 10, 2014 Seattle, WA</b>	<b>April 7-15, 2014 Anchorage, AK</b>
Safety report from NIOSH	Community Fishing Association 'workshop'	
Review IFQ proposals: <b>IFQ Implementation Committee report</b>	VMS: Discussion paper/ <b>Enf. Committee Recommendations</b>	
Observer Electronic Monitoring EFP: <b>Review (T)</b>	Observer Program Regulatory Amendments: <b>Discussion paper</b>	
Final 2014 annual deployment plan: Report	SSL EIS: <b>Action as necessary</b>	
GOA Pot Gear for Sablefish: <b>Expanded Discussion Paper</b>	GOA Pcod pot sector participation: <b>Discussion paper (T)</b>	GOA Trawl Bycatch Management: <b>Discussion paper</b>
Review BOF scallop and pollock proposals	Review BOF groundfish proposals	
Amendment 80 program 5-Year review: <b>Develop Workplan</b>	AI P.cod CV allocation/delivery: <b>Update/Discussion Paper</b>	
GOA Rockfish Chinook Cap rollover: <b>Final Action</b>	BSAI Halibut PSC: <b>Updated discussion paper</b>	
Charter Halibut Measures: <b>Cttee report and action as necessary</b>	PSEIS SIR: <b>Review Draft (T)</b>	
Definition of fishing guide: <b>Final Action (T)</b>	BSAI Crab bycatch limits: <b>Expanded discussion paper (T)</b>	
Round Island Transit: <b>Initial Review</b>	Round Island Transit: <b>Final Action (T)</b>	Bering Sea Chinook/chum salmon bycatch: <b>Discussion paper (T)</b>
Co-op Reporting Requirements: <b>Discussion Paper</b>	BS Canyons: <b>AFSC report; Discussion Paper (T)</b>	Scallop SAFE: <b>Plan Team report and OFL/ABC specifications</b>
BSAI Crab Cooperative reports; crew provisions, etc.	CDQ Pacific cod fishery development: <b>Discussion paper (T)</b>	
BSAI Crab ROFR contract clarification: <b>Discussion Paper</b>	GOA Tendering: Update/Discussion Paper	Salmon EFH revisions: <b>Initial Review (T)</b>
Ecosystem Committee report on EBFM/EBM	Grenadier management: <b>Final Action</b>	
Grenadier management: <b>Initial Review</b>	Bering Sea FEP: <b>Discussion Paper</b>	
EGOA skate fishery: <b>Discussion paper; PT recommendation</b>	Crab modeling workshop: <b>Report (SSC Only)</b>	<b>ITEMS BELOW FOR FUTURE MEETINGS</b>
GOA octopus fishery: <b>Discussion paper; PT recommendaiton</b>	Chinook Salmon EDR: <b>Report from AFSC (T)</b>	BSAI Crab PSC numbers to weight: <b>Discussion paper</b>
Groundfish Harvest Specifications: <b>Adopt final specifications</b>	Groundfish and Crab Economic SAFE reports: <b>SSC Review</b>	ROFR Aleutia PQS: <b>Final Action</b>
		Greenland Turbot allocation: <b>Initial Review</b>
		Electronic Monitoring Workgroup Report
		Charter Halibut Compensated Reallocation Pool: <b>Disc Paper</b>
		Norton Sound RKC LLPs: <b>Discussion paper (June)</b>

AI - Aleutian Islands  
AFA - American Fisheries Act  
BiOp - Biological Opinion  
BSAI - Bering Sea and Aleutian Islands  
BKC - Blue King Crab  
BOF - Board of Fisheries  
CQE - Community Quota Entity  
CDQ - Community Development Quota  
EDR - Economic Data Reporting  
EFH - Essential Fish Habitat  
EFP - Exempted Fishing Permit  
EIS - Environmental Impact Statement  
FLL - Freezer longliners  
GOA - Gulf of Alaska

GKC - Golden King Crab  
GHL - Guideline Harvest Level  
HAPC - Habitat Areas of Particular Concern  
IFQ - Individual Fishing Quota  
IBQ - Individual Bycatch Quota  
MPA - Marine Protected Area  
PSEIS - Programmatic Supplemental Impact Statement  
PSC - Prohibited Species Catch  
RKC - Red King Crab  
ROFR - Right of First Refusal  
SSC - Scientific and Statistical Committee  
SAFE - Stock Assessment and Fishery Evaluation  
SSL - Steller Sea Lion  
TAC - Total Allowable Catch

**Future Meeting Dates and Locations**

December 9-17, 2013, Anchorage  
February 2-10, 2014, Seattle  
April 7-15, 2014, Anchorage  
June 2-10, 2014, Nome  
October 6-14, 2014 Anchorage  
December 8-16, 2014, Anchorage  
February 2-10, 2015, Seattle  
April 6-14, 2015, Anchorage  
June 1-9, 2015, Sitka  
October 5-13, 2015 Anchorage  
December 7-15, 2015, Anchorage

**(T) = Tentative**



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:** REP 13-003

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**Agenda Date:** 12/9/2013

**Agenda Number:** B-1

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**SUBJECT:**  
Executive Director's Report

## Executive Director's report

### MSA/CCC

In October I updated you on several initiatives and subcommittees related to the Council Coordination Committee and/or Magnuson-Stevens Act reauthorization. At that meeting you endorsed the general NPFMC positions on MSA reauthorization which were presented at the Managing our Nation's Fisheries 3 Conference, noting that the Council may wish to discuss more specific positions when specific legislation is introduced. There have been no substantive developments to report at this time.

### Community Fishing Association workshop

In October, under discussions of our Gulf of Alaska trawl bycatch management agenda item, you directed staff to organize an informal workshop aimed at gathering information from other regions with experience CFA or similar programs, generally associated with "anchoring quota in communities". We have contacted several persons in this regard, and have tentatively identified 4 or 5 persons to participate in such a workshop during our February meeting in Seattle. PFMC Council member David Crabbe, along with Rick Algert who is involved with the Morro Bay Community Quota Fund, have indicated their availability to participate. From the east coast, we have John Pappalardo (Cape Cod Commercial Fishermen's Alliance) and Paul Parker (Cape Cod Fisheries Trust) who both have extensive experience with permit/quota banking programs set up for community participation in east coast fisheries. We are also hoping to have someone from NMFS Fisheries Policy Office participate, and are hopeful that NMFS will publish their pending Technical Memorandum (Design and Use of Fishing Community and Regional Fishery Association Entities in Limited Access Privilege Programs) in time for our February workshop. At this time, based on the availability of these participants, we anticipate this informal workshop will occur on the afternoon of Monday, February 10.

### IPHC Interim Meeting

Last week I attended the interim meeting of the International Pacific Halibut Commission, as an interim U.S. Commissioner. Jane DiCosimo also attended. While no major decisions are made at the interim meeting, we of course were apprised of the potential range of 2014 catch quotas across the U.S. and Canadian subareas. We also had extensive discussions on a number of other topics, including responses to the Management Strategy Advisory Board (MSAB), and initial responses to the report of the Halibut Bycatch Working Group. IPHC staff will report on these items under B-6, and the Council will also be dealing with the initial 2014 catch quota issue under agenda item C-1 (charter halibut management measures for 2014). I will note here that the IPHC agreed to extend the deadline for comments on the bycatch working group report until December 18 (that group meets again on December 19 to further refine that report in preparation for the IPHC annual meeting which will be January 6-10 in Seattle).

### Recreational Saltwater Fishing Summit

NOAA Fisheries recently published a 'save the date' notice for the 2014 Saltwater Recreational Fishing Summit, which will be April 1-2 in Washington, D.C. That meeting will be comprised of around 100

constituents, and they would like to have a representative from each Council participate. On January 29-30 they will also be hosting, along with the Atlantic States Marine Fisheries Commission, a more focused workshop on recreational economic data collection and modelling capabilities, and have invited a staff member from each Council to participate in that workshop.

#### Recent and pending outreach activities

In an effort to keep you apprised of various staff or Council member activities related to outreach, I recently (in late November) provided a presentation to the annual meeting of the Alaska Municipal League on Council process and current issues. Following the presentation, Nicole Kimball and Kelly Hepler with ADF&G assisted me in answering numerous questions from an audience of nearly 100 persons. Not surprisingly, many of the questions had to do with bycatch issues, as well as with our current management initiatives in the Gulf of Alaska trawl fisheries. I have been asked to provide a similar presentation, scheduled for January 23, at the Alaska Rotary Club. Also in late November, Steve Maclean and I met with representatives from the Environmental Law Institute who are working on a project to develop recommendations for improving policies and approaches for linking science and subsistence communities in the U.S. Arctic. While their focus is on linkages to scientific research specifically, I believe that we were able to provide them some useful input in that regard, and provide them with specific information on our management process and role in the Arctic. Also in late November, David Witherell provided a presentation and Q&A session on Gulf of Alaska management issues to the Aleutian East Borough in association with the annual Fish Expo in Seattle.

In early December we were asked to participate in a national workshop (Fisheries Management in a Changing Climate) as part of the larger national conference of the U.S. National Council on Science and the Environment, to be held in Washington DC in late January. After some internal discussion, we were able to convince Bill Tweit, Chair of our Ecosystem Committee, to participate in this workshop on behalf of our Council. Additional information on this conference is under Item B-1(a).

#### Events this week

There are a number of events taking place this week, starting on Tuesday evening, December 10 – from 5:30 to 6:30 pm in the King Salmon room Greenpeace will be holding a public workshop on the Bering Sea canyons, featuring Dr. Robert Miller of the Marine Science Institute at UC Santa Barbara, who will share results of a new habitat suitability model for corals and sponges across the Bering Sea shelf break, including Pribilof and Zhemchug canyons. The model incorporates data from both trawl and visual surveys, as well as several physical parameters. Under the Staff Tasking agenda item the Council may discuss and provide additional direction relative to a potential Council workshop on the canyons issue (which was delayed this fall due to the government shutdown).

Later on Tuesday evening, starting at 6:30 pm, there will be a reception, hosted by various fishing industry sponsors, at the Alaska Hotel to honor Tom Enlow for his many years of service on the Advisory Panel and his great leadership of that body over the past several years.

On Wednesday, December 11, staff from the NMFS Observer program will hold an outreach session in the Council meeting room, from approximately 5:30 to 6:30 pm. The Young Fishermen's Summit is also going on this week, and they will be holding an open reception on Wednesday evening starting at 6:30 pm at the Snow Goose restaurant on 3<sup>rd</sup> avenue. The NPFMC is one of the sponsors of the Young

Fishermen's Summit (organized through the Alaska Sea Grant Marine Advisory Program), and all Council 'family' members are invited to this reception. Item B-1(b) contains additional information on the reception. Some of the participants in this year's Summit may also be attending parts of the Council meeting during the week.

On Thursday evening, December 12, staff from the IPHC will be holding a public workshop regarding the 2013 halibut stock assessments – this will be in the Council meeting room beginning at approximately 5:30 pm.

On Friday, December 13, Acting Assistant Administrator Sam Rauch will be visiting the Council. On Friday evening, from 5:30 to 7:00 pm, there will be an open reception (meet and greet) at the Top of the World in the Hilton Hotel. Everyone is invited!

<b>Monday, January 27, 2014</b> - Pre-Conference Event	
<b>Tuesday, January 28, 2014</b>	
8:00 a.m.	Registration, Continental Breakfast, and Scientific Poster presentations open
8:30 a.m.	<p><b>Welcoming Remarks: Governor Bill Richardson</b>, former Ambassador to the United Nations and Secretary of Energy</p> <p><b>Keynote Address: Richard Alley</b>, Professor of Geosciences, Pennsylvania State University</p>
9:20 a.m.	<p><b>Plenary 1: Framing Climate Change Science</b></p> <p><b>Moderator: Richard Harris</b>, Science Correspondent, NPR</p> <ul style="list-style-type: none"> <li>• <b>Youba Sokona*</b>, Coordinator, African Climate Policy Centre; Intergovernmental Panel on Climate Change</li> <li>• <b>Virginia Burkett</b>, Chief Scientist for Climate and Land Use Change, U.S. Geological Survey; Intergovernmental Panel on Climate Change</li> <li>• <b>Katharine Jacobs</b>, Assistant Director, Climate Assessment and Adaptation, White House Office of Science and Technology Policy</li> <li>• <b>Molly Brown</b>, Research Scientist, Biospheric Science Branch, NASA Goddard Space Flight Center</li> </ul>
10:20 a.m.	<p><b>Plenary 2: Framing the Challenges Facing Societies</b></p> <p><b>Moderator: Anne Thompson</b>, Chief Environmental Affairs Correspondent, NBC News*</p> <ul style="list-style-type: none"> <li>• <b>Edward Maibach</b>, Director, Center for Climate Change Communication, George Mason University</li> <li>• <b>Maggie Opondo</b>, Senior Lecturer and Researcher, Department of Geography and Environmental Studies, University of Nairobi; IPCC</li> <li>• <b>Lisa Jackson*</b>, Vice President for Environmental Affairs, Apple</li> </ul>
11:20 a.m.	<p><b>Plenary 3: Framing Solutions</b></p> <p><b>Moderator: Terry Tamminen</b>, CEO and Founder, 7<sup>th</sup> Generation Advisors</p> <ul style="list-style-type: none"> <li>• <b>Clay Nesler</b>, Vice President of Global Energy and Sustainability, Johnson Controls</li> <li>• <b>Richard Jackson</b>, Joan H. Tisch Distinguished Fellow in Public Health, Hunter College and Professor and Chair, Environmental Health Sciences, Fielding School of Public Health, University of California - Los Angeles</li> <li>• <b>Priya Shyamsundar</b>, Director, South Asian Network for Development and Environmental Economics</li> <li>• <b>Jaime Lerner</b>, former Governor of the state of Paraná, Brazil; former Mayor, Curitiba, Brazil</li> </ul>
12:30 p.m.	Lunch (on your own)
2:00 p.m. - 3:30 p.m.	<p><b>Symposia A:</b></p> <ol style="list-style-type: none"> <li>1. <b>What Makes a Climate-Smart City and How Can We Build Them?</b></li> <li>2. <b>Hazard Mitigation and Climate Adaptation</b></li> </ol>

	<ul style="list-style-type: none"> <li>3. <a href="#">Preparing Campuses and Communities for a Changing Climate</a></li> <li>4. <a href="#">Nature as a Source of Innovation for a Sustainable Metropolis</a></li> <li>5. <a href="#">Linking Global, Regional, and Local Perspectives for Climate Solutions</a></li> <li>6. <a href="#">Applying an Ecosystems Framework for Adaptation</a></li> <li>7. <a href="#">Food Security and Climate Change</a></li> <li>8. <a href="#">The Arctic: The Changing Role of the Polar North in a Climate Constrained World</a></li> <li>9. <a href="#">Reducing Emissions from Deforestation and Forest Degradation (REDD+)</a></li> <li>10. <a href="#">Managing Marine Fisheries in a Changing Climate</a></li> <li>11. <a href="#">Building the Climate Change Education and Communication Collective</a></li> <li>12. <a href="#">Sustainability for the Nation: Resource Connections and Governance Linkages</a></li> <li>13. <a href="#">Identifying Security Risks and Opportunities from Climate Change</a></li> <li>13b. <a href="#">National Climate Assessment: Innovations in Science and Engagement - Part I</a></li> <li>13c. <a href="#">Environmental Performance Disclosure and Climate Risk Governance</a></li> </ul>
3:45 p.m. - 5:15 p.m.	<p><b>Symposia B:</b></p> <ul style="list-style-type: none"> <li>14. <a href="#">Taking "Eco-districts" to Scale</a></li> <li>15. <a href="#">Evidence-Based Healthier and High Performing Learning Environments</a></li> <li>16. <a href="#">Monitoring and Measuring Greenhouse Gases in Cities for Decisions</a></li> <li>17. <a href="#">Goldilocks and Climate Adaptation: The Regional Approach is "Just Right"</a></li> <li>18. <a href="#">The Urban Waters Federal Partnership</a></li> <li>19. <a href="#">Preparing U.S. Agriculture to Manage Climate Change Risk</a></li> <li>20. <a href="#">Strategic Mitigation of Emissions Impacting the Arctic and the Globe</a></li> <li>21. <a href="#">Managing Risk and Resilience to Climate Change</a></li> <li>22. <a href="#">Natural Capital for Adapting Coastal Communities to Sea Level Rise</a></li> <li>23. <a href="#">MomentUs: Building a Movement for Climate Action</a></li> <li>24. <a href="#">Incentivizing Adaptation in the Built Environment</a></li> <li>25. <a href="#">Every Place has a Climate Story</a></li> <li>26. <a href="#">National Climate Assessment: Innovations in Science and Engagement - Part II</a></li> <li>27. <a href="#">Financing Climate Solutions</a></li> <li>28. <a href="#">Climate Adaptation and Mitigation Synergies, Barriers, and Opportunities</a></li> </ul>
5:30 p.m.	<p><b>Keynote Address:</b> <a href="#">Kathryn Sullivan</a>, Acting Administrator, NOAA</p> <p><b>Keynote Address:</b> <a href="#">Ban Ki-Moon*</a>, Secretary General, United Nations</p>

**Wednesday, January 29, 2014**

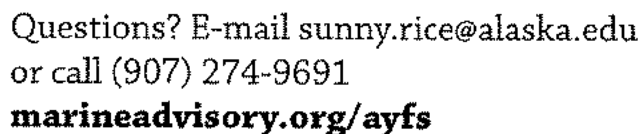
8:00 a.m.	Registration, Continental Breakfast, Exhibition, and Scientific Poster presentations open
8:45 a.m.	<p><b>Welcoming Remarks: Governor Bill Richardson</b>, former Ambassador to the United Nations and Secretary of Energy</p> <p><b>Keynote Address: Rachel Kyte</b>, Vice President for Sustainable Development, The World Bank  <b>Keynote Address: Jack Sinclair</b>, Executive Vice President, Grocery Division, Walmart</p>
10:00 a.m.	<p><b>Plenary 4: The Built Environment - Building Climate Solutions</b></p> <p><b>Moderator: Andrew Revkin</b>, Senior Fellow for Environmental Understanding, Academy for Applied Environmental Studies, Pace University</p> <ul style="list-style-type: none"> <li>• <b>Diana Ürge-Vorsatz</b>, Director, Center for Climate Change and Sustainable Energy Policy (3CSEP), University of Central Europe; Intergovernmental Panel on Climate Change</li> <li>• <b>Alison Taylor*</b>, Vice President of Sustainability, Siemens</li> <li>• <b>Anthony Zolezzi</b>, Operating Advisor, Pegasus Capital Advisors; Board Chair, ZeroWaste Global</li> <li>• <b>David Hales</b>, President and CEO, Second Nature</li> <li>• <b>Harvey Ruvin</b>, Clerk of Courts, Miami-Dade County</li> </ul>
11:15 a.m.	<p><b>Plenary 5: Agriculture and Natural Resources - Building Climate Solutions</b></p> <p><b>Moderator: Elizabeth Shogren*</b>, Science Correspondent, NPR</p> <ul style="list-style-type: none"> <li>• <b>Johan Rockström*</b>, Executive Director, Stockholm Resilience Center</li> <li>• <b>Tom Tidwell</b>, Chief, U.S. Forest Service</li> <li>• <b>Yannick Glemarec</b>, Director of Climate Finance, UN Development Programme</li> <li>• <b>Christopher Shore</b>, Executive Director, Secure the Future - East Africa, World Vision</li> </ul>
12:30 p.m.	Lunch (on your own)
2:00 p.m. - 5:15 p.m.	<p><b>Breakout Workshops (24 concurrent sessions):</b></p> <ol style="list-style-type: none"> <li>1. <a href="#">What Makes a Climate-Smart City and How Can We Build Them</a></li> <li>2. <a href="#">Hazard Mitigation and Climate Adaptation</a></li> <li>3. <a href="#">Preparing Campuses and Communities for a Changing Climate</a></li> <li>4. <a href="#">Nature as a Source of Innovation for a Sustainable Metropolis</a></li> <li>5. <a href="#">Linking Global, Regional and Local Perspectives for Climate Solutions</a></li> <li>6. <a href="#">Applying and Ecosystems Framework for Adaptation</a></li> <li>8. <a href="#">The Arctic: Changing Climate, Socio-Economic Implications, and Strategic Mitigation</a> (<i>workshop for sym. 8&amp;20</i>)</li> <li>9. <a href="#">Reducing Emissions from Deforestation and Forest Degradation (REDD+)</a></li> <li>10. <a href="#">Managing Marine Fisheries in a Changing Climate</a></li> <li>11. <a href="#">Building the Climate Change Education and Communication Collective</a></li> <li>12. <a href="#">Sustainability for the Nation: Resource Connections and Governance Linkages</a></li> <li>13. <a href="#">Identifying Security Risks and Opportunities from Climate Change</a></li> </ol>

	<p>14. <a href="#">Taking "Eco-districts" to Scale</a></p> <p>15. <a href="#">New Tools for Existing Buildings: Data-Driven Applications to Adapt Educational Facilities for Climate Change</a></p> <p>16. <a href="#">Monitoring and Measuring Greenhouse Gases in Cities for Decisions</a></p> <p>17. <a href="#">Goldilocks and Climate Adaptation: The Regional Approach is "Just Right"</a></p> <p>18. <a href="#">The Urban Waters Federal Partnership</a></p> <p>19. <a href="#">Building Effective Climate Change Partnerships and Networks for Agriculture</a></p> <p>21. <a href="#">Managing Risk and Resilience to Climate Change</a></p> <p>22. <a href="#">Natural Capital for Adapting Coastal Communities to Sea Level Rise</a></p> <p>23. <a href="#">MomentUs: Building a Movement for Climate Action</a></p> <p>25. <a href="#">Every Place has a Story</a></p> <p>26. <a href="#">National Climate Assessment: Innovations in Science and Engagement</a> (<i>workshop for sym. 13b&amp;26</i>)</p> <p>28. <a href="#">Climate Adaption and Mitigation Synergies, Barriers, and Opportunities</a></p>
5:30 p.m.	<p><b>NCSE Lifetime Achievement Awards:</b> Founders of the US Global Change Research Program: <b>Robert Corell</b>, <b>Michael Hall</b>, <b>Shelby Tilford</b>, <b>Ari Patrinos</b> and <b>Jack Fellow</b></p> <p>Interviewer: <b>Eileen Shea</b>, Pacific Regional Coordinator, NOAA</p>
6:15 p.m.	<p><b>13th Annual John H. Chafee Memorial Lecture:</b> <a href="#">James Hansen</a>, Adjunct Professor, Earth Institute, Columbia University and former Head, NASA Goddard Institute for Space Studies</p> <p><b>Master of Ceremonies:</b> <b>Governor Bill Richardson</b>, former Ambassador to the United Nations and Secretary of Energy</p>
7:00 p.m.	Reception
<b>Thursday, January 30, 2014</b>	
8:00 a.m.	Continental Breakfast, Scientific Poster Presentations, and Exhibition continue
8:45 a.m.	<p><b>Welcoming Remarks:</b> <b>Governor Bill Richardson</b>, former Ambassador to the United Nations and Secretary of Energy</p> <p><b>Keynote Address:</b> <b>Mitch Landrieu*</b>, Mayor, New Orleans</p> <p><b>Keynote Address:</b> <a href="#">Gina McCarthy</a>, Administrator, U.S. Environmental Protection Agency</p>
10:00 a.m.	<p><b>Plenary 6: Implementing Solutions</b></p> <p><b>Moderator:</b> <a href="#">Cristina Rumbaitis del Rio</a>, Senior Associate Director, Rockefeller Foundation</p> <ul style="list-style-type: none"> <li>• <b>Christopher Pyke</b>, Vice President for Research, US Green Building Council</li> <li>• <a href="#">Kara Hurst</a>, CEO, Sustainability Consortium</li> </ul>

	<ul style="list-style-type: none"> <li>• <b>Petra Tschakert</b>, Associate Professor of Geography, Institutes of Energy and the Environment, Pennsylvania State University; Intergovernmental Panel on Climate Change</li> <li>• <b>John Gummer, Lord Deben*</b>, Chair, Climate Change Committee, UK</li> </ul>
11:00 a.m.	<p><b>Plenary 7: Moving from Science to Action</b></p> <p><b>Moderator:</b> <b>Juliet Eilperin</b>, National Environmental Reporter, The Washington Post</p> <ul style="list-style-type: none"> <li>• <b>Kathleen McGinty*</b>, former Chair, Council on Environmental Quality; former Secretary, Pennsylvania Department of Environmental Protection</li> <li>• <b>Ann Bartuska*</b>, Deputy Under Secretary for Research, Education and Economics</li> <li>• <b>Robert Perkowitz</b>, President, EcoAmerica</li> </ul>
12:00 p.m.	<p><b>Closing Session:</b> Master of Ceremonies: <b>Governor Bill Richardson</b>, former Ambassador to the United Nations and Secretary of Energy</p> <p><b>Keynote Address:</b> <b>Marie-Hélène Aubert</b>, Adviser to the President of France on international negotiations on climate and environment</p>
12:30 p.m.	<b>Networking Buffet Lunch</b> (with youth mentoring tables)
2:00 p.m.	Conference Closes

## 6:30-8:30 PM

hosted by the Alaska Sea Grant Marine Advisory Program



## Alaska



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

605 W. 4th Ave. Suite 306  
Anchorage, AK 99501  
(907) 271-2809  
Fax (907) 271-2817

## Action Memo Text

**File Number:** REP 13-006

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**Agenda Date:** 12/9/2013

**Agenda Number:** B-2

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

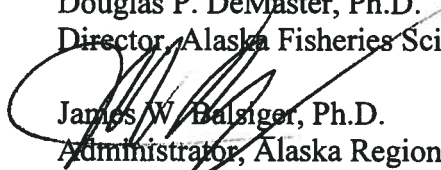
NMFS Management Report (including update on final 2014 annual deployment plan, update on observer/tendering issue; update on LAPP cost-recovery; ROFR clarification from February 2013 Council motion; update on at-sea scales rule; update on EM EFP; and EFH consultation update (T))



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
*National Marine Fisheries Service*  
P.O. Box 21668  
Juneau, Alaska 99802-1668

November 6, 2013

MEMORANDUM FOR: Douglas P. DeMaster, Ph.D.  
Director, Alaska Fisheries Science Center (AFSC)

FROM:  James W. Balsiger, Ph.D.  
Administrator, Alaska Region

SUBJECT: Application for an Exempted Fishing Permit from  
Alaska Longline Fishermen's Association

We have received the attached application from the Alaska Longline Fishermen's Association (ALFA) for an exempted fishing permit under 50 CFR 679.6. I am required to consult with the AFSC on exempted fishing permit applications at § 679.6(c)(1). While we are requesting some additional clarifications from the applicant as required under § 679.6(b) and 50 CFR 600.745, the application is sufficiently complete for the AFSC to determine if the experimental design is valid. ALFA has consulted with members of your staff and the Alaska Region regarding this project, and we support the concept of advancing Electronic Monitoring research and development in Alaska.

The application is tentatively scheduled for review by the North Pacific Fishery Management Council (Council) and its Scientific and Statistical Committee at the February 2014 meeting. AFSC review and comment on the experimental design supporting the EFP application is necessary before the February meeting so that your review may be considered by the Council and the public, along with other supporting documents. If you have any questions, please contact Jeff Hartman at 907-586-7442. Thank you for your consideration.

Attachment:  
EFP Application

cc: Jennifer Ferdinand  
Martin Loefflad





# Alaska Longline

## FISHERMEN'S ASSOCIATION

Post Office Box 1229 / Sitka, Alaska 99835 907.747.3400 / FAX 907.747.3462

To: Jim Balsiger, NOAA  
From: Linda Behnken, ALFA  
Date: November 5, 2013  
Subject: EM EFP supplemental information

Dear Dr. Balsiger,

Below are the clarifications and supplemental information that you requested in your letter dated October 23, 2013. Unfortunately, that letter did not reach me until November 4<sup>th</sup>; this is the first chance I have had to respond.

### EFP Application Checklist

- 1) Complete
- 2) Linda Behnken, as Executive Director of the Alaska Longline Fishermen's Association (ALFA) is the principal investigator for this project. ALFA is the applicant with Linda Behnken as the representative. Dan Falvey is the overall Project Coordinator. Contact information is below:

Linda Behnken, ALFA  
834 Lincoln Street Rm 23  
Sitka, AK 99835  
(907) 747-3400 office; (907) 738-3615 cell  
[alfafish@acsalaska.net](mailto:alfafish@acsalaska.net)

Dan Falvey, ALFA  
834 Lincoln Street Rm 23  
Sitka, AK 99835  
(907) 747-3400 office; (907) 738-8710 cell  
[Myriadfisheries@gmail.com](mailto:Myriadfisheries@gmail.com)



Linda Behnken, ALFA (PI/Applicant)



(Dan Falvey, Project Coordinator)

- 3) Complete
- 4) Proposed projected start date for exempted fishing: March 2014 (to coincide with halibut/sablefish IFQ season start date).
- 5) NA
- 6) Contract participants:  
Dave Colpo, Pacific States Marine Fisheries Commission, 205 SE Spokane St #100, Portland, OR 97202; (503) 595-3100; [dcolpo@psmfc.org](mailto:dcolpo@psmfc.org)

Tim Carroll, Saltwater Inc, 733 N Street, Anchorage AK 99501 (907) 276-3241;  
[tim@saltwaterinc.com](mailto:tim@saltwaterinc.com)

Jason Bryan, Archipelago Marine Research, 525 Head Street, Victoria BC V9A 5S1 (250) 383-4535 [amr@archipelago.ca](mailto:amr@archipelago.ca)

Letters of support and engagement from these organizations are attached.

- 7) No supplemental information was requested under this item number per your highlights, but to be clear: Vessel selection vessels will be randomly selected by NMFS; names will be provided to NMFS prior to commencement of exempted fishing. Trip selected boats are volunteering for the project; requested data will be provided prior to commencement of exempted fishing.
- 8) Signature of applicant: see number 2 above.
- 9) Complete

I have also attached letters of support from SEAFA, PVOA, FVOA and K-Bay Fisheries.

Please let me know if additional information is needed as you continue to review our application.

Sincerely,



Linda Behnken, ALFA



Post Office Box 1229 / Sitka, Alaska 99835 907.747.3400 / FAX 907.747.3462

## **Integrating Electronic Monitoring of Fixed Gear Vessels with the North Pacific Research Program**

**An Exempted Fishing Permit Application  
October 18, 2013**

### **1.0 Background and Project Justification**

Amendments 86 and 76 to the BSAI/GOA Fishery Management Plans fundamentally changed the funding and deployment system for observer coverage in North Pacific fisheries. The new funding and deployment system allows the National Marine Fisheries Service (NMFS) to determine when and where to deploy observers according to management and conservation needs, with funds provided through a system of fees based on the ex-vessel value of groundfish and halibut in fisheries covered under the new system.

Along with changing the observer funding mechanism and the observer service delivery model, the Amendments authorize observer coverage for the first time on vessels under sixty feet and vessels participating in the halibut fishery. Because many of these vessels lack accommodations for an additional person, in June 2010 the North Pacific Fishery Management Council (Council) recommended that: *"the Observer Advisory Committee, Council Staff, and NMFS staff develop electronic monitoring [EM] as an alternative tool for fulfilling observer coverage requirements with the intent that it be in place at the same time as the restructured observer program."*<sup>1</sup>

As a result, one of the analytical assumptions noted in the March 2011 Secretarial Review draft of the EA/RIR supporting the decision on Amendments 86/76 was that: *"staff has thus proceeded with the assumption that development of electronic monitoring for specific sectors would be addressed under a separate, but coordinated process and timeline."*<sup>2</sup> At the October 2011 meeting, the Council recommended the *"initial phases of an EM program focus on halibut and sablefish hook and line vessels from 40 ft LOA to 57.5 ft LOA."*<sup>3</sup> Encouraged by this Council direction, fixed gear industry groups sought and secured funding from the National Fish and Wildlife Foundation to work in partnership with NMFS and the Council to pilot test EM on small fixed gear boats. The goal of the EM pilot program was to inform development of the

<sup>1</sup> [http://alaskafisheries.noaa.gov/npfmc/PDFdocuments/conservation\\_issues/Observer/ObserverMotion610.pdf](http://alaskafisheries.noaa.gov/npfmc/PDFdocuments/conservation_issues/Observer/ObserverMotion610.pdf)

<sup>2</sup> [http://alaskafisheries.noaa.gov/analyses/observer/amd86\\_amd76\\_eairirfa0311.pdf](http://alaskafisheries.noaa.gov/analyses/observer/amd86_amd76_eairirfa0311.pdf) P 22

<sup>3</sup> <http://alaskafisheries.noaa.gov/frules/77fr70062.pdf> P 70081. NMFS response to comment 71.

performance standards, technical specifications and regulatory structures necessary to support an EM alternative. Although the pilot program was conducted as planned, the performance standards and technical specification were not developed in time to provide EM as an alternative when Amendments 86/76 were implemented. The Proposed Rule for Amendments 86/76 noted that the: *“initial draft regulations included a provision that would have required vessels selected for coverage in the vessel selection pool to have either an observer or an electronic monitoring system onboard the vessel for the duration of the selection. Upon further review, concerns were raised about the legality of requiring electronic monitoring on vessels since NMFS has not yet developed performance standards or technical specifications for electronic monitoring.”*<sup>4</sup>

In response to this NMFS declaration, the Council noted the following in their May 14, 2012 comments on the proposed rule:

*“The use of electronic monitoring is an important alternative on smaller vessels that, because of logistical and economic challenges with accommodating an observer onboard, may otherwise be released from observer coverage. Although voluntary efforts have been made by members of these sectors to experiment with electronic monitoring systems, the impetus for these efforts has largely been the promise that, at some point, the use of an electronic monitoring system would be a viable alternative to having an observer onboard. The Council is concerned that the change to the proposed rule will severely undermine NMFS’s incentive to continue development of electronic monitoring systems as a tool in the restructured observer program.*

*The Council proposes that NMFS consider alternative ways to meet the Council’s intent, which is to incentivize the agency and the fleet to actively develop appropriate standards for the use of electronic monitoring, at the outset of the newly restructured observer program. It is the Council’s view that a critical component of this effort is for the regulations to allow a vessel in the vessel selection pool, that would otherwise be required to take an observer, to use an electronic monitoring system instead (at the agency’s discretion).”*<sup>5</sup>

In the Final Rule implementing Amendments 86/76, NMFS responded that for the reasons cited in the Proposed Rule EM could not be provided as an alternative to human observers. NMFS also noted the need to resolve identified issues associated with species identification, seabird identification, data review time lags, and system reliability. The Final Rule proposed a voluntary pilot program to conduct this work.<sup>6</sup>

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<sup>4</sup> <http://alaskafisheries.noaa.gov/prules/77fr23326.pdf> P 23336.

<sup>5</sup> [http://alaskafisheries.noaa.gov/npfmc/PDFdocuments/conservation\\_issues/Observer/Council\\_EMLtr051412.pdf](http://alaskafisheries.noaa.gov/npfmc/PDFdocuments/conservation_issues/Observer/Council_EMLtr051412.pdf)

<sup>6</sup> <http://alaskafisheries.noaa.gov/frules/77fr70062.pdf> P 70081

At the April 2013 meeting, the Council approved the formation of an EM working group “to evaluate alternative EM approaches, with a consideration for tradeoffs between achieving monitoring objectives, timelines, and other factors (e.g., costs, disruption to fishing practices). The EM Working Group will be guided by the Electronic Monitoring Strategic Plan that the Council is scheduled to adopt at the June 2013 Council meeting.”<sup>7</sup> At the June 2013 meeting, the Council specified the following sections of the strategic plan as applicable to the working group’s considerations:

- A) *Goal II: NMFS is advancing cost effective EM/ER capabilities through science-based studies and technological developments.*

*Objective 1: Conduct scientific research to advance the science of monitoring and data integration*

*Strategy C: Evaluate EM technologies in the 2013-14 EM project on volunteer vessels in the <57.5 ft longline and pot vessels.*

*Action: Evaluate species identification issues.*

*Action: Identify data gaps and potential solutions for species weight estimates, biological samples and rare species interactions.*

*Action: Assess the efficacy of using technology for capturing information that would quantify discard and provide spatial and temporal distribution of effort.*

- B) *Goal III: NMFS has a cost effective, adaptable and sustainable fishery data collection program that takes advantage of the full range of current and emerging technologies.*

*Objective 1: Implement EM/ER technology where appropriate and cost effective to improve catch estimation and better inform stock assessments.*

*Strategy A: Implement EM as appropriate based on scientific research from goal II.*

*Action: Select EM approach.*

*Action: Analyze EM approach, impacts, cost, and benefits.*

*Action: Write implementing regulations.*

*Action: Implementation, roll out, outreach.*

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<sup>7</sup> [http://alaskafisheries.noaa.gov/npfmc/PDFdocuments/conservation\\_issues/Observer/ObserverMotion413.pdf](http://alaskafisheries.noaa.gov/npfmc/PDFdocuments/conservation_issues/Observer/ObserverMotion413.pdf)

The Exempted Fishing Permit (EFP) process has been used by other U.S. regions to develop and test EM performance standards, technical specifications, and operator responsibilities. It also provides a transparent, collaborative, and scientifically rigorous process through which management needs can be identified and solutions to data gaps tested. The EFP can require participants to meet performance elements outlined in the EFP to ensure the experimental design is followed. This ability to enforce compliance is not possible under a voluntary program. The EFP also provides the flexibility to test operational practices which currently may be prohibited by regulation. Under an EFP, performance standards and operational practices can be developed, tested and annually refined prior to developing regulations that, once implemented, take years to change. Additionally, data gathered under an EFP can contribute toward target at-sea monitoring coverage levels until superseded by regulations. For these reasons, the EFP process provides an effective structure to achieve the Council and industry goal of integrating EM with the North Pacific Research Program (NPRB) and providing fixed gear vessels with an EM alternative to observers.

In Alaska, the EFP application process is governed by regulations. This process ensures that a scientifically rigorous yet collaborative process is followed. The EFP application process generally takes three to six months to complete. Applicants believe that an expedited process may be justified in this case for two reasons: 1) the Commerce Department appropriations bill reported by the Senate Appropriations Committee has requested an EM EFP be approved and funded in 2014; and, 2) 2013 observer coverage levels in the vessel selection pool were well below target levels due to difficulties associated with physically accommodating an observer on these vessels. The EM EFP will provide the vehicle to augment vessel selection coverage levels in 2014, and may allow target coverage levels to be achieved. In an effort to develop an EM EFP application in time for the 2014 season, the Alaska Longline Fishermen's Association (ALFA) consulted with fishermen, fixed gear associations, fishery managers and stock assessment scientists. These consultations informed development of the proposed EM EFP. The EM EFP is intended to provide a transparent, collaborative, and scientifically rigorous multi-year process to an EM alternative for fixed gear boats. The objectives identified in this EFP are consistent with Council identified priorities, and the approach set out in this EFP application is consistent with the sections of the strategic plan identified by the Council and referenced above.

## **2.0 Purpose and Goals**

**2.1 EFP Purpose:** To experimentally develop the performance standards, operational procedures, and operator responsibilities necessary to integrate EM as a component of the NPRP for fixed gear vessels. The EFP seeks to make EM available as an alternative to human observers where EM provides a cost effective or less problematic alternative to human observers to meet management needs.

## **2.2 EFP Goals**

- A. Develop operational procedures necessary to obtain representative data from fixed gear vessels employing EM to achieve NMFS/Council target coverage levels.**
- B. Experimentally test methods of estimating effort, catch composition (in numbers and weight), and disposition of catch sufficient to meet management needs in fixed gear fisheries.**
- C. Identify and assess programmatic decision points for the Council and NMFS related to EM integration, and provide the necessary quantitative data on cost, vessel compatibility and data quality to inform development and implementation of EM regulations.**

**3.0 EFP General Provisions:** To achieve the goals of this EFP, applicants propose a phased approach to addressing fisheries, management objectives, and equipment. In the first year, the EFP project will focus on the Council identified priority fisheries--IFQ sablefish and halibut. EM testing and development for the Gulf of Alaska (GOA) Pacific cod hook and line fishery (the Council's 2<sup>nd</sup> identified priority) and the GOA Pacific cod pot fishery will begin in Year 2 and 3, respectively. In each fishery, specific EM management objectives will be identified and a detailed experimental design developed to evaluate the ability of EM systems to meet these objectives. During Years 2-5, regulatory changes necessary to support EM will be identified, and the Council will be asked to initiate amendments as needed. The intent is to have any necessary EM regulations in place by the end of Year 5 to ensure a seamless transition from the EFP to an integrated EM alternative within the NPRP.

Developing operational procedures to collect representative data will be a fundamental objective of the experimental design. The experimental design and sampling procedures will be reviewed through the established EFP process to elicit comment from scientists, fishery managers, industry stakeholders and the Council. The initial experimental design will focus on using existing EM technologies and operator handling practices to establish baseline information on data quality and costs. The baseline data will then be evaluated relative to management needs and priorities with the help of an EM EFP work group composed of stock assessment scientists, fishery managers, EM service providers, and industry. Data gaps, potential solutions, and new technologies will be evaluated and incorporated into the experimental design in subsequent years to quantify incremental improvements and costs. Throughout the process, decision points and potential regulatory requirements will be identified and reported to the Council for consideration. Consistent with Goal C of this EFP, this information will inform the development and implementation of EM regulations.

### **3.1 Integrating the NMFS EM Pilot Program:**

The purpose of this EFP is to experimentally develop the performance standards, operational procedures, and operator responsibilities necessary to integrate EM as a component of the NPRP for fixed gear vessels. Applicants propose a phased approach and a suite of objectives to

accomplish this goal. Applicants believe that this suite of EFP objectives can incorporate or compliment the NMFS EM pilot program objectives of testing new EM technologies and data processing methods. The most cost effective approach, and the approach supported by the EM EFP applicants, would be to incorporate the pilot program by deploying the NMFS pilot program EM equipment (provided by Saltwater Inc.) on the Homer and Kodiak vessels operating under this EFP as specified in the current contract. Incorporating the objectives of the pilot program into the EFP would ensure compliance with operational procedures, incentivize participation to achieve objectives, and provide structure and transparency to the results. Since NMFS plans to review the data generated by the EFP, applicants anticipate that the pilot program objectives would be met and enhanced. Incorporating the NMFS EM pilot program equipment into the EFP will also reduce EFP costs and improve coordination between NMFS and the industry, which will benefit the industry, NMFS and the NPRP. Applicants invite full integration of the NMFS EM pilot program with this EFP and look forward to the working with the Agency to define specific objectives for the 2014 pilot program.

**3.2 EFP Project Duration:** The applicants propose a five year project period or until regulations are implemented superseding the need for this EFP, whichever comes first. Applicants anticipate that the EFP will identify most decision points related to performance standards, technical specifications and operator responsibilities during the initial two years of field testing in a fishery. This initial field testing will be followed by continued deployment and refinement of techniques while the regulatory process is initiated. The five year duration provides sufficient time for this process to occur sequentially in the IFQ sablefish and halibut fisheries, the GOA Pacific cod hook and line fishery, and the GOA Pacific cod pot fishery. The EFP is designed to develop procedures to obtain representative data from the fisheries; the five year period will allow sustained participation and EM deployment to achieve target coverage levels until implementing regulations are in place. Finally, as EM systems are durable and built to provide service for a number of years, the five year period will provide a reasonable and realistic service life for the EM hardware used in the EFP. This will lead to realistic cost estimates associated with an integrated EM alternative.

**3.3 Data Confidentiality:** Individual vessel set locations and catch amounts will be kept confidential and images from the vessel will not be used publicly without the skipper's permission. To monitor system performance and cost data, each vessel will be assigned a number and the EFP project will report on the number of trips a vessel takes, the performance of the EM system on that vessel, the video quality achieved, and the cost/sea day of using the EM systems on that vessel. Catch information will be aggregated across multiple vessels to protect confidentiality consistent with existing federal and Alaska statutes and Council procedures.

**3.4 Reporting and Annual Review of Sampling Plan:** By May 1<sup>st</sup> 2014, and each year following, applicants will provide a report to the Council on activities under this EFP. The May report will contain an initial work plan identifying potential objectives for the following year to allow Council input during the June meeting. Beginning in 2015, the May report will also

include a final report on the previous year activities and results. By October 15<sup>th</sup> each year, the applicants will submit specific objectives and a detailed EFP sampling plan for the following year for NMFS and Council review. The October report will also describe current year activities with available data. To facilitate this reporting schedule, the EM workgroup will meet in advance of the April and October Council meetings to define future research objectives and refine the proposed sampling plan and experimental design prior to submission to NMFS.

#### **4.0 Provisions Specific to Year 1**

**4.1 Project Scope.** Applicants intend to use the ports of Petersburg, Sitka, Homer and Kodiak as hub communities during Year 1. Each community will have local technicians trained in EM system installation and maintenance. Each community will also have a part-time port coordinator responsible for identifying EM candidate vessels, coordinating schedules, performing quality control checks, collecting and securing data, and performing or overseeing dockside monitoring tasks. Additional communities may be added in Years 2 and 3 with the goal of establishing EM capacity in at least eight GOA communities by Year 5.

**4.2 Objectives (note full details associated with the 2014 sampling plan are provided under Section 6 below).**

**4.2.1 Rockfish Identification Objective:** To determine whether at-sea monitoring using IP digital cameras provides sufficient identification of rockfish species to meet management needs or whether an operational EM program will require full retention of all rockfish with subsequent dockside identification. The Final Rule implementing Amendments 86/76 noted concern with the capability of EM systems to provide species identification adequate for management needs. Although the intent is to identify to the lowest possible taxonomic level all catch harvested under the EFP, rockfish identification will be a Year 1 focus. Under this objective, all vessels participating in the EFP will be required to retain 100% of rockfish species harvested during each trip throughout Year 1. At least one trip from each vessel will be sampled for dockside rockfish identification and compared with 100% video review for this same trip. Vessel selection for dockside monitoring will follow International Pacific Halibut Commission (IPHC) guidelines (Erikson and MacTavish, 2012). The utility of species groupings will be considered in Year 1, such as the grouping of shorttraker and rougheye rockfish.

**4.2.2 Vessel Selection Objective:** To develop operational procedures necessary to obtain representative data from the vessel selection and trip selection vessels operating in the halibut and sablefish Individual Fishing Quota (IFQ) fisheries. Managers have indicated that data collected from volunteer vessels cannot be considered representative of the fleet as a whole. This fact, more than any other, has guided design

of this EFP. The process for selecting EFP participants from the vessel selection pool is designed to secure data representative of this pool; the selection process for sampling data obtained from trip selection vessels is designed to secure cost data representative of the trip selection pool and catch data representative of the EFP trip selection participants. More detail is provided below.

*NMFS Vessel Selections Stratum*-- NMFS currently selects a pool of vessels for observer coverage for each two month period with 60 days advanced notice. These vessels may then request a conditional release based on bunk space or life raft capacity. Applicants propose that NMFS refer vessel owners who request a release to the EFP program coordinator to participate in the EM EFP in lieu of carrying an observer. If EM hardware is available and the vessel can travel to an EFP port for EM installation, NMFS will issue a release for that selection period conditional on the vessel's participation in the EM EFP. If the EFP project cannot accommodate a vessel due to full use of the available EM systems, the vessel will be referred back to NMFS for further release evaluation.

Applicants intend to deploy four EM systems in each port for the vessel selection pool. There is potential to rotate the EM systems to more than one vessel during a selection period if fishing schedules are compatible. Conversely, if for example only two selected vessels apply for a waiver from any one port, there will be selection periods when all four systems are not deployed. Applicants anticipate deploying EM system on 50 – 64 vessels from this stratum, with 60 vessels being the Year 1 goal (Table 1).

As proposed, the EM EFP vessels from the vessel selection pool will be selected through the same random selection process currently in place for this pool. Because EM will only be deployed on vessel selection boats seeking observer releases, the EFP will augment rather than reduce coverage in the vessel selection pool and is intended to assist the Council and NMFS in meeting coverage targets for this observer stratum.

*NMFS Trip Selection Pool*--NMFS currently requires trip selection vessels to log into the Observer Declaration and Deployment System (ODDS) at least three days in advance of each fishing trip. Trip selection vessels have a 15% probability of being randomly selected to carry an observer on any given trip. Because three day notice is too short to allow EM systems to be installed on vessels and installing and removing EM systems on a trip by trip basis is not cost effective, applicants propose opportunistically selecting up to 12 trip-selected vessels participating in the IFQ sablefish and halibut fisheries to carry EM systems on every trip taken in these fisheries during Year 1. After data retrieval, 15% of the trips taken by a vessel will be randomly selected for video review. To achieve the target trip selection coverage levels, at least one additional EM system will be provided to each port specifically for trip selection vessels. Some trip selection vessel owners have offered to pay for the EM systems installed on their vessels. EM data from

these vessels will also be reviewed as part of the EM trip selection pool. Applicants anticipate deploying EM system on 6 to 12 trip selection vessels with 8 vessels being the Year 1 goal (Table 1).

**4.2.3 Catch Estimation Objective: To develop baseline estimates of effort, catch composition (in numbers and weight), and disposition of catch in the IFQ halibut and sablefish fisheries.** This objective was identified by NMFS in a May, 2012 letter to the Council: *“Our goal for a fully-integrated EM program in the North Pacific includes obtaining quality effort (location and quantity of gear set) and catch composition information from EM-observed vessels.”*<sup>8</sup> To achieve this objective, the Pacific States Marine Fisheries Commission (PSMFC) has agreed to review video footage of all hauls from the vessel selection vessels and all hauls from trip selection vessels. Sensor data will supply trip start times, number of sets, set location and haul time. To capture additional effort information, participating vessel operators will be provided a data sheet on which they will be required to record hook size, number of hooks, average hook spacing, and set length or number of skates. In following years, this information will be used to inform development of an electronic logbook that requires fishermen to enter only the data that is not easily captured by EM equipment. Based on the haul time, PSMFC will review 30% of the haul video for species identification to be congruent with the current NMFS groundfish observing program (AFSC, 2013). Species will be identified to the lowest taxonomic level. The disposition status of each fish will be noted as retained, drop-off, or discarded. In Year 1, the applicants propose using average weights to estimate total weight of discarded species. In subsequent years, this baseline will be used to assess the costs and impacts associated with changing performance standards, deploying new technology, or requiring additional handling procedures to meet management needs.

**4.2.3.1 Sub-sampling Objective: Determine a percentage of haul video review that will maximize species identification and catch estimation while remaining cost effective.** The haul subsampling rates for video review will be: 10%, 30% and 50% of the total haul time. This will allow total catch to be estimated for the different amounts of haul time reviewed. The results from the Rockfish Identification study will be used to compare the 100% video review catch information with the different subsampling rate catch information.

**4.2.4 EM System Performance Objective: Identify EM system attributes and performance standards necessary to obtain quality effort and catch composition sufficient to meet management needs.** The lack of performance standards and questions about system reliability were identified in the Amendment 86/76 Final Rule as issues requiring resolution prior to EM implementation (NMFS response to comment 71).

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<sup>8</sup> [http://alaskafisheries.noaa.gov/npfmc/PDFdocuments/conservation\\_issues/Observer/NMFS\\_EMLtr053112.pdf](http://alaskafisheries.noaa.gov/npfmc/PDFdocuments/conservation_issues/Observer/NMFS_EMLtr053112.pdf)

In Year 1, the EFP will deploy digital IP cameras and EM systems supplied by two EM service providers. Multiple EM service providers will be engaged to evaluate system reliability and to identify best attributes for monitoring the IFQ fleet. The Year 1 EM service provider for Sitka and Petersburg will be AMR; Year 1 EM provider for Homer and Kodiak will be Saltwater Inc. The technical details associated with each system and evaluation metrics are described in detail under Section 6.0.

**4.2.4.1 Frame Rate Objective:** An additional study on frame rates during video recording will be conducted on trip selection vessels. The goal of this project will be to compare the ability to identify catch to the species level at different frame rates and to compare cost and time for video review and quality checks. Video quality (low, medium, high, or unusable) will be evaluated for the selected time segments (ALFA, 2012).

**4.2.5 Operator Responsibilities Objective: Identify operator responsibilities and handling procedures necessary to obtain quality effort and catch composition sufficient to meet management needs.** An operational EM program requires clear operator responsibilities detailed in regulation. In Year 1, applicants will evaluate the efficacy of using a pre-departure function check to ensure system reliability and the necessary lens cleaning requirements to achieve acceptable data quality. Year 1 operator responsibilities will focus on EM system maintenance and proper handling to ensure effective video capture of the required fishing information. Once the baseline data from Year 1 is reviewed and management needs are assessed, catch handling procedures and operator responsibilities can be tested in subsequent years to resolve any outstanding management requirements.

**4.2.6 Regulatory Area Compliance Objective:** EM systems record position and sensor data at a higher resolution than Vessel Monitoring Systems (VMS) units are currently required to record. This enables sensor data from EM systems to identify fishing effort and video footage to verify catch. VMS provide real time transmission verifying vessel position but lack the ability to verify fishing activity or catch. Regulations under 679.7 (f)(4) prohibit a vessel from retaining IFQ halibut or sablefish in excess of the total amount of unharvested IFQ applicable to the vessel category and IFQ regulatory area(s) in which the vessel is deploying fixed gear unless an observer is onboard. Under the restructured observer program, there is no means of obtaining an observer for partial coverage vessels outside of the ODDS and vessel selection deployment systems. Consequently, IFQ holders who have small amounts of quota in multiple areas no longer have a cost effective solution for harvesting their IFQ. Halibut regulations allow a vessel to carry VMS or an observer in IPHC Area 4 to address this same issue with small amounts of halibut. The purpose of VMS in this application is to verify that the vessel harvests the fish in the regulatory area associated with the IFQ.

Applicants propose to evaluate the feasibility of using EM systems to validate compliance with this regulatory area provision and the cost effectiveness of using EM versus observers for this task. This is consistent with the fundamental purpose of this EFP; namely to develop performance standards, operational procedures, and operator responsibilities necessary to integrate EM as a component of the NPRP for fixed gear vessels where EM provides a cost effective or less problematic alternative to human observers.

**4.2.7 Seabirds objective: Develop and test the operator responsibilities and logistical procedures necessary to implement a “bag-and-tag” program to identify seabird remains.** The limitations associated with using EM technology to identify seabird bycatch remains have been raised by NMFS at numerous Council meetings. Observers often cannot adequately identify the remains and rely on a bag-and tag- program to bring remains on shore for identification. Although applicants recognize the logistical and permitting challenges associated with implementing a bag-and-tag program on unobserved vessels, we propose that a similar bag-and-tag program be tested on vessels using EM systems.

**4.3 Vessels and Gear.** Vessels participating in this EFP will use longline gear to harvest IFQ halibut and sablefish. Types of longline gear that may be covered include conventional, auto line, and snap on. EFP vessels may participate in all regulatory areas in which they may legally harvest halibut or sablefish IFQ.

Vessel selection boats will be those selected by NMFS for 2014 coverage that apply for and are granted an observer release subject to complying with the terms and conditions of the EM EFP. These vessel owners will sign a compliance agreement indicating they will comply with the terms and conditions of this EFP. Once the compliance letter is signed, the vessel name, ownership, and vessel specific information required for an EFP will be transmitted to NMFS by the project coordinator. If NMFS continues providing 60 day notice to vessel selection candidates and communicates release requests to the EFP project coordinator in a timely manner, it is anticipated that the information needed to list vessels under this EFP will be provided to NMFS and the appropriate EM service provider 30 days prior to the vessel commencing fishing operations.

Trip selection boat will be selected on a volunteer basis and owners will also sign a compliance agreement indicating they are willing to comply with the terms and conditions of this EFP. Once the compliance letter is signed, the vessel name, ownership, and vessel specific information required by the EFP will be transmitted to NMFS and the appropriate EM service provider by the project coordinator 30 days prior to the vessel commencing fishing operations.

**4.3 Disposition of Species--Year 1:** Vessels participating in the EFP will operate within the confines of the normal fixed gear fishing seasons with participating vessels legally harvesting

sablefish and halibut IFQ and other legally harvestable bycatch species. With the exception of rockfish species landed in excess of maximum retainable amounts identified in 50 CFR 679.20 (e), disposition of landed catch will be consistent with existing regulatory guidelines and will be unaffected by the EM EFP. Rockfish from federal waters retained above maximum retainable amounts will be handled by the processor taking delivery of that fish, with the ex-vessel value forfeited to fund further work under this EFP. Rockfish harvested in state waters and retained above maximum retainable amounts will be handled by the processor taking delivery of that fish, with the ex-vessel value forfeited to the State of Alaska as is currently required.

#### **4.5 Requested Regulatory Exemptions Year 1--Applicants request that vessels listed under this EFP be exempted from the following regulations.**

**4.5.1 Exemption from regulations governing maximum retainable amounts of rockfish.** Regulations governing maximum retainable amounts are listed at 50 CFR 679.20 (e), with specific percentages for the Gulf of Alaska listed in Table 10. In order to fulfill the rockfish identification objective of this EFP, applicants are requesting that vessels participating in the EFP be exempted from the “aggregate rockfish,” “SR/RE” and “DSR” percentages listed in this table when directed fishing for IFQ halibut or sablefish. Applicants also request an exemptions from regulations prohibiting retention above the MRAs including 679.7 (a) (16), 679.20 (d) (iii) (B) and 679.20 (e) (a) and (f). For conservation reasons, applicants do not request exemption from regulations at 679.20 (d) (2) requiring discard if NMFS places a rockfish species on prohibited status due to Total Allowable Catch (TAC) or Allowable Biological Catch (ABC) concerns. If this occurs, EFP vessels will be required to discard that species, and the hauls during this period will not be included in the evaluation of the rockfish management objective. Finally, consistent with the disposition of other rockfish described in Section 4.4 above, applicants are requesting an exemption from 679.20 (j) (iii) to allow the overages from fish harvested in federal waters to be sold and the ex-vessel value forfeited to fund further work under this EFP.

Because the mortality of captured rockfish is 100% for most species, requiring all EFP vessels to retain rockfish will not increase rockfish mortality, therefore will not create a conservation concern; in fact, full retention will provide a more accurate estimate of rockfish bycatch in the longline fisheries than is currently available, reduce waste, and allow this important EFP objective to be achieved.

#### **4.5.2 Exemption from observer coverage requirements under 50 CFR 679.51.**

Regulations governing observer coverage for vessels in the partial coverage category are listed under 50 CFR 679.51 (a) (1). Applicants request an exemption from this section to allow a vessel to be removed from the partial coverage category, the associated observer coverage requirements, and the requirement to register trips in ODDS. Participating

vessels will still be subject to the observer fee collection program described in 50 CFR 679.55. These release provisions are necessary to incentivize participation and to provide a sufficient sample size to secure the data necessary to answer the questions posed by the EFP. Since vessel selection boats that will be referred to the EFP are vessels that request a waiver from observer coverage, exempting these boats from observer selection will not reduce observer coverage but will, in fact, assist NMFS in securing representative data from the vessel selection pool. Exempting trip selection boats will reduce the number of vessels in this pool slightly, but NMFS is still likely to achieve coverage targets by selecting additional trips from the remaining vessels.

**4.5.3 Exemption from observer requirements under 679.7 (f) (4).** Regulations under 679.7 (f) (4) prohibit a vessel from retaining IFQ halibut or sablefish in excess of the total amount of unharvested IFQ applicable to the vessel category and IFQ regulatory area(s) in which the vessel is deploying fixed gear unless an observer is on board. Applicants request an exemption from this regulation to allow EM systems to be used in lieu of an observer. This will facilitate participation in the EFP and is consistent with the stated purpose of the EFP to develop performance standards, operational procedures, and operator responsibilities necessary to integrate EM as a component of the NPRP for fixed gear vessels where EM provides a cost effective or less problematic alternative to observers. EM data review will verify that vessel harvest occurred in the appropriate IFQ areas and that the amount of catch matches the IFQ assigned to that area. This will allow IFQ holders to efficiently harvest IFQ from multiple management areas while ensuring conservation and management objectives are not compromised.

**4.5.4 Seabird exemptions.** Sablefish fixed gear boats are required to retain incidentally taken seabirds only if an observer is on board. Halibut regulations require all vessels to retain any incidentally harvested seabird but the United States Fish and Wildlife Service (USFWS) has not developed a system for recovering seabirds incidentally taken by unobserved boats. Currently NMFS has a “salvage” permit that authorizes observers to retain sea bird remains for future identification. Applicants have not been able to identify specific regulations that would require an exemption; however seabirds can only be retained under a permit issued by the USFWS. Thus the logistical, permitting and regulatory challenges associated with unobserved vessels retaining seabird remains for subsequent identification are significant and best addressed under an EFP.

In Year 1, applicants request NMFS designate vessels participating in this EFP as sub-permittees under the existing NMFS salvage permit. If this is not possible, applicants will work with NMFS to find an alternative solution or delay the seabird objective until Year 2 to allow more time to resolve this issue. Since unobserved vessels currently cannot legally retain seabird bycatch for subsequent identification, developing a system that allows retention will improve seabird bycatch accounting.

**4.5.5 Exemption from State regulations.** EFP applicants are working with State of Alaska fishery managers to identify regulations that might require an exemption in order for this project to proceed. In the Southeast region, full retention is already required for demersal shelf rockfish (DSR), black rockfish, and thornyhead rockfish in all state waters. Dark and blue rockfish have a 15% limit in aggregate but their occurrence is not likely to exceeded this amount. Thornyhead rockfish and all other rockfish in the 0-3 mile area of State waters have a 5% retention limit in aggregate. The Central region requires full retention of all rockfish harvested in State waters with the ex-vessel value of overages forfeited to the State. The Western region rockfish bycatch limits apply only to black, blue, and dark rockfish and do not include a full retention provisions. Preliminary discussion suggests that requiring EFP vessels to retain all rockfish caught in State waters with forfeiture of the ex-vessel value of overages to the State as one possible solution. A Commissioner's permit has been identified as a possible alternative solution. Applicants will continue to investigate this issue and to work with the State of Alaska as needed. Applicants have also contacted appropriate ADF&G staff to inquire about permits needed to retain seabird bycatch from State waters for subsequent on-shore identification. The State has a salvage permitting process, which applicants will complete if this EFP is approved. Again, since seabird bycatch retention is not currently required on unobserved boats, developing a retention methodology will improve seabird bycatch accounting.

**4.6 Anticipated Impacts on the Environment from Year 1 Activities:** Applicants anticipate no additional impacts to the fisheries, environment, marine mammals, endangered species or EFH beyond that which normally occurs during the standard fixed gear season.

**4.7 Project Timing:** Preparation, training and equipment installation for the EM EFP will start in January 2014 to ensure EM systems are deployed and operable when the halibut/sablefish IFQ season opens. This timing is crucial to achieving Year 1 objectives. Applicants request guidance from NMFS on how to best plan for and manage the preparation and training tasks necessary for success in conjunction with the EFP review process and timeline.

## **5.0 Future Studies**

### **5.1 Year 1**

#### *Survey vessels*

Applicants are working with the Alaska Fisheries Science Center (AFSC) and the IPHC to deploy EM systems on survey vessels to pilot test their capability to capture length measurements during video review. This feature may be tested in Year 1 on survey vessels to evaluate the use of average weights and to identify operational procedures needed to obtain lengths electronically.

### **5.2 Year 2**

### *Vessel Selection*

Based on the outcome of Year 1 vessel selection and the quality of catch estimates collected from the EFP, applicants may request that the Council revise the conditional release policy in Years 2 and 3 of the EFP to include more vessels. Expansion could be in the halibut and sablefish IFQ fisheries and/or in the Pacific cod pot fisheries. A vessel's compliance record and video quality rating from the previous year(s) will be a factor in selecting EFP vessels after Year 1.

### *Video Quality*

After baseline data from Year 1 is reviewed by the PSMFC and management needs are assessed, catch handling procedures will be tested to resolve remaining management needs or data gaps. These may include halibut release methods that allow video reviewers to estimate length, installation of measuring boards on vessels for size estimates, and equipment maintenance specifications. With additional ports, new technology may also be pilot tested as identified and when appropriate.

### *Vessel Logbooks*

The results of effort data extracted from the sensor information will be used to identify data fields necessary for an electronic log (elog) component. The elog component will be added in Years 2 and 3 to improve Meta data collection and haul location verification using GPS.

### *Catch Estimation*

Year 1 data are intended to establish a baseline data-set that will identify data gaps and management priorities. This will inform decisions on the need to include additional species of management concern or alternative weight estimation techniques in subsequent years. Discard mortality and halibut viability are estimated on a subsample of halibut harvested in fisheries with observer coverage. In Year 2 of this EFP, new strategies for assessing halibut viability with EM will be tested. Variables to consider will include method of hook release, soak time, and halibut size.

### *Bird Deterrent Use*

Use of bird deterrents is a requirement for vessel deploying fixed gear during daylight hours. In Year 2, the EFP will explore methods to verify deterrent use with EM.

## **5.3 Year 3:**

### *New Technologies*

After existing technology is tested, enhanced through performance requirements and retested, applicants will solicit ideas for new technology that might enhance species identification or fill other identified data gaps. Applicants will work with the EFP EM work group/ steering committee to select new technology to deploy and test. On-going testing of new technology will occur on a subsample of vessels selected for EM coverage.

**6.0 Year 1 Methods and Sampling Plan Technical information:** Year 1 hypothesis are identified and explained in the following section. These hypotheses may be answered in the first year, if data is conclusive, or may require additional testing. Hypothesis for subsequent years will be developed, along with sampling strategies and protocols, by the EM EFP work group and will be reviewed by the Council. These will include monitoring objectives and technical specifications for deploying EM on Pacific cod longline and pot vessels.

### **6.1 Rockfish Identification:**

It is essential to determine whether IP digital cameras can provide sufficient identification of rockfish species to meet management needs or whether an operational EM program will require full retention of all rockfish and subsequent dockside identification. To make this determination, all vessels participating in the EFP will be required to retain 100% of rockfish species harvested during each trip throughout Year 1.

**Hypothesis:** Rockfish species composition identified from EM haul videos will not differ significantly from rockfish species composition identified during dockside sampling.

#### *Dockside sampling*

Vessel operators will be required to notify program coordinators of potential delivery schedules and ports. At least one trip from each vessel will be sampled dockside for rockfish identification and comparison with the video data. Rockfish dockside identification landings will be opportunistically sampled. The port coordinators will communicate with the vessels to determine offload schedules and will choose which vessels to sample based on the port sampler's availability and whether or not that boat has already been sampled. If multiple boats are offloading at the same time, port coordinators can select the landing with the greatest haul weight similar to the IPHC protocols for dockside sampling vessel selection (Erikson and MacTavish, 2012). Each port coordinator will have, within a two month period, five offloads to attend and each port location will have between 64 and 96 hauls for 100% video review (Table 2).

#### *Video Review for Rockfish*

For each randomly selected offload, 100% of the video from hauls associated with the trip will be reviewed by PSMFC for species identification to the lowest taxonomic level. The rockfish catch information will then be compared to the rockfish identified dockside during the offload by a port sampler. All port samplers will be required to pass a competency test on rockfish species

identification prior to working unaided as a dockside sampler. Verification of full retention will be made by comparing the total number of rockfish counted during video review with the total number counted by the dockside sampler (Stanley *et al.*, 2011).

## **6.2 Vessel Selection**

### *NMFS Vessel Selection Stratum*

As explained above, vessels in this selection stratum are randomly selected by NMFS for at-sea monitoring to obtain representative data. The vessel selection component of the EFP will focus on four sampling periods: March-April, May-June, July-August, and September-October. These sampling periods are consistent with the selection periods used in the observer program and span the entire fishing season for the halibut and sablefish fisheries with the exception of one week in November. As proposed, a pool of vessels will be selected for observer coverage for each two month period by NMFS with 60 days advanced notice. These vessels may then request a conditional release based on bunk space or life raft capacity. When NMFS receives a release request, the vessel will be referred to the EFP program coordinator for the option of participating in the EM EFP in lieu of carrying an observer. If EM hardware is available and the vessel owner agrees to the terms and conditions of the EFP, NMFS will issue a release for that selection period conditional on the vessel's participation in the EM EFP. If the EFP project cannot accommodate a vessel due to full use of the available EM systems or the inability of the vessel to travel to an EM EFP port, the vessel will be referred back to NMFS for further release evaluation. Trip selection vessels will have 15% of their trips randomly selected for video review. This approach is congruent with the 15% probability of having to carry an observer on any given trip. Each trip selection vessel will also have one landing met by a dockside monitor for rockfish species identification.

Two additional studies are planned for the trip selection vessels. The first involves evaluating the effect of the frame capture rate on species identification and costs and the second involves using EM systems to spatially monitor fishing activity and to verify that fishing activity is occurring in the correct regulatory area. The methods associated with these studies are described in Section 6.5.1 and 6.7 respectively below.

## **6.3 Catch Estimation**

The EFP will estimate total catch for each haul based on species identification and counts. Species identification in Year 1 will establish a baseline of EM capacity to accurately and reliably identify species to the lowest taxonomic level. All hauls from the vessels selected for catch estimates will be reviewed by PSMFC and 30% of the video will be processed for species identification. Portions of the haul video will be randomly selected by PSMFC video reviewers to cover 30% of the haul time in three 10% increments. Species identification, including

seabirds, will be recorded to the lowest taxonomic level. Species discarded at the roller station and drop-offs will be identified to the lowest taxonomic level and counted; this discard data will be used to estimate total percentages of discarded species. A catch estimate will then be extrapolated from the subsamples for each species or species group:

$$\text{Total catch} = \frac{\text{Number of fish counted in video review}}{\text{Time covered in 30\% video subsample}} \times \text{Total time for haul}$$

In the first year the EFP will focus on using average weights to estimate total catch for commonly discarded species, including grenadier, dogfish, skates, sub-legal halibut, and sablefish. Average weights will be applied to discarded species and drop-off events to allow catch weights to be calculated. Survey data from NMFS will be used to determine species average weights (personal communication). Once extrapolated for each species, the catch estimates of discards and drop-offs will be summed with retained catch to determine total catch weights for each haul. Species groupings will be used when it is impossible to distinguish different species on the gear, for example shortraker and rougheye will be grouped. In Year 1, grouping species into size categories (e.g. observably smaller or larger) will also be tested with giant grenadier (*Albatrossia pectoralis*), in order to evaluate base-line estimates of average weights for this species.

#### 6.4 Subsampling Rates

**Hypothesis:** Catch estimates will be more cost effective and as accurate in subsampled haul videos as they are in video reviewed for 100% of the haul.

The hauls reviewed for rockfish identification will also be reviewed by PSMFC at different percentages to compare catch estimates, species identification, and time and cost for video review. Each haul will have 10%, 30% and 50% of the haul time reviewed for species identification. The EFP research coordinators will randomly select 10% segments from each haul that was 100% reviewed for rockfish identification to be used for species identification and catch estimations at each of the subsampling rates. This will allow total catch to be estimated by extrapolation for the different amounts of haul time reviewed:

$$\text{Total catch} = \frac{\text{Number of fish counted in video review}}{\text{Time covered in video subsample}} \times \text{Total time for haul}$$

The results from the Rockfish Identification study will be used to compare 100% video review catch information with the subsampling rates.

#### *Haul Sampling*

In order to obtain quality catch composition data, video will be reviewed by PSMFC for species identification according to the sampling percentage assigned to that haul (Table 1). Species will

be identified to the lowest taxonomic level. The disposition status of each fish will be noted as retained, drop-off, or discarded. Camera placement and instructions on vessel-specific monitoring plans will be used to ensure that discard events during hauling are captured by the cameras.

All hauls from the vessel selection vessels and all hauls from randomly selected, trip-selection vessel trips will have 30% of the video processed for species identification to be congruent with the current NMFS groundfish observing program (AFSC, 2013). The total time between the first and last hooks leaving the water will be broken into time segments of one-tenth the total haul time; three time segments will then be randomly selected from the ten total segments for species identification. To randomly select the three segments, a number from the random number table will be chosen (Appendix A). That number will begin the segment selection; the next two segments will be selected by counting up by the number randomly selected. For example, if the random number is 4, the segments for review would be 2, 4, and 8 (Figure 1)

## **6.5 EM System Performance**

In Year 1, the EFP will use digital IP cameras and EM systems supplied by two EM service providers, Archipelago Marine Research, (AMR) and Saltwater Inc., to record fishing activity. AMR will deploy their EM Observe v4.5 Electronic Monitoring System which includes a control center powered by 12v DC or 120v AC and a removable 1 terabyte hard drive. Sensors used on AMRs system include hydraulic pressure, rotation sensors, and GPS. The AMR system can accommodate up to eight 1 mp IP digital cameras with variable frame rate capture setting from 1 to 30 frames per second (FPS), and a selection of lenses with different fields of focus. Saltwater's onboard computer contains system operating software and data storage. Each server contains two 500GB hard drives. The system has a USB 3.0 port that allows for efficient data download to password protected external hard-drives. Sensors used on Saltwater's EM system include hydraulic pressure sensors, magnetic drum sensors and motion detection to trigger recording. A GPS sensor is integrated into the camera housing and time, data, latitude and longitude are stamped on each video frame. Saltwater's camera system uses two digital Internet Protocol (IP) cameras. One has a hemispheric lens that can capture the entire deck. The second camera has various lens options that capture a narrower field of view. All frames can be zoomed-in on during the review process. The cameras can record at 12+frames per second at a resolution equivalent to HDTV (1280 x 960). Resolution and frame rate can be easily adjusted for each camera at the installation, if lower rates (requiring less storage space) are adequate to meet project requirements. Both the AMR and Saltwater EM systems record sensor activity continuously and use threshold setting on the sensors to trigger video recording of events. Sensor and video data will be stored on a hard drive installed with a tamper evident seal.

Throughout the EFP, attributes of the EM systems which improve the collection of effort and catch composition data will be noted. The reliability of EM systems will be evaluated on a vessel specific basis by comparing the number of hauls the vessel made with the number of hauls

successfully captured on video. GPS sensor performance will be evaluated based on the number of hours in each trip compared to the number of hours the GPS was operational, excluding momentary lapses of 30 seconds or less and night-time gaps if the vessel is anchored and the system powered down. Video quality will be rated as good, medium, and poor based on criteria identified in Table 4. While applicants acknowledge that the video quality rating will contain elements of operator maintenance and system performance, the reason for lower quality video ratings such as lighting, glare, camera alignment or moisture on the lenses will also be noted to allow evaluation.

**6.5.1 Frame Rate:** This experiment is the first step in testing particular variables within EM technology. The goal is to determine cost effectiveness and species identification ability from video captured at different frame rates.

**Hypothesis:** There is no difference in ability to identify species to the lowest taxonomic levels from video recorded at different frame rates.

Vessels from the NMFS trip selection pool that are randomly selected for EM will be outfitted with two cameras similar to the other EM covered vessels. For the frame rate project, one camera will record at the same frame rate as the vessel selection cameras while one will record at a higher frame rate. The goal of this project will be to compare the ability to identify catch to species at the different frame rates and to compare cost and time for video review and quality checks. PSMFC technicians will randomly select 30% of the trips to review haul video (Table 3). Selected hauls from each camera will be reviewed for 30% of the haul time by multiple reviewers. Reviewers will use the same method used with catch estimates for randomly selecting three 10% time segments to review. The time segments randomly selected from one camera by one reviewer will be the same as those reviewed from the second camera by a second reviewer. The 30% video review will also be used to determine catch estimates as described above. However, because the trip selection vessels were chosen opportunistically these data are not intended to be representative of the fleet and will not be pooled with the vessel selection catch estimates.

## 6.6 Operator Responsibilities

Each vessel will receive an on-board quality check after the first trip to evaluate system performance, image quality and operator responsibilities, and to resolve any installation issues. The EFP will evaluate the efficacy of using a pre-departure function check to ensure system reliability and the necessary lens cleaning requirements to achieve acceptable data quality. At the end of the deployment period, or as needed, the hard drives will be collected by a port coordinator. The port coordinator will note the conditions of the tamper evident seal prior to removing the hard drive.

The port coordinator will make a copy of the data on the hard drive which will be sent to PSMFC for video review. Upon receipt, PSMFC will make a second copy to be sent to a designated person within NMFS for internal review and use. Upon review of the video and sensor data by PSMFC, the vessel will be evaluated for compliance with system maintenance provisions of this EFP and assigned a numeric grade. This grade will be communicated to the port coordinator and used to track vessel compliance with the operator responsibilities of this EFP, identify good candidate vessels for EM, and to track performance improvements over time. The original hard drive will be stored in a secure location until PSMFC has notified the program coordinator that they have completed their review of the data from that vessel. At that point the hard drive will be reformatted and returned to the port coordinators for reuse.

Vessel operators will be provided data sheets; this data can eventually be used to gather information similar to commonly used logbooks in other commercial fixed gear fisheries (AFSC, 2013). For each haul, hook size, number of hooks, average hook spacing, and set length or number of skates will be manually recorded. Additional information about each haul and trip will be gathered during video review.

## **6.7 Regulatory Area Compliance**

For the regulatory area compliance study, trip selection vessels wishing an exemption from the regulations in 679.7 (f) (4) which prohibit a vessel fishing multiple areas from retaining IFQ halibut or sablefish in excess of the total amount of unharvested IFQ applicable in any single area unless an observer is on board, will be required to notify their respective program coordinators when making these trips. Sensor data will be used to identify set location and video footage will be used to verify fishing activity. All hauls made by trip selection vessels that are fishing multiple areas will be reviewed for regulatory area compliance. Unless otherwise randomly selected as part of the vessels 15%, these trips will not be further reviewed to avoid introducing bias.

## **6.8 Seabirds Objective**

Vessels will be tasked to retain all seabirds caught on their longlines. Vessel operators will be instructed to place all seabird remains in a sealed bag along with a specimen label noting the date, time, and location then placed in a second sealed bag. The double-bagged seabird will then be placed in the freezer or iced in the fish hold until the vessel reaches port. The vessel operator will inform the port coordinator of all seabird bycatch events and the port coordinator will contact NMFS.

## **7.0 Statistical Analyses**

All statistical analyses will be performed by the EFP project research coordinators Adam and Molly Zaleski. The descriptive statistics for each Year 1 project are included in the following outline and have been developed through consultation with the Alaska Fisheries Science Center (AFSC).

Additional statistical analysis will be developed in consultation with the EFP work group, the Council's SSC and staff from the AFSC.

### **7.1 Rockfish Identification**

The EFP will compare rockfish species identified in the 100% video review with rockfish identified during dockside sampling using an appropriate statistical analysis determined by the structure of the collected data and the number of vessels participating in the program. In lieu of agreed upon statistical methods, preliminary results will estimate the accuracy of species identification from recordings using rockfish collected during dockside sampling as the control. Separate estimates of accuracy will be run for each species of rockfish, as well as groupings of rockfish species. Groupings of rockfish and subsequent analyses will be done retrospectively. Estimates of uncertainty will initially be made using standard likelihood methods. In addition, the average weight of rockfish by species and species grouping will be estimated and compared to the estimated weight of rockfish from the dockside samples using standard ANOVA methods.

### **7.2 Subsampling Rates**

Video reviewed at different percentages (10%, 30%, 50%, and 100%) will allow for a direct comparison of the type and number of species identified among the different review rates. The statistical method used for this comparison will be identified based on the structure of the collected data and the number of vessels participating, after consultation with the Council's SSC and staff from the AFSC. Included in this analysis will be an effort to provide the information needed for managers to decide which of the subsampling rates is most cost effective. Input from the SSC and NMFS managers will be needed to properly weight the cost-associated errors in estimates of species identification and average weight.

### **7.3 EM System Performance**

The quality of imagery during all video review will be ranked as low, medium, high, or unusable. The following criteria identified in Table 4 will be used to determine video quality and the ability to accurately identify catch: video frame is free of debris, fish or sea spray, light glare, and the field of view remains focused on the roller station during all hauling activity. In addition, we will estimate the proportion of the time the imagery was considered of low, medium, or high quality for each trip. These data will be used to evaluate the cost effectiveness of different EM systems used in the EFP.

### **7.4 Frame Rates**

The EFP will compare the extrapolated catch estimates for targeted as well as bycatch species between hauls recorded at different frame rates using an appropriate statistical analysis, as determined by the structure of the collected data and the number of vessels involved in the program. The statistical significance of both the total catch estimates and estimates by species

will be compared to evaluate hypotheses related to discrepancies in species identification and estimates of total number, length, and weight among different species/species groups.

## **7.5 Cost Analysis**

Throughout the study period, costs will be tracked and assigned to one of five categories: equipment, planning, operational field work, data review, or analysis and reporting. This data will be reported and will be used to inform decisions related to options within an EM program and cost comparisons between EM programs and the existing observer program.

## **8.0 Project Partners and Qualifications**

**Alaska Longline Fishermen's Association (ALFA)** --ALFA is a non-profit association of independent commercial longline vessel owners and crew members. Founded in 1978, ALFA has extensive experience participating in fishery management forums and cooperative research projects. ALFA will be responsible for overall project management and reporting. ALFA will also coordinate stakeholder involvement, vessel participation, and outreach with the other industry partners. In 2009, ALFA launched a Fishery Conservation Network (FCN) to engage fishermen in developing and testing innovative solutions to address resource and management issues. The 65 FCN members and other interested fishermen will be engaged in the EM field tests.

**Linda Behnken—Executive Director, Alaska Longline Fishermen's Association (ALFA):** Ms. Behnken has BA from Dartmouth College and a Masters in Environmental Science from Yale University. She has been a commercial fisherman in Alaska since 1982, has served as the Executive Director of ALFA since 1991. Linda served on the North Pacific Fishery Management Council (NPFMC) from 1992-2001 and co-chaired the NPFMC's Essential Fish Habitat Committee. Ms. Behnken was awarded the National Fisherman Highliner award in 2009 for her work promoting healthy marine ecosystems and strong coastal communities, and was a keynote speaker at the 2009 Young Fishermen's Summit in Anchorage, Alaska. ALFA is based in Sitka, Alaska and has members from the Alaska communities of Sitka, Juneau, Haines, Port Alexander, Wrangell and Petersburg, as well as members who winter in Oregon, Washington and Idaho. Ms. Behnken will be responsible for fishing fleet participation in the project, and stakeholder outreach and education. She will also supervise the project coordinator.

**Dan Falvey-- project coordinator, ALFA:** Mr. Falvey has a BA in resource management and policy from Western Washington University and training in Geographic Information Systems analysis from Penn State World Campus. He has owned/operated commercial fishing vessels in Alaska since 1984. Mr. Falvey served on the Advisory Panel to the NPFMC from 1991-2004, serving as vice-chairman from 1999-2004. He was the acting director of the Alaska Marine Safety and Education Association in 1998, was recently appointed to the Advisory Panel of the North Pacific Research Board, and has served on numerous community economic development

and educational advisory boards. Mr. Falvey was awarded the National Fisherman Highliner award in 2011. Through his involvement with ALFA, Mr. Falvey has successfully coordinated several cooperative research projects, most recently serving as overall program coordinator for a successful NFWF funded pilot program to operationalize video-based electronic monitoring of Alaska's halibut and sablefish catch share fisheries.<sup>9</sup> Mr. Falvey has also managed numerous other projects such as developing selective fishing techniques for underutilized rockfish species in southeast Alaska, identifying an appropriate product recovery rate for sablefish, and coordinating a rockfish identification project with NMFS observers and regional processing plant workers. Mr. Falvey will serve as overall project coordinator and be responsible for contract management, program design and planning, and coordinating reports.

**Petersburg Vessel Owners Association (PVOA)**—PVOA is a multi-gear, multi-species advocacy group that monitors and acts on current issues that affect the fishing industry and represents a diverse group of over 100 commercial fishermen and businesses operating primarily in Southeast Alaska. The purpose of the organization is to protect the economic viability of the commercial fishing fleet in Petersburg; promote the conservation and rational management of the North Pacific fisheries resource; and advocate for protection of fisheries habitat.

**Brian Lynch, Executive Director, Petersburg Vessel Owners Association (PVOA):** Mr. Lynch has a BS in Fisheries Science from Oregon State University. He recently retired from the Alaska Department of Fish and Game (ADFG), where he worked as a biologist for over thirty-year's in commercial fisheries management and research projects. For the first ten years of his tenure with ADFG he was involved with various research projects in Southeast Alaska involving pre-logging physical characteristic inventories, salmon rearing habitat and adult migration studies on the Stikine River, salmon drift gillnet selectivity studies and was the Petersburg port sampling supervisor in charge of the biological sampling of commercial troll, drift gillnet and purse seine salmon landings. From 1991-2001 he was the ADFG Commercial Fisheries Division Petersburg assistant area management biologist with direct management authority over salmon drift gill net, purse seine, spring troll fisheries as well as herring and dive fisheries. During this time he was also a member of the Pacific Salmon Commission (PSC), Transboundary Rivers Technical Committee. From 2001-2010 he was the ADFG Commercial Fisheries Division Southeast Alaska regional salmon troll fishery management biologist. During his tenure as the troll fishery manager he was also a member of the PSC Chinook Technical Committee and served as technical staff to the PSC US Northern Panel and the PSC Transboundary Panel. Mr. Lynch is currently a member of the Advisory Panel to the NPFMC. He has extensive community involvement as a past member of the Petersburg city council, planning commission, volunteer fire department and is currently a member of the Petersburg Economic Development Council. Mr. Lynch will be responsible for fishing fleet participation in the project, and stakeholder outreach and education.

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<sup>9</sup> <http://www.alfafish.org/observer-program/electronic-monitoring.html>

**Adam Zaleski and Marilyn Zaleski - Project Research Coordinators:** Mr. and Mrs. Zaleski are recent graduates of the University of Alaska Fairbanks School of Fisheries and Ocean Sciences. Both received Master's degrees in Fisheries. Mr. Zaleski's project focused on anthropogenic contamination as an alternative hypothesis contributing to the decline of western Steller sea lions. Ms. Zaleski studied the snow crab fishery with a focus on reproductive physiology. Prior to their Master's work, they were fisheries observers in Alaska. Marilyn has 104 active sea days on 4 vessels and Adam has 213 sea days on 6 vessels, including both trawl and longline vessels. As the Project Research Coordinators they are responsible for determining the data collection and sampling methodologies for this project. They will work in collaboration with the Alaska Fisheries Science Center to perform statistical analysis of the data and to determine if and how changes to the program will be made in order to meet project objectives as well as management needs.

**Saltwater Inc.** is a small business headquartered in Anchorage, Alaska that is focused on collecting accurate, reliable scientific data. Saltwater Inc. was started in 1988 in response to the growing need for data about the fisheries off Alaska. It was one of the first companies to be certified by the Alaska Department of Fish and Game (1988) and by the National Marine Fisheries Service (1989) to employ trained biologists to collect data onboard commercial fishing vessels.

For over 20 years Saltwater has worked closely with commercial fishermen and government agencies to collect data on fisheries, marine mammals, and seabirds throughout Alaska as well as Hawaii and along the West Coast. Saltwater Inc. has years of experience in planning and executing complex and time sensitive logistics to meet sampling goals. They have extensive experience in editing observer data and writing reports.

Since 2009, Saltwater Inc. has been working to develop electronic monitoring systems that will offer a viable monitoring option in fisheries where observers would be impractical. In 2012, NMFS selected Saltwater Inc. to deploy its EM system on small halibut and sablefish vessels as part of the restructure of the North Pacific groundfish observer program. This is the first time a U.S.-based fishery monitoring company has been awarded a US government contract to deploy EM systems.

**Kathryn Carovano** is the Saltwater Inc. Program Manager responsible for optimizing the use of new technology in fishery monitoring. She has guided the development and implementation of Saltwater's electronic monitoring program, and oversees Saltwater's new technology initiatives. She has a BA from Middlebury College and an MA in International Relations from the Johns Hopkins University. She comes to Saltwater Inc. with over 20 years experience in project development and program management. Kathryn will oversee Saltwater Inc.'s responsibilities in the proposed EFP including program design, planning, and implementation.

**Archipelago Marine Research** Established in 1978, Archipelago Marine Research Ltd. Is a global provider of sustainable marine resource management products and services. From its

headquarters in Victoria, British Columbia, the company's team of 175+ industry professionals helps fisheries, coastal communities, and government organizations around the world to implement sustainable practices through at-sea and dockside observer services, electronic monitoring programs, and marine environmental services.

**Jason Bryan** joined Archipelago Marine Research in early 2010 as a Project Manager focused on international projects. He began his career in the 1980s in freshwater fisheries and over the next 25 years conducted freshwater and marine fish projects on both coasts of Canada as well as terrestrial field studies in Canada, USA and Belize. Over the years Jason has proven himself as a highly motivated, results-oriented problem solver and a very capable Project Manager who is currently responsible for Electronic Monitoring projects in the United States of America as well as Europe. Jason holds a Masters of Science in Fisheries and has contributed to the development of Electronic Monitoring in America through work with the National Marine Fisheries Service, the Alaska Longline Fishermen's Association, the Nature Conservancy and the Pacific States Marine Fisheries Commission. Internationally he has worked with a number of organizations, including the Institute for Marine Resources & Ecosystem Studies (Netherlands), the Marine Management Organization and Marine Scotland (UK) and the Danish AgriFish Department (Denmark). Jason will oversee AMR's responsibilities in the proposed EFP including program design, planning, and implementation.

**Pacific States Marine Fisheries Commission.** Pacific States Marine Fisheries Commission. Established in 1947 by consent of Congress, the Pacific States Marine Fisheries Commission (PSMFC) is an interstate compact agency that helps resource agencies and the fishing industry sustainably manage our valuable Pacific Ocean resources in a five-state region. Member states include California, Oregon, Washington, Idaho, and Alaska. Each is represented by three Commissioners.

PSMFC's primary goal is to promote and support policies and actions to conserve, develop, and manage our fishery resources in California, Oregon, Washington, Idaho and Alaska. We accomplish this through coordinating research activities, monitoring fishing activities, and facilitating a wide variety of projects. We work to collect data and maintain databases on salmon, steelhead, and other marine fish for fishery managers and the fishing industry.

PSMFC has no regulatory or management authority. Instead, as a neutral party, we serve a number of other vital functions that include providing for collective participation by the Pacific States to work on mutual concerns; serving as a forum for discussion regarding our vital fisheries resources; working for coast-wide consensus in cooperation with state and federal authorities; addressing issues that fall outside state or regional management council jurisdiction; acting as a primary contractor on grants and projects for states and other organizations; dispersing monetary assets from the variety of federal, state, and other resources; coordinating research and management projects related to interstate fisheries, and making these data available; and

participating as a non-voting member of the Pacific Fishery Management Council and the North Pacific Fishery Management Council.

**Dave Colpo.** Mr. Colpo is a Senior Program Manager at Pacific States Marine Fisheries Commission. In this capacity he acts as the Principal Investigator or provides oversight on a number of commercial fisheries related projects on the West Coast, Alaska and Hawaii. Mr. Colpo has an M.S in Economics from the University of Washington. Mr. Colpo will supervise PSMFC staff working on the video and sensor data review and reporting.

## **9.0 Budget**

This preliminary budget is based on a stand-alone EM EFP. A significant portion of the budget includes start up costs that will not be annual or part of an operable, fully integrated EM component. More explicitly, start up costs include:

- \$140,000 in planning to support a collaborative effort involving stakeholders, EM service providers, PSMFC, and NMFS staff to evaluate results and plan next steps in an open transparent process.
- \$245,000 in Year One for equipment purchase. This equipment should last five or more years; an operational program can be expected to spend approximately \$50,000/year to replace the equipment as it ages.
- \$40,000 for research coordinators to review EFP data and provide the planning group with the timely answers critical to rapid adaptation and development. Once procedures are set, this funding may no longer be necessary.
- \$60,000 in travel, training and support from project partners to build capacity in Alaska communities to develop the data review capacity and procedures. Once this capacity is established, training and support at this scale will not be necessary.
- Approximately \$180,000 to install and remove the EM systems from participating vessels randomly selected per the Council /NMFS observer deployment plan. This may not be the most cost effective means of deploying EM to meet at-sea monitoring needs. Once base line data is secured, the EFP will evaluate alternate and more cost effective deployment scenarios tailored to EM systems and fishery specific coverage needs. This may result in significant savings.
- Approximately \$30,000 to conduct experiments on the IPHC and NMFS survey vessels. These experiments are designed to resolve questions related to the use of recorded length vs. average weights for estimating catch. These costs will be eliminated once program design is determined.

In sum, approximately \$300,000 to \$400,000 of the Year 1 costs are associated with launching the EM component, taking it to scale, and developing the procedures and systems to support data

gathering with EM. These start up costs will not be annual or ongoing. Applicants expect cost efficiencies to be identified and achieved in subsequent years.

Applicants look forward to working with NMFS and AFSC to integrate, if possible, equipment and services from the existing pilot program. The integration would constitute a significant cost savings and enhance collaboration between EM initiatives. Applicants are also seeking supplemental funding to reduce the observer fees necessary to support the project, and will be applying to the National Fish and Wildlife Foundation Fisheries Innovation Fund to support the planning, coordination, and reporting aspect of the EFP.

While the annual revenue stream afforded by the observer fees is essential to this project, applicant's intent is that the revenue stream support EM deployment on fixed gear vessels instead of **observer** deployment on fixed gear vessels. It is not the intent of the applicants to divert funds or observers from the trawl to the fixed gear fleet.

### **9.1 Budget Narrative Planning/Reporting--\$142,006 Total**

**Personnel--\$30,000**—Funds will support ALFA staff engaged in overall project planning, developing 2015 experimental designs and sampling plan details, writing the 2015 EFP application, coordinating and participating in the EM working group, developing reporting templates for data, writing the May and October 2014 EM EFP progress reports, and providing outreach to stakeholders on the EFP project. This work is estimated to require a 1/3 FTE position.

**Contract--\$73,929**—Funds will be used to contract with project research coordinators (\$10,000) for technical assistance with overall project planning, developing 2015 experimental designs and sampling plan details, writing the 2015 EFP application, developing reporting templates for data, and reviewing the May and October 2014 EM EFP progress reports. Contract funds will also support media assistance (\$3,000) with developing reporting templates and lay-out of the annual report, accounting services (\$5,000), and legal assistance (\$2,500) with developing project partner contracts.

**Travel--\$26,888**—Funds will support travel for two ALFA staff (\$5,500), the two Research Coordinators (\$5,000), and one representative from project partners Archipelago Marine Research, Saltwater Inc., and PSMFC (\$16,338) to two EM workgroup meetings each year in Anchorage and to report to NPFMC on EM EFP progress.

**Supplies--\$5,000**—Funds will purchase office supplies (\$1,000) related to project planning and reporting and for printing/postage of outreach material (\$4,000) including a mailing of an annual report to an estimated 3,000 Alaskan IFQ and fixed gear permit holders.

**Indirect--\$6,189**—Applicants request an indirect rate of 10% be applied exclusive of contract and equipment line items. Funds will cover ALFA overhead costs including audits, facility rent,

phone, internet, insurance, employee supervision, employee training, and other organizational expenses related to normal business operations.

Budget Table 1: Planning and Reporting

<b>Planning and Reporting 2/1/2014 - 2/01/15</b>		
<b>Personnel</b>	ALFA Staff	\$30,000
	<b>Total Personnel</b>	<b>\$30,000</b>
<b>Contract</b>	Research coordinators	\$10,000
	Project Partners	\$53,429
	Media	\$3,000
	Accounting	\$5,000
	Legal	\$2,500
	<b>Total Contract</b>	<b>\$73,929</b>
<b>Travel</b>	Project Cord	\$5,500
	Research Cord	\$5,000
	Project Partners	\$16,388
	<b>Total Travel</b>	<b>\$26,888</b>
<b>Equipment</b>		
	<b>Total Equipment</b>	<b>\$0</b>
<b>Supplies</b>	Office Supplies	\$1,000
	Report printing	\$4,000
	<b>Total supplies</b>	<b>\$5,000</b>
<b>Indirect</b>		<b>\$6,189</b>

**Planning/Reporting Total**

**\$142,006**

**9.2 Budget Narrative 2014 Field Services--\$775,119 Total**

**Personnel--\$99,000**—Funds will support a 0.5 FTE (\$44,000) ALFA Project Manager engaged in implementing the 2014 experimental design and sampling plan, coordinating logistics among project partners and participating vessels, supervising initial data review logistics, data base development, budget management, reporting requirements, and overall project management. Funds will also support two 0.5 FTE Port Coordinator position (\$50,000 total), one in Sitka and one in Petersburg. These positions will be supervised by the Project Manager and will provide the detailed logistical coordination to ensure local technician are trained on EM system installs, up to 20 NMFS referred vessels in each port are engaged in the project and installation schedules coordinated, quality control visits to participating vessels after the initial trip are made, any necessary follow-up visits from EM hardware providers to resolve technical issues are coordinated, and dockside monitoring of unloads are scheduled and performed. Port Coordinators will also be responsible for data retrieval, copying, and transmission to PSMFC for review.

**Contract--\$377,639**—Funds will be used to contract for Port Coordinators in Homer and Kodiak (\$55,575) to perform the duties described above. Funds will also be used for Project Research Coordinators (\$10,000) to evaluate in-season management decisions related to the sampling plan and review initial data. Funds for contracts with project partners AMR, Saltwater Inc., and PSFMC (\$258,564) will be used to train local technicians to install EM systems on vessels, perform the installations on up to 20 vessels/port, and provide support services such as system maintenance, repair and trouble-shooting. Funds will support dockside monitoring of rockfish unloads (\$20,000) by trained technicians. Funds will also support installation of EM systems on the AFSC Sablefish survey vessels and on an IPHC Survey vessel (\$21,000) to pilot test the ability of EM systems to accurately extract length data during manual video review. Applicants also request \$10,000 in contract contingency funds to meet unanticipated needs, services, and opportunities.

**Travel--\$19,250**—Funds will support travel for the project Coordinator (\$5,000) to each participating community to coordinate with local stakeholders and EFP project personnel. Funds will support travel for local technician training in Sitka and Petersburg (\$8,950). Applicants also request contingency travel funds (\$5,300) to meet unexpected needs and opportunities.

**Equipment--\$244,224**—Funds will purchase 22 EM (\$218,414) systems for the EFP project, which will include 2 cameras per system, hydraulic sensors, rotations sensors, motions sensors, and computer control boxes with hard drives from project partners. Funds will be spent on one set of spare parts (\$21,182) including cameras (but excluding the computer control boxes) for each of the four communities to ensure reliability and allow additional vessels to be pre-wired if

practical. Finally, funds will also be spent to acquire 20 additional hard drives (\$4,628) to allow continuous system operation and data transfer from participating vessels.

**Supplies—\$26,074**—Funds will be spent for EM system shipping (\$3,735), hard drive shipping to PSMFC (\$3,600), office supplies (\$1,500), program supplies (\$4,000) for materials related to EM system installations and support, and supplies for Port Coordinators (\$13,239), including computers, software, office, and other necessary items to establish a local capacity.

**Indirect--\$13,932**—Applicants request an indirect rate of 10% be applied exclusive of contract and equipment line items. Funds will cover ALFA overhead costs including audits, facility rent, phone, internet, insurance, employee supervision, employee training, and other organizational expenses related to normal business operations.

**Budget Table 2: Field Services**

Field Services 2/1/2014 – 2/01/15		
Personnel	ALFA Staff	\$44,000
	Sitka & Petersburg Port Cord.	\$50,000
	<b>Total Personnel</b>	<b>\$94,000</b>
Contract	Port cord	\$55,575
	Research cord	\$10,000
	Project Partners	\$258,564
	Dockside monitoring	\$20,000
	Legal	\$2,500
	Survey Vessel Projects	\$21,000
	Contingency	\$10,000
	<b>Total Contract</b>	<b>\$377,639</b>
Travel	Project Cord	\$5,000
	Project partners	\$8,950
	Contingency	\$5,300
	<b>Total Travel</b>	<b>\$19,250</b>

Equipment		
	22 EM systems	\$218,414
	Spare parts	\$21,182
	Hard drives	\$4,628
	<b>Total Equipment</b>	<b>\$244,224</b>
Supplies		
	EM System and Hard Drive Shipping	\$7,335
	office supplies	\$1,500
	program supplies	\$4,000
	Port Coordinator supplies	\$13,239
	<b>Total supplies</b>	<b>\$26,074</b>
Indirect		<b>\$13,932</b>
<b>Field Services Total</b>		<b>\$775,119</b>

### 9.3 Budget Narrative Data Review--\$171,343 Total

**Contract--\$166,283**—Funds will support PSMFC (\$110,000) in developing a data base for 2014 data, purchasing necessary software, reviewing an estimated 1,400 sets using methods described in the sampling plan, and contribute to report preparation. Funds will also allow Project Research Coordinators (\$20,000) to evaluate 2014 data, perform statistical analysis, evaluate alternative sampling designs and generate summary data on 2014 field services and collected data. Contracts with project partners AMR and Saltwater Inc. (\$18,783) will include funding to resolve technical issues identified by PSMFC reviewers as they review data. Contract funds will also be used to review data collected from the AFSC and IPHC survey vessel (\$7,500). Finally applicants are requesting a \$10,000 in contingency funds to support unanticipated data review needs and opportunities.

**Travel--\$3,600**—Funds will support travel for up to two trips by the Project Coordinator or Research Coordinators to Portland to meet with data reviewers as needed.

**Supplies--\$1,000**—Funds will purchase office supplies, hard drives, and pay for shipping related to the data review aspect of the project.

**Indirect--\$460**—Applicants request an indirect rate of 10% be applied exclusive of contract and equipment line items. Funds will cover ALFA overhead costs including audits, facility rent,

phone, internet, insurance, employee supervision, employee training, and other organizational expenses related to normal business operations.

**Budget Table 3: Data Review**

<b>Data Review 2/1/2014 - 2/01/15</b>	
<b>Personnel</b>	<b>\$0</b>
<b>Total Personnel</b>	<b>\$0</b>
<b>Contract</b>	
Research Coordinators	\$20,000
PSMFC	\$110,000
Data Review support	\$18,783
Survey Data Review	\$7,500
Data review contingency	\$10,000
<b>Total Contract</b>	<b>\$166,283</b>
<b>Travel</b>	
Project Cord	\$3,600
<b>Total Travel</b>	<b>\$3,600</b>
<b>Equipment</b>	
<b>Total Equipment</b>	<b>\$0</b>
<b>Supplies</b>	
Program supplies	\$1,000
<b>Total supplies</b>	<b>\$1,000</b>
<b>Indirect</b>	<b>\$460</b>
<b>Data Review Total</b>	<b>\$171,343</b>

**9.4 Budget Table 4: Project Total**

<b>EM EFP Project Total 2/1/2014 - 2/01/15</b>		
<b>Personnel</b>	ALFA Staff	\$74,000
	Sitka & Petersburg Port Coordinator	\$50,000
	<b>Total Personnel</b>	<b>\$124,000</b>
<b>Contract</b>	Port coordinator	\$55,575
	Research coordinator	\$40,000
	Project Partners	\$440,776
	Dockside monitoring	\$20,000
	Professional services	\$13,000
	Survey Vessel Projects	\$28,500
	Contingency	\$20,000
	<b>Total Contract</b>	<b>\$617,851</b>
<b>Travel</b>	Project Manager/research coordinator	\$19,100
	Project partners	\$25,338
	Contingency	\$5,300
	<b>Total Travel</b>	<b>\$49,738</b>
<b>Equipment</b>	EM systems, spare parts, and hard drives	\$244,224
	<b>Total Equipment</b>	<b>\$244,224</b>
<b>Supplies</b>	Shipping	\$7,335
	office supplies	\$3,500
	program supplies	\$17,239
	Printing	\$4,000
	<b>Total supplies</b>	<b>\$32,074</b>

<b>Indirect</b>	<b>\$20,581</b>
<b>EM EFP Project Total</b>	<b>\$1,088,468</b>

## 10.0 Tables and Figures

### 10.1 Tables

Table 1. Number of vessel covered for Year 1 by electronic monitoring (EM) for the different projects within this Exempted Fishing Permit (EFP) proposal.

Objective	Goal # vessels	% video reviewed per haul	Selection pool
Rockfish Identification	68	100	Vessel and trip selection pool
Catch Estimation	60	30	Vessel selection pool
Subsampling Rates	60	10, 30, 50, 100	Vessel selection pool
Frame Rates	8	30	Trip-selected
Seabirds	60	100	Vessel selection pool

Table 2. Total estimated number of hauls from vessel selection vessels that will be sampled for video review at each port over four sampling periods. Each port has vessels with different rates of hauls/day and days/trip; averages of these different rates were used to estimate hauls to be sampled (ALFA, 2012). Petersburg and Kodiak data were unavailable so Sitka and Homer rates were averaged for haul estimations.

Objective	Sitka		Homer		Petersburg		Kodiak		TOTAL
	hauls/day	days/trip	hauls/day	days/trip	hauls/day	days/trip	hauls/day	days/trip	
Average Rates:	1	4	2	3	1.5	3.5	1.5	3.5	
Rockfish Identification	60		90		79		79		308
Catch Estimation	160		320		240		240		960
Subsampling Rates	60		90		79		79		308
Seabirds	60		90		79		79		328

**Table 3. Total estimated number of hauls from trip selection vessels that will be sampled for video review.**

Objective	Goal # Vessels	Average Rates		Estimated # Hauls
		reviewed trips/vessel	hauls/trip	
Frame Rate	8	2	6	96

**Table 4. Imagery quality classification used while reviewing imagery.**

Classification	Description
High	Data are of superior quality; overall sensor and video data from all catch handling are clear and complete; retained and released catch can be detected and identified.
Medium	Data are of adequate quality; overall data from catch handling are complete and reasonably clear; retained and released catch can be detected and identified but with at a slightly slower pace.
Low	Data are of poor quality; overall data from catch handling are complete but not reasonably clear; retained and released catch can be detected and identified but with greater difficulty and at a much slower pace
Unusable	Data are not usable; data from when catch was handled may be incomplete and/or catch may not be detected or identified from the video.

## 10.2 Figures

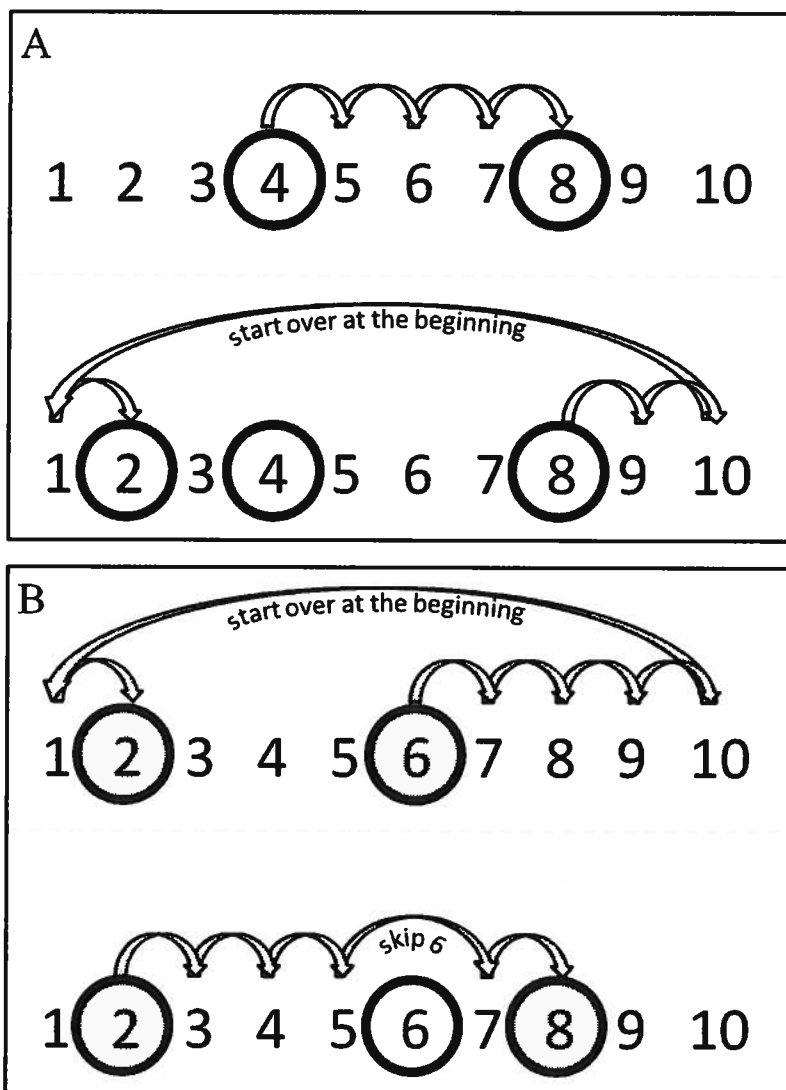


Figure 1. Randomly selecting time segments from haul video: (A) An example if the number from the random number table is 4 shows that you would review time segments 2, 4, and 8. (B) If the number is 6, using that number to begin the segment selection and counting up 6 to select the next two segments, the segments reviewed are 2, 6, and 8. When going through the numbers, you should skip over any that have already been selected.

**Appendix A****10.3 Random Number Tables (See Section 6.4: Sub sampling Rates: *haul sampling*)****Random Number Table A**

2	8	5	1	2	8	8	7	7	10	7	8	5	6	2	9	7	10	4
9	2	10	8	5	8	8	1	3	6	5	5	4	4	8	1	1	5	7
3	5	4	1	7	8	4	5	5	7	1	10	3	1	2	3	6	4	4
2	10	5	3	5	5	10	6	4	2	3	10	7	5	4	5	4	10	9
4	5	3	1	6	1	4	10	8	6	9	7	7	1	1	3	9	9	10
7	5	6	3	8	3	3	6	4	10	5	10	3	1	10	2	2	1	1
2	9	10	3	2	7	9	8	2	7	1	7	3	8	1	3	8	10	1
8	8	4	6	6	6	3	6	1	7	6	6	4	3	3	9	3	5	2
2	8	1	4	8	1	7	4	6	4	3	9	10	1	1	5	6	2	6
2	4	7	6	6	10	9	2	1	10	8	10	5	8	7	1	4	3	9
8	3	4	4	9	5	3	4	9	3	5	5	9	10	4	7	4	5	2
9	7	3	6	5	5	3	10	3	6	10	1	5	2	4	1	1	3	6
9	1	5	4	7	1	8	4	1	4	8	10	3	3	7	10	3	10	5
3	1	6	4	4	5	6	5	7	9	8	5	3	5	6	7	2	4	1
6	7	4	8	3	10	7	8	5	3	2	8	5	8	7	4	6	6	10
9	9	4	8	5	6	1	10	7	6	2	2	10	3	6	6	4	2	5
2	2	1	5	8	2	5	3	6	6	10	3	2	7	4	3	10	8	8
2	5	3	6	7	8	4	9	5	1	4	4	1	3	5	8	7	9	10
4	10	8	2	1	3	8	10	3	10	6	3	10	7	9	3	10	9	3
1	2	2	8	8	3	10	9	1	1	3	8	9	4	5	7	4	8	1
7	1	10	4	3	2	2	8	5	9	6	4	2	7	9	5	3	6	7
6	6	6	4	8	8	5	2	2	7	1	10	2	10	5	10	1	7	9
6	9	5	8	8	10	8	1	2	2	3	10	10	5	9	5	8	7	8
9	6	8	7	9	10	6	2	7	1	4	9	10	2	7	6	3	1	6
6	1	6	2	6	8	5	7	4	2	8	10	10	1	2	5	2	4	5
9	5	6	7	8	5	7	3	8	5	4	2	10	2	6	7	9	2	2
5	9	8	1	3	7	3	9	7	2	1	9	10	10	6	7	2	7	3
8	1	10	6	2	10	6	2	8	7	5	6	1	8	1	9	6	4	2
9	8	7	10	6	8	4	4	1	10	5	10	3	5	4	3	4	1	10
8	4	5	9	6	10	1	1	2	7	4	5	3	2	9	6	2	1	4
1	5	8	3	3	4	10	4	10	9	2	3	6	9	10	3	3	4	10
1	3	3	10	2	7	5	10	1	4	8	8	3	2	2	10	6	8	10
3	1	2	3	8	3	8	1	3	10	6	8	10	1	9	7	5	1	1
6	1	9	9	6	1	4	8	8	7	2	6	3	2	7	6	1	10	7
5	5	6	4	1	8	6	9	6	4	3	8	1	7	8	2	2	7	6
9	6	2	7	6	2	3	1	5	10	1	5	7	1	7	1	5	4	4
4	10	10	7	1	5	5	7	6	1	4	1	10	10	3	3	9	6	8
3	3	6	4	1	1	1	5	7	9	1	6	2	2	9	8	6	9	4
6	6	10	5	4	2	1	10	9	1	1	2	5	4	8	8	2	7	4
6	7	3	3	7	7	6	6	3	7	9	4	3	5	9	3	8	1	4
8	2	3	7	2	10	5	2	4	10	5	7	10	10	3	7	2	1	1

**Random Number Table B**

3	9	5	7	8	2	4	2	7	7	8	3	6	8	3	1	2	5	3
2	8	5	7	10	8	4	2	4	1	7	4	3	1	1	9	8	3	4
3	10	4	10	6	5	10	1	6	10	9	8	10	9	2	8	3	5	8
4	8	3	3	10	1	2	4	6	3	5	6	7	5	4	6	1	8	4
4	2	9	5	4	2	1	10	5	9	7	10	2	3	3	8	10	2	3
6	8	6	5	9	8	9	3	8	8	5	5	2	9	7	2	2	3	2
10	2	6	10	10	3	3	5	1	10	4	7	6	8	5	8	4	1	4
10	8	8	7	1	8	4	3	3	8	4	10	2	6	10	1	8	2	7
7	2	7	8	7	2	4	10	9	10	9	4	8	5	6	10	5	10	6
3	1	1	8	3	9	9	10	4	3	3	6	4	10	6	7	8	7	1
8	1	4	4	10	4	6	7	7	10	2	4	7	6	1	7	2	3	1
5	6	6	7	9	4	3	8	7	5	10	4	8	8	10	9	1	5	1
9	1	8	5	3	1	3	2	5	3	6	2	5	8	1	9	4	5	6
9	4	3	8	9	6	7	3	5	6	8	2	10	8	10	10	6	7	7
5	6	9	5	3	2	9	10	4	3	5	6	2	1	4	10	1	8	4
10	3	10	3	6	1	10	6	6	1	3	8	4	10	7	1	4	8	5
2	2	4	9	5	1	3	7	5	7	10	3	9	1	4	5	1	5	5
5	10	4	3	7	8	6	9	1	10	8	1	7	9	5	1	5	6	4
1	9	2	6	2	10	10	4	5	4	6	6	1	4	8	10	10	10	9
1	9	6	7	9	5	6	6	2	9	7	2	3	10	7	1	10	2	5
6	3	9	7	10	8	10	8	10	7	8	1	6	9	7	10	1	9	10
8	3	8	7	3	10	9	10	5	5	10	3	6	8	10	10	9	10	6
3	6	4	5	10	2	7	2	2	3	8	4	1	2	5	8	5	8	8
3	9	3	10	1	4	10	4	1	1	6	7	3	6	8	1	2	2	6
8	9	8	1	10	7	5	1	3	1	4	5	9	9	1	6	7	8	1
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9	10	5	1	4	6	8	10	5	4	4	4	10	10	5	1	2	1	6
3	3	8	2	4	2	3	7	4	9	10	10	7	6	10	3	1	2	6
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6	2	5	4	2	5	8	10	1	9	1	2	8	6	3	10	6	6	2
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3	7	2	2	3	1	2	5	1	1	8	7	3	3	10	5	10	10	8
3	3	2	7	9	3	3	3	4	6	7	5	6	1	4	8	8	3	7
10	8	10	9	2	8	5	6	2	5	9	9	8	5	8	1	8	8	8
5	2	5	5	6	3	7	6	3	5	7	4	5	2	4	1	9	9	8
2	1	4	5	2	1	3	3	4	1	7	8	7	3	3	10	10	10	10
10	5	1	6	3	7	8	4	10	8	5	4	7	10	2	5	10	7	3
10	4	9	8	6	10	1	9	8	9	8	1	6	9	2	7	8	3	5

10	10	3	9	10	3	9	4	5	3	2	3	3	1	2	3	5	10	2
9	1	10	5	6	10	4	6	8	2	7	3	1	7	8	3	2	10	4

**Random Number Table C**

8	9	3	9	6	7	3	8	6	5	7	9	8	3	5	8	6	4	3
2	10	7	10	5	10	4	1	4	7	4	5	3	7	2	3	10	2	9
8	1	2	3	8	4	4	1	4	6	9	5	3	8	2	1	1	4	9
10	7	8	5	10	5	4	5	4	1	3	3	3	8	6	9	10	7	1
10	1	2	8	7	5	5	7	10	6	9	7	8	5	5	3	8	8	6
4	4	6	1	6	7	9	10	8	7	3	6	4	8	7	8	2	4	9
2	3	3	3	6	3	2	10	10	2	7	8	4	4	6	4	1	1	8
5	5	10	9	10	2	1	5	1	10	10	2	5	8	1	9	8	9	1
3	1	7	3	1	2	7	8	1	5	3	9	1	5	6	1	10	3	6
6	2	8	9	2	3	6	9	4	8	3	7	5	7	6	6	4	9	2
10	6	8	2	9	3	10	9	8	8	6	7	6	2	3	7	1	4	3
9	8	5	3	2	3	2	6	7	2	2	10	8	2	7	5	3	8	2
4	9	8	4	1	1	1	5	9	6	4	8	1	1	9	10	5	7	3
3	8	1	7	3	5	1	4	4	10	8	1	1	8	9	5	6	2	6
2	1	10	7	6	1	6	10	7	1	10	1	8	5	9	7	4	10	2
8	4	1	10	9	9	4	10	9	9	3	3	2	2	1	3	6	2	5
2	8	4	10	1	8	5	7	5	2	10	5	9	4	6	1	4	1	2
6	6	10	4	10	1	6	7	4	7	5	9	3	8	7	10	9	9	5
10	10	6	10	9	3	1	3	7	8	8	3	7	7	1	7	2	6	2
6	4	5	9	1	4	3	3	9	7	9	4	6	3	5	10	1	5	9
10	4	3	6	4	5	7	3	8	8	7	1	3	9	5	5	1	2	7
5	1	3	9	9	1	5	8	9	9	8	3	7	9	6	3	3	10	5
1	10	2	8	9	10	5	2	1	10	7	1	9	2	8	6	6	7	8
7	3	4	4	10	6	4	3	4	5	10	4	2	9	9	4	5	9	8
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4	6	8	9	9	9	10	3	2	6	7	10	9	5	10	9	10	4	4
9	6	4	8	6	3	7	10	8	2	3	3	10	3	7	9	10	10	7
6	4	2	1	9	4	9	9	8	3	3	7	6	10	7	8	7	3	8
10	1	7	6	10	10	8	6	5	10	4	3	1	8	1	9	9	7	2
9	7	1	9	9	5	2	1	9	10	2	2	10	1	1	2	7	4	2
1	7	3	8	7	6	9	6	9	2	10	2	4	6	3	10	4	5	9
8	10	10	9	4	3	8	2	4	5	4	7	2	1	7	1	5	5	8
2	9	1	5	10	6	2	5	6	4	7	9	7	4	3	9	10	7	3
1	5	5	9	7	7	4	4	2	10	2	7	7	1	2	6	6	4	2
9	5	9	3	10	5	6	6	10	2	4	9	2	8	5	10	10	8	10
10	10	7	8	5	5	3	2	1	7	6	5	7	2	7	6	9	8	5
7	1	7	7	1	3	1	6	10	7	1	1	5	9	3	3	5	6	4

3	10	10	7	2	10	2	4	2	1	10	6	2	5	3	4	5	1	6
6	5	10	2	7	7	7	8	9	8	10	6	10	2	5	6	4	4	9
9	2	2	2	3	7	3	5	8	7	8	10	4	8	10	3	4	2	5







**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
*National Marine Fisheries Service*  
*P.O. Box 21668*  
*Juneau, Alaska 99802-1668*  
November 19, 2013

Linda Behnken  
Alaska Longline Fishermen's Association  
834 Lincoln Street  
Sitka, Alaska 99835

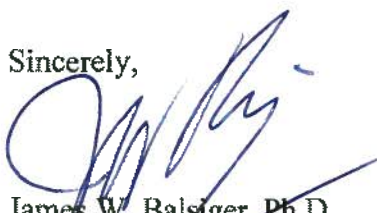
Dear Ms. Behnken:

This letter provides comments from the Alaska Fisheries Science Center (AFSC) and the Alaska Region concerning the revised Exempted Fishing Permit (EFP) application for "Integrating Electronic Monitoring of Fixed Gear Vessels with the North Pacific Research Program" you submitted to us on behalf of the Alaska Longline Fishermen's Association (ALFA) on October 18, 2013, and supplemented on November 6, 2013. This is the second letter we have sent you on your EFP application. The first letter addressed administrative issues on the initial EFP application and was dated October 23, 2013.

Overall, there are a number of scientific and logistical questions that we believe would need to be addressed before the proposed EFP could be approved. However, we have attempted to provide constructive suggestions for a revised EFP that we believe could lead to an effective and helpful step forward in the implementation of electronic monitoring. If you have specific questions on our review, our staff are available to assist you in the development of a revised EFP. Comments from the AFSC on the EFP design are provided in Enclosure 1 to this letter. Comments from the Alaska Region are addressed in Enclosure 2 to this letter. As you will note in the comments from the Alaska Region, we provided additional detail on suggestions for potential alternative electronic monitoring experiments that could be conducted under a revised EFP.

Please contact me if you have questions or would like additional feedback from our staff to help you develop a revised EFP.

Sincerely,



James W. Balsiger, Ph.D.  
Administrator, Alaska Region

Enclosures







**UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
NATIONAL MARINE FISHERIES SERVICE**

Alaska Fisheries Science Center  
7600 Sand Point Way N.E.  
Bldg. 4, F/AKC  
Seattle, Washington 98115-0070

November 18, 2013

**MEMORANDUM FOR:**

James W. Balsiger, Ph.D.  
Administrator, Alaska Region

**FROM:**

Douglas P. DeMaster, Ph.D.  
Science and Research Director

We have reviewed the application by the Alaska Longline Fishermen's Association for an exempted fishing permit in response to your request dated 11/6/2013. Our review of the permit application highlights our concerns with the proposed experimental design and sampling protocols that we believe need to be addressed in order to best move us forward with electronic monitoring research and development in Alaska. We have not provided a set of detailed comments herein but could do so on request.

Attachment



*AFSC comments on ALFA EFP re: EM research 15 Nov 2013*

**Alaska Fisheries Science Center review of the October 18, 2013, exempted fishing permit application submitted to the Alaska Regional Office of the National Marine Fisheries Service by the Alaska Longline Fishermen's Association**

This document presents a scientific review conducted by the Alaska Fisheries Science Center (AFSC) of the Exempted Fishing Permit (EFP) application titled "Integrating Electronic Monitoring of Fixed Gear Vessels with the North Pacific Research Program" submitted to the National Marine Fisheries Service's (NMFS) Alaska Regional Office by the Alaska Longline Fishermen's Association (ALFA).

**Overview**

Exempted Fishing Permits are an excellent tool used to address conservation and management needs in North Pacific fisheries. They have been used both by industry to move forward on projects where NMFS has not been able to make progress and they have been used in collaborative work between industry, academia, and NMFS.

The abovementioned EFP application references an electronic monitoring (EM) workgroup and addresses both the scheduling of meetings and tasking of this workgroup. We note that the EM workgroup is a North Pacific Fishery Management Council body, so the Council would need to address the workgroup's role, tasking, and scheduling, but outlining a Council workgroup's role and schedule is likely outside the scope of the EFP.

The objectives of this EFP should complement existing fishery data collections including observer data and fishery logbooks. The AFSC notes that sablefish logbook catch per unit effort (CPUE) is used in the stock assessment at the request of industry. The EFP would be strengthened if it utilized the logbook framework currently in place for the management of sablefish to help develop electronic logbooks. Similarly, effort data are an important component of observer data for computation of CPUE indices used in the stock assessment process. Effort information (e.g., hook spacing, number of hooks, gear performance, etc.) needs to be captured by EM to be useful in CPUE calculations. Additionally, results of this EFP can only be compared to data collected by human observers if certain standards are met to ensure data compatibility. When detailed data collection protocols are developed, they should be discussed with NMFS personnel.

The EFP should clearly specify which management needs will be addressed. Previous comments provided by the AFSC outline these objectives and the EFP applicants should reference these. Developing standards is important; however, we believe that at a minimum the overall goal should be to characterize catch and bycatch in the halibut and sablefish fisheries. Developing operational procedures and outlining operator responsibilities should be a component of this EFP.

Finally, it is not clear who would have access to the data collected as part of the EFP. This should be clarified.

*AFSC comments on ALFA EFP re: EM research 15 Nov 2013*

### **General comments**

The EFP application notes that its goal is to develop EM in support of management and conservation needs, and goes on to state that using EM is less problematic than using fishery observers. This perspective that EM is less problematic is based on an at-sea logistics rather than a quality of data provision as seen from a management perspective.

The EFP's applicants should include or commit to a statistical analysis of their sampling design and associated statistics in order to evaluate whether the proposed sample size constitutes "over-" or "under-" sampling from the perspective of statistical power. Sufficient literature exists for a detailed proposal to be developed prior to sampling. A power analysis or simulation based on previously collected catch compositions would improve the proposal. Scientific evaluation of the EFP objectives will be more constructive if power analyses are provided or committed to regarding the ability to meet vessel selection sampling goals and precision surrounding catch estimation confidence.

While the EFP envisions a length of 5 years, it makes more sense from a science perspective to see annual EFP applications that build on previous results because the plan may change considerably given results from preceding years.

This EFP application proposes to subsume the study already underway by NMFS but restricts the NMFS pilot program to the Homer and Kodiak regions. NMFS has not agreed to this, and there are legal issues given that a contract has been established and work is currently underway. Furthermore, it is uncertain how the goals of NMFS' ongoing EM work may be affected by this proposal.

The EFP notes that species will be identified to lowest taxonomic level using EM images such that unidentified fish will be grouped. Since nearly all commercial species are managed under the Bering Sea-Aleutian Islands (BSAI) and the Gulf of Alaska (GOA) Fishery Management Plans (FMP) as individual species, estimation of discard by species groupings will not meet current management needs. For example, no mention is made of species other than rockfish as a hard-to-identify species and complex. Other "complex" groupings that may require 100% retention may include arrowtooth flounder, Greenland turbot/Kamchatka flounder and multiple species of skates.

The EFP applicants report that "At least one trip from each vessel will be sampled for dockside rockfish identification and compared with 100% video review for this same trip". The EFP applicants should include or commit to an evaluation of the sample size needed to ensure that a sufficient sample size is collected to meet study objective(s). Concerns regarding bias in the various sampling regimes being proposed should be addressed by the EFP applicants.

The EFP applicants report that survey data from NMFS will be used to determine species average weights. Species-specific weight is highly variable over time and regionally. Its use may therefore lead to inappropriate expansion of catch. The applicants should consider other ways to better inform species average weight for sampled hauls. The AFSC recommends that weights be used from complementary data such as from an observed longline fishery rather than from survey data because of selectivity differences between survey catch and the fishery catch. An evaluation of whether average weights are appropriate for estimating discards should be considered.

*AFSC comments on ALFA EFP re: EM research 15 Nov 2013*

Applicants should carefully evaluate the best metrics to be used based on prior EM research or use this EFP to test alternative methodologies. The EFP applicants suggest that haul sub-sampling rates for video review will be 10%, 30%, and 50% of the total haul time which will then be compared against a census to evaluate cost-effectiveness. The EFP's research coordinators plan to randomly select 10% of the segments from each haul that was 100% reviewed for rockfish identification to be used for species identification and catch estimations at each of the sub-sampling rates. The EFP applicants should evaluate if alternative sampling regimes might be less biased. Other options exist, such as hook count or number of skates hauled (see observer sampling manual). Our recommendation would be to test and evaluate several sampling frames during the first year of study to help determine the best sampling frame method or to cite previous work that has haul time as optimal.

The EFP application should be revised regarding the statement that halibut regulations require that all vessels must retain any incidentally harvested seabirds. Further, if there is agreement to retain seabirds, a U.S. Fish and Wildlife Service (USFWS) salvage or scientific collection permit is required. This EFP has no direct involvement with the AFSC and is outside the bounds of our existing salvage permit. The applicants will need to submit a request to the USFWS Region 7 permit office (Anchorage) and describe what it will do with the seabird carcasses after they are used for the study. Note also that a salvage or scientific collection permit does not cover ESA-listed species. The EFP applicants should work directly with the USFWS Region 7 Ecological Services Division to determine what to do should a short-tailed albatross be taken or occur near a vessel engaged under the EFP.

Many of the uncertainties surrounding EM's ability to be successful in catch estimation are inherent to the hardware and in camera placement and performance. There are numerous significant video quality issues that need to be resolved prior to conducting an expansive and costly study aboard commercial vessels. Other components of this EFP can also be tested prior to multi-vessel deployments and should be evaluated on an individual basis to see if a step-wise approach is warranted to achieve the EFP objectives.

## ***Enclosure 2***

### ***Comments from Alaska Region***

Alaska Region staff conducted a thorough technical review of the revised November 6, 2013 EFP application that is available upon request. Rather than detail the technical aspects of that review, we propose that you contact staff after reviewing and considering the proposed revisions to the EFP provided in this attachment.

#### ***1. Use of Observer Fees for EFP funding***

The proposed FY14 budget for the EFP is \$1,088,468. On page 28, the application states that “the annual revenue stream afforded by the observer fees is essential to this project...” We interpret this statement to mean that ALFA proposes to use funds derived from fees collected under the current North Pacific Groundfish and Halibut Observer Program to fund the EFP. For reasons described below, observer fees may not be used to fund your EFP.

Observer fees are collected by NMFS under the authority of section 313 of the Magnuson-Stevens Fishery Conservation and Management Act (MSA). Section 313 authorizes the North Pacific Council to prepare and submit to the Secretary of Commerce a “fisheries research plan” that “establishes a system, or system [sic] of fees, ... to pay for the cost of implementing the plan.” While section 313(b)(2)(A) authorizes the use of funds deposited into the North Pacific Fishery Observer Fund for “stationing observers, or electronic monitoring systems, on board fishing vessels...,” section 313(b)(2)(H) conditions their use by stating that “fees collected will only be used for implementing the plan established under this section.”

The North Pacific Fishery Management Council (Council) developed its fisheries research plan under Amendment 86 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area and Amendment 76 to the Fishery Management Plan for Groundfish of the Gulf of Alaska (Amendments 86/76). Amendments 86/76 were approved by NMFS on behalf of the Secretary of Commerce on June 7, 2012. Per section 313(c), NMFS implemented the Council’s fishery research plan through a final rule published in the *Federal Register* on November 21, 2012. Under this fisheries research plan, observer fees may be used only for the deployment of human observers through a contract with an observer provider following an annual observer deployment plan that is developed by NMFS and reviewed by the Council. The final rule also explains that the Council explicitly chose to not include electronic monitoring in the alternatives considered under Amendments 86/76 (see response to comment 69 on 77 FR 70080). Furthermore, the fisheries research plan does not include any provisions that allow or direct the use of observer fees to support EFPs. Therefore, the Council’s current fisheries research plan does not provide NMFS the authority to disburse funds in the North Pacific Fishery Observer Fund to ALFA for activities conducted under this EFP.

Any use of observer fees for purposes other than deployment of observers under Amendments 86/76, including for electronic monitoring in general or for your EFP in particular, would require the Council to change its fisheries research plan by submitting fishery management plan (FMP) amendments to NMFS. If approved, NMFS would implement revisions to the Council’s fisheries research plan through Federal regulations in accordance with section 313(c) of the MSA.

## **2. *Responsibilities for Participating EFP Vessels:***

We recommend several additional EFP requirements to help insure success of the project:

- 1) If a vessel is selected and agrees to carry Electronic Monitoring (EM), the EFP should establish that the vessel be made available in a specified port for EM installation or removal within a specified number of days as you determine reasonable.
- 2) A selected vessel should agree to maintain EM functioning equipment once the system is on board and report problems immediately to the your identified contact. You may wish to require the vessel operator report circumstances that kept EM from functioning. You may also wish to consider provisions if EM equipment is not adequately maintained.
- 3) The EFP application should require that all participating vessels remain in the specified port to allow for EM installation, maintenance, repair, data download, or removal.
- 4) Vessels participating in the EFP should agree to comply with the condition of the EFP. To ensure success of the EFP, we recommend that this agreement be in writing and that it include those on board the vessel who would be interacting with, or maintaining the EM equipment. This may include IFQ hired skippers, IFQ holders, other crew, vessel operators, and vessel owners.
- 5) We recommend that you provide a mechanism for regular review and reporting of the successes and challenges.

## **3. *Suggested Potential EFP Study Design Revisions for Consideration***

The participants you have identified in the proposed EFP have vast practical experience and an information base related to vessel characteristics and fleet attributes that must be considered in moving any future EM regulatory program forward. An EFP that focuses on this expertise will also minimize duplication of effort. To that end we have suggestions to assist in conducting a successful EFP.

Rather than focus on a random selection of vessels we would suggest a focus on identifying and developing solutions to the logistical issues of deploying EM. Solving these issues is necessary for the regulatory development of EM. To this end, we suggest selecting a variety of vessels based on operation characteristics, size, primary species harvested, and gear configurations. These selections could use vessels that are conditionally released by the observer program under current Council policy and vessels in the zero coverage category.

We would suggest a more limited duration EFP. The proposal below is for a 2-year EFP to limit the administrative burden on the applicant from an annual EFP submittal process. Given the need to review the information collected, and the likely insight that information will provide, we would support a limited initial duration for this initial EFP, with the option for additional future EFPs to be developed and approved that build on the information gathered during this initial phase. Under this proposed approach, information collected during the first year is necessary to evaluate sampling and guide additional sampling in the second year. As a starting point for the first year, we suggest obtaining at least 3 vessels within each industry-identified vessel category (see the categories in the Vessel Monitoring Plan section below) to perform the EM tests.

Below are seven recommended categories of experimentation for your review and consideration that we believe you and your participants would be well suited to answer, and that will need to be addressed to implement any effective EM program.

### **3.1. Fleet Logistics and Deployment:**

**Study question:** What are the fleet-derived logistical methods that allow efficient transfer and deployment of EM video systems between ports and vessels throughout the year?

The EFP participants would use their knowledge of the fleet's activities and movements to evaluate the scope of logistical issues of getting EM on and off multiple vessels spread across Alaska throughout the course of a year. Understanding this issue will guide development of regulations and the feasibility of deploying EM under real sampling scenarios. Specific study items are 1) investigating lead times required for video installation; 2) issues with the logistics of deploying EM across a wide geographical area; 3) identifying what ports are feasible to provide technical and maintenance services; 4) identifying the costs to vessels not operating out of those ports to install and maintain video (e.g., costs to vessel operators if EM equipment fails and they have to return to port); 5) are "roaming" technical services available or feasible; 6) can EM cameras be effectively moved and deployed between vessels during short time periods and what are the limitations associated with those logistics (i.e., would the current 2-month selection period work?); and 7) identify the procedures and communication models that would help NMFS coordinate EM deployment in the future.

Phase I (year 1): The first year will provide descriptive information about volunteer vessels (e.g., number of vessels, operation types, size, where/when fished, species targeted, ports of landing), characterize logistical issues, and provide solutions to improve logistics in Phase II.

Phase II (year 2): The second year of the project will implement the recommended solutions from Phase I and provide a final report with recommendations on the seven study items described above.

### **3.2. Vessel Monitoring Plan (VMP) Development:**

**Study Question:** The EFP applicant will explore the concept of a Vessel Monitoring Plan (VMP) that would provide an important step in designing the regulatory architecture required for specifying EM use on board vessels.

Developing EM regulations requires understanding, in detail, the physical limitations of placing EM systems on vessels. Some limitations are video system-specific, but others are dependent on the operational characteristics of vessels rather than technical specifications. For example, the VMP would evaluate where discard occurs, specification of discard area(s), potential camera configurations based on vessel configuration (e.g., a stern hauler with clip gear versus a vessel hauling gear from the side), placement of compliance monitoring cameras outside of the discard area, the types of special handling requirements for crew that are needed to optimize EM performance, and how the VMP components interact with the logistics of deploying and moving cameras among many vessels. The EFP applicant would propose different VMPs based on the different vessel categories being studied, have the vessels test these VMPs, and modify the VMPs accordingly.

- Discard and retained areas: Investigate the physical issues associated with obtaining discard information from video. The fleet is well-equipped to explore where video could be placed on a variety of vessel configurations to obtain discard information and compliance monitoring while minimizing impacts on participants. Performance indicators should be developed to show whether catch was identified as discarded, retained, or the disposition was uncertain. Species identification is not required at this stage; only information about whether an animal dropped off a hook or was retained is required (see compliance monitoring point below). The report would need to evaluate the feasibility of restricting discard locations, detail crew handling procedures, and whether additional equipment or procedures would enhance the ability for cameras to monitor discards and retained catch.
- Compliance monitoring: Are there situations where compliance monitoring is necessary to verify that a fish was not discarded outside of a camera frame? If necessary, identify key points on the vessel where cameras could be placed for compliance monitoring. For example, how does this vary between vessel operations and how could this be incorporated into the concept of a VMP?
- Monitor careful release methods for halibut: Identify location, resolution, frame rate, and number of cameras needed for monitoring approved careful release methods. Special handling procedures required to evaluate approved careful release methods should also be considered.
- Obtain hook/skate counts: Identify location, resolution, frame rate, and number of cameras needed to obtain skate and hook counts as compared to the electronic logbook.
- Seabird avoidance measures: Determine the configuration of cameras for effective monitoring of seabird avoidance measures.
- Marine mammal interactions: Determine the configuration of cameras for effective monitoring of marine mammal interactions, including effective identification and detection of marine mammals. Reporting whether all marine mammal interactions were detected will not be possible without an independent observer on board.

Phase I (year 1): Define vessel categories based on operation characteristics and develop VMPs for each category. Prior to installing EM on a vessel, the EFP applicant through their technicians or port coordinators would visit the vessel and develop a plan related to camera and other EM equipment placement, crew catch handling procedures, operator responsibilities, and additional equipment the vessel may need to meet the bulleted objectives described above. The EFP applicant then would provide the plan to the vessel operator. After the first trip, the EFP applicant would review the EM system to determine if the draft VMP was functioning as intended. Modifications to the VMP would be made and vessel would again test the VMP. This process would be repeated for each modification.

Phase II (year 2): Deploy VMPs identified in year 1 for vessel categories aboard different vessels in the same categories and review performance. Develop VMPs (using methodology described in year 1) for vessel categories not tested in year 1 (Pacific cod longline and pot vessels).

The final EFP report will describe the final VMPs for each vessel category and characterize the issues during Phase I and II needed to finalize the VMPs.

### 3.3. Deploy and use NMFS Supplied Electronic Logbook (ELB):

Study question: Are ELBs feasible and functional on small vessels (<58' length overall)?

Besides knowing whether it is feasible and functional to have ELBs completed on small vessels, the ELB will provide useful information to an effort study (see below). Vessel operators would be required to complete effort information for each haul (time, location, number of hooks and skates set), and target catch information (species and weight) as well as rockfish by species information (species by number and weight). At the end of each trip, the vessel operator would either provide the logbook data to the port coordinator for transmission to NMFS or transmit the data themselves using an available internet connection. NMFS will provide the required software to the EFP applicant, along with installation instructions and data entry and transmission instructions. Each participating vessel would need a PC laptop computer with a Windows 7 operating system (a minimum software requirement).

Phase I (year 1): Deploy ELB on IFQ sablefish and halibut longline vessels. Compile results and provide suggestions for improvement.

Phase II (year 2): Deploy ELB on Pacific cod longline vessels and pot vessels. Compile results and provide suggestions for improvement.

### 3.4. Effort Data Collection Study:

Study question: How well does reported effort in the ELB correspond with video data and what are effective sampling methods to obtain effort data from video?

On a per-haul basis, a panel study could be conducted to (1) determine the level of agreement between video and ELB, (2) whether time is an acceptable sub-sampling unit for measuring effort from EM, and (3) to investigate a range of sampling times that can be compared to a census of catch and ELB effort information. This study will require applicants to randomly select skates on a fishing trip across a representative section of vessel categories (as defined in study 3.2, phase I above). Each sampled skate will be matched with ELB information, a video census of the sampled skate, and estimates based on a sample of video review periods (e.g., a systematic random sample of time periods). These estimates can be compared to each other.

Data from the first year (or data within the first year) should be used to investigate whether sampling is adequate and where to make adjustments to ensure reasonable statistical power. This investigation should be done on different vessel categories as described in the VMP. In addition, the costs associated with each method should be evaluated, including the costs of decreasing or increasing sampling time periods (and number of skates or hauls selected).

Phase I (year 1): Collect video. Using data from Phase I, evaluate and adjust the experimental design to test in Phase II. AFSC staff should be consulted during this process.

Phase II (year 2): Test the adjusted experimental design as necessary and report findings in the final EFP report.

### 3.5. Rockfish Retention Study:

**Study Question:** Is full retention of all rockfish species with at-sea verification using video feasible?

Vessels would be required under the conditions of the EFP to retain all rockfish on board until delivery at the dock. At the time of delivery, port coordinators or plant personnel will speciate rockfish and record the species, weight, and other currently required fields on the fish ticket. Vessel will notify the video technician of any drop-offs or other at-sea discard of rockfish. The port coordinator will obtain from the vessel operator the haul number, approximate time, and location of the accidental drop off. This information can be compared to onboard video data and will be part of the Phase I and II reports. This also corresponds with the VMPs ability to detect these incidents.

### 3.6. Seabird Collection Feasibility Study:

**Study Question:** Is it feasible for vessel operators to bag, tag, and ship seabirds?

We would coordinate with you to provide the necessary support to receive any applicable permits, and the necessary shipping information and preparation methods for seabird specimens. The applicant's port coordinator would record the seabird information on a spreadsheet that could be referenced to the video. The final EFP report would detail how well this method worked and provide suggestions for improvement.

### 3.7. Participating Vessel Exit Questionnaire:

The EFP applicant would develop a captain/crew exit questionnaire that could be compiled and reported at the end of the EFP. The questionnaire would provide insight into how successful the deployment might have been for the vessel, and provide feedback improve EM operation. The questionnaire may include questions about the successes and challenges with: 1) maintaining EM equipment, 2) using the ELB, 3) retaining rockfish, 4) retaining seabirds and following salvage protocols, 5) following VMPs, and 6) the vessel's ability to carry out other aspects of the EFP (hook count study, returning to specified ports). This project would be a Year 1 and Year 2 effort. Results from these questionnaires would be used to refine the VMPs and instructions to vessels regarding operational requirements identified in the EFP.



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November 26, 2013

Dr. Jim Balsiger  
National Marine Fisheries Service  
PO Box 21668  
Juneau, AK 99802

Dear Dr. Balsiger,

We have reviewed the National Marine Fisheries Service (NMFS) and Alaska Fisheries Science Center (AFSC) comments on ALFA's EFP application: Integrating Electronic Monitoring of Fixed Gear Vessels with the North Pacific Research Plan. We sincerely appreciate the time and effort both NMFS and the AFSC dedicated to reviewing and commenting on the EFP. Clearly significant time and resources were committed despite already busy schedules.

ALFA and the EM EFP "team" believe we can accommodate the technical recommendations made by the AFSC. In fact, some of the recommendations match year 2 or 3 EFP objectives, with details to be decided pending review of year 1 data. Other suggestions, such as the power analysis, will strengthen the EFP and we have already initiated work to incorporate these recommendations.

The comments from the Region range from easily accommodated to recommendations that would fundamentally change the nature of ALFA's EM EFP. Relative to the latter: we proposed a multi-year project focused on integrating EM as an at-sea monitoring system to secure representative data from the fixed gear fleet; in our view, the Region's recommendations change the EFP to a series of short-term pilot programs using volunteer vessels with unspecified objectives. While we appreciate the suggestions, ALFA and other organizations have completed pilot programs that addressed many of the logistical issues NMFS has raised. We believe that many attributes of EM systems are known and that logistical factors and data quality can be improved with experience. We firmly believe EM will, at best, remain in the pilot program stage until EM field work is focused on achieving *fishery specific* monitoring objectives designed to meet clearly identified management needs as part of an integrated data collection plan.

The EFP application and review process has clarified for us the fundamental difference between the Region's view of EM development and the view of the stakeholders who have worked with ALFA to develop this EFP. We recognize that progress on the EFP is not possible without a shared vision, shared goals, and a joint commitment to EM implementation. We would like to work with NMFS and the AFSC to build that shared vision, and hope you and your staff are likewise willing to work with us.

### **Building a shared vision**

We believe building a shared vision will require a facilitated collaborative process that engages fishery managers, IPHC and sablefish stock assessment scientists, EM providers, observer program personnel, and fishermen stakeholders. For the process to be successful, we believe both sides must be committed to completing by June 2014 a mutually supported EM roadmap for Council review. We suggest this date because in June the Council is scheduled to review the observer program and consider changes to the deployment plan that affect “trip selection” and “vessel selection” criteria specific to gear type and fishery. The use of an EFP or other vehicle as part of a well-defined, mutually supported process to create an integrated alternative for fixed gear vessels should be part of that review. We believe the process must also identify a mechanism to fund EM deployment as an integrated alternative to observers. It is our hope that we could meet prior to the Council’s December meeting to design and schedule the process to identify common ground, and to discuss how we can work together in the interim to advance EM.

### **2014 Cooperative Research**

In a recent call, you suggested ALFA and NMFS explore opportunities for 2014 EM cooperative research. If 2014 EFP implementation is not possible, we would like to work with NMFS on 2014 cooperative research initiatives, such as the EM Pilot program, that will serve as stair-steps to the EM EFP. Critical to the success of any cooperative research effort is a common vision, inclusion of key stakeholders and outside expertise as needed in planning, timely review of the data, and timely communication between all parties involved to ensure successful coordination. At this point we suggest three primary goals for that research that could be incorporated into the EM pilot program for 2014.

Goal 1: Evaluate EM deployment techniques that obtain representative data.

- a) Identify and evaluate procedures to efficiently deploy EM systems on boats randomly selected from the “vessel selection” strata that request observer releases (due to bunk space or safety limitations).
- b) Explore other strategies for gathering representative data.

Discussion: Again, we anticipated the EFP would provide an EM alternative in 2014, which would in turn increase at-sea monitoring levels for the vessel selection strata. We would like to see these two objectives met through the 2014 cooperative research. As recommended in the AFSC and NMFS comments, we propose developing written agreements for vessel operators that commit operators and crew to making their vessels available in specific ports for installation, complying with specific on-board EM equipment maintenance procedures, and to complying with some of the other recommendations from sections 2 (*Responsibilities for participating EFP vessels*) and 3.1 (*Fleet logistics and deployment*) of the Region’s comments.

Goal 2: Deploy EM systems on volunteer “trip selection” vessels to test system reliability, evaluate alternative metrics, evaluate data quality improvements over time, and compile a large enough data

pool to evaluate data review methodologies, data processing time, and data review costs associated with an operational program.

Discussion: In comments on the EFP, AFSC suggested evaluation of various sample rates, metrics, and methodologies to improve EM data review and analysis. Deploying EM systems on trip selection vessels with substantial quota holdings will provide sufficient data to initiate the analysis AFSC recommends and to gather meaningful cost data on EM deployment and data review. We suggest engaging multiple EM service providers in this segment of the research to allow system comparisons relative to reliability, image quality, vessel compatibility, and cost. The data review component should allow for timely review of the data and feedback to involved parties.

Goal 3: Deploy EM on select segments of the halibut and sablefish longline surveys to conduct fine scale research on average weight estimates, mortality rates associated with release techniques, and the ability to collect length data from EM video.

Discussion: Studies on extracting length data from EM video images and identifying appropriate size categories to apply average weights may best be conducted using side-by-side coordination with observer data. Likewise, evaluating the efficacy of different release techniques, as suggested in the NMFS review, may also require observer evaluation to calibrate cues visible in the EM data. The stock assessment survey vessels offer a unique platform to conduct side-by-side comparisons.

Overview: Although other goals could be included in the cooperative research, given time and funding restraints we have limited our suggestions to these three. We consider these three goals critical to stakeholder confidence in this process. While we recognize additional discussion and refinement will be necessary, we hope these are goals that both the Region and the AFSC can support.

## **Conclusion**

In closing, ALFA is deeply committed to providing EM as an integrated alternative to observers and believes it will serve a vital role in securing representative data from the fixed gear feet. We recognize that a shared vision between NMFS and stakeholders is necessary for the potential of EM to be realized, and will fully commit to a collaborative process to develop that shared vision. While we work through that process, we are willing to work with NMFS and the AFSC to lay the groundwork for EFP implementation through 2014 cooperative research projects that meet our collective goals. To launch both processes, we request a meeting of all parties prior to the December 2013 Council meeting.

Thank you for your time and willingness to work with us to define the path ahead.

Sincerely,



Linda Behnken  
(Executive Director, ALFA)





**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**

*National Marine Fisheries Service*

*P.O. Box 21668*

*Juneau, Alaska 99802-1668*

December 6, 2013

Eric Olson, Chairman  
North Pacific Fishery Management Council  
605 W. 4<sup>th</sup> Avenue, Suite 306  
Anchorage, Alaska 99501

Dear Chairman Olson:

This letter responds to the North Pacific Fishery Management Council's (Council's) October 17, 2013, letter to NMFS about the 2014 Annual Deployment Plan (ADP) and other related issues.

Final 2014 ADP: The Final 2014 ADP was posted on the NMFS Alaska Region website on December 3, 2013 (<http://alaskafisheries.noaa.gov/sustainablefisheries/observers/adp2014.pdf>). As recommended by the Council, the 2014 ADP continues to reflect a priority on vessels managed under prohibited species catch limits by setting the anticipated selection rate for vessels managed under trip selection (vessels greater than 57.5 ft LOA) higher than vessels managed under vessel selection (vessels between 40 ft and 57.5 ft LOA) in the same relative weighting as was used in the 2013 ADP. In addition, the 2014 ADP continues to reflect the policy of conditional releases from observer coverage for vessel operators who provide reasonable information that accommodating an observer would displace crew members or additional individual fishing quota (IFQ) permit holders. As noted in the ADP, this conditional release policy combined with changes in actual effort in 2013 relative to expected effort made it difficult to achieve our target sampling fractions in the vessel selection pool. We will more thoroughly analyze the impact of the conditional release policy in our 2013 annual report scheduled for presentation to the Council at its June 2014 meeting.

As stated in section 1.4.6 of the 2014 ADP, we intend to issue the conditional releases only to vessels in the vessel selection pool in 2014. NMFS's experience in 2013 was that vessels within the trip selection pool were able to accommodate observers, with a few exceptions when an IFQ holder was brought aboard thereby displacing the observer. We are concerned that if we continue the conditional release policy in the trip selection pool we will decrease our ability to randomly assign observers to vessels in the partial coverage category thereby undermining one of the primary objectives of observer restructuring. We note that vessels in the trip selection pool have the flexibility to take IFQ holders on non-selected trips. Given this flexibility and the limited number of releases requested we believe that vessel owners will be able to adjust and accommodate observer coverage requirements.

Observer Coverage for Vessels Delivering to Tenders: As requested at your October 2014 meeting, Council staff prepared a discussion paper about concerns related to observer coverage for vessels delivering to tenders. This paper consolidates information in the 2014 ADP



and our September 3, 2013, letter to the Council. This discussion paper will be presented separately by Council staff. We did not have time between the October and December Council meetings to provide new information about this issue. However, we will analyze the full 2013 data about observer coverage on vessels delivering to tenders and continue to work with the Council to identify regulatory amendments that could be implemented to address any problems confirmed by further analysis.

Observer coverage on vessels with small amounts of IFQ remaining: The Council requested that NMFS consider whether the 2014 ADP could

*...accommodate relief for vessels with IFQ holders that have fished almost all of their IFQ, but have a small poundage remaining in their account, and are triggering the requirement to carry an observer when they switch into a State water fishery in which they would not otherwise be required to have observer coverage.*

This request is similar to the request that the Council made at its June 2013 meeting that

*NMFS provide information that would help inform a decision as to whether to create a new criterion for receiving a conditional release from observer coverage in 2014 based on a de minimus amount of halibut or sablefish IFQ in an IFQ holder's account.*

We addressed the Council's June 2013 request in our September 3, 2013, letter to the Council. We discussed this issue with the Observer Advisory Committee in September, but we were unable to make a presentation to the Council at its October 2013 meeting due to the government shutdown. Both of the requests above present the same challenges to NMFS. While we appreciate the desire to deploy observers in an efficient and cost effective manner, creating a new category of vessels or fishing circumstance that would be released from observer coverage requires analysis to determine the appropriate threshold and the impact of the conditional release on data quality. In addition, further analysis is needed to establish how vessel owners would notify NMFS about the IFQ holders expected to be onboard the vessel during an upcoming trip and how NMFS would monitor and enforce compliance with any requirements associated with a conditional release. Some scenarios would require revisions to the Observer Declare and Deploy System and some may require regulatory amendments to effectively monitor and enforce. We will add this issue to the list of analyses that the Council has requested and ask the Council at its February 2014 meeting to provide additional input on its priority relative to the other issues the Council has requested NMFS to further analyze for both the 2013 annual report and future regulatory amendments.

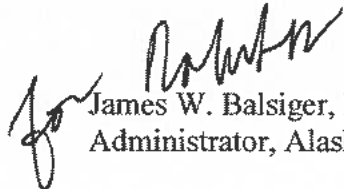
Recommendations for issues to analyze in the 2014 annual report: The Council and the Scientific and Statistical Committee recommended a number of items to include in the 2013 annual report on the Observer Program, which will be presented at the June 2014 Council meeting. We have received numerous requests for things to include in the annual report, starting with the Council's final motion on Observer Program restructuring in October 2010. We will

consolidate these requests and our recommendations into a draft outline for the annual report that we will present to the Council for input at its February 2014 meeting.

Electronic Monitoring Pilot Project: In response to our request (NMFS letter of September 13, 2013), the Council provided input about our proposal to place vessels volunteering to participate in our pilot project into the observer no selection pool. NMFS staff will provide the Council with an update on the pilot project at the December 2013 meeting.

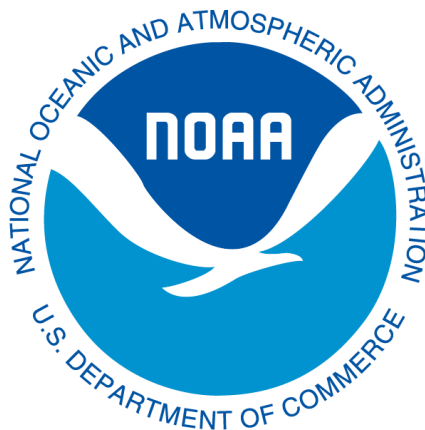
Thank you again for your recommendations and input on the ADP and other observer issues. We will continue to work with the Council to implement the new requirements for the Observer Program as effectively and efficiently as possible and to be as responsive as we can to requests for program improvements and adjustments.

Sincerely,

  
James W. Balsiger, Ph. D.  
Administrator, Alaska Region

# 2014 Annual Deployment Plan for Observers in the Groundfish and Halibut Fisheries off Alaska

December 2013



**NOAA**  
**FISHERIES**

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### **Suggested Citation**

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## Chapter 1 2014 Annual Deployment Plan

### *1.1 Purpose of the Deployment Plan*

This 2014 Annual Deployment Plan (ADP) documents how the National Marine Fisheries Service (NMFS or Agency) intends to assign at-sea and shoreside observers to operations fishing in the North Pacific under the authority of the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (BSAI FMP), the Fishery Management Plan for Groundfish of the Gulf of Alaska (GOA FMP), and the Northern Pacific Halibut Act of 1982. Data collection by observers is currently the only reliable and verifiable method available for NMFS to gain fishery discard information on fish and data concerning seabird and marine mammal interactions with fisheries. Onboard observers also perform the critically important task of collecting biological data such as species composition, weights, and tissue samples that are important for stock assessment scientists and researchers. Much of this information is expeditiously available (e.g., daily or at the end of a trip, depending on the type of vessel) to ensure effective management.

Details on the legal authority and purpose of the ADP are found in the Final Rule for Amendment 86 to the BSAI FMP and Amendment 76 to the GOA FMP (77 FR 70062, November 21, 2012). This ADP follows section 313 of the Magnuson-Stevens Fishery Conservation and Management Act (MSA, 16 U.S.C 1862), which authorizes the North Pacific Fishery Management Council (Council) to prepare a fisheries research plan that requires observers to be deployed in the North Pacific fisheries and establishes a system of fees. The intent of the ADP is to focus on a science driven deployment of observers to reduce potential bias and meet NMFS's data needs. Some aspects of observer deployment can be adjusted through the ADP, including the assignment of vessels to the selection pools or the allocation strategy used to deploy observers in the partial coverage category.

The ADP describes observer deployment for the partial coverage category (50 CFR 679.51(a)). NMFS and the Council created the ADP process to provide flexibility in the deployment of observers to gather reliable data for estimation of catch in the groundfish and halibut fisheries off Alaska. NMFS and the Council recognized that the amount of observer coverage available for any given year would be dependent on available revenue generated from fees on groundfish landings. The flexibility of the ADP process allows NMFS to adjust deployment in each year so that sampling can be achieved within financial constraints.

In June 2013 the Observer Science Committee (OSC) released its Preliminary Annual Performance Review that provided a scientific evaluation of deployment for the first quarter of 2013. The 2014 ADP builds off the recommendations provided to NMFS by the OSC through the Annual Performance Review (Chapter 2 of this ADP), the June 2013 Council motion on the Annual Performance Review (Appendix A), and the Council's motion of the Draft 2014 ADP during its October 2013 meeting (Appendix A). Some items in the June 2013 and October 2013 Council motions were addressed by NMFS through letters provided to the Council during its October and December meetings.

This ADP proposes to deploy observers using sampling with randomization to perform their duties that include species identification, quantification and disposition of catch, documenting interactions between fishing gear and marine mammals and seabirds, and collection of biological specimens to support research and assessment of biological resources in the North Pacific.

## *1.2 ADP Process and Schedule*

Analysis and evaluation of the data collected by observers is an on-going process. The ADP process ensures that the best available information is used to evaluate deployment, including scientific review and Council input to annually determine deployment methods. Each year NMFS will develop an ADP to describe how observers will be deployed for the upcoming calendar year and prepare an annual report that evaluates the performance of the prior year's ADP implementation. The ADP process and schedule is as follows:

- October – November 2013: The Council and its Scientific and Statistical Committee (SSC) reviewed the Draft 2014 ADP and associated Plan Team and Observer Advisory Council (OAC) recommendations.
- December 2013: Upon final analysis of the Council recommendations from its October 2013 meeting, NMFS finalized the 2014 ADP and released it to the public prior to the December 2013 Council meeting.
- June 2014: NMFS will present an annual performance review that provides a comprehensive evaluation of observer activities, costs, sampling levels, issues in 2013, and potential changes for 2015. NMFS will evaluate data collected in prior years to identify areas where improvements are needed to (1) collect the data necessary to manage the groundfish and halibut fisheries, (2) maintain the scientific goals of unbiased data collection, and (3) accomplish the most effective and efficient use of the funds collected through the observer fees. This review is intended to inform the Council and the public of how well various aspects of the program are working, and consequently lead to recommendations that may adjust sampling methods and priorities for the upcoming year.
- June – September 2014: Using information from deployment and Council recommendations, NMFS will release the Draft 2015 ADP containing recommendations for deployment in the partial coverage category. NMFS will release the Draft 2015 ADP to allow review by the OAC and the Groundfish and Crab Plan Teams, as requested by these teams.
- October – November 2014: The Council and its SSC will review the Draft 2015 ADP and any associated Plan Team recommendations. Based on input from its advisory bodies and the public, the Council may choose to clarify objectives and provide recommendations for the final 2015 ADP. NMFS will review and consider these recommendations; however, extensive analysis and large scale revisions to the Draft 2015 ADP are not feasible. This constraint is due to the short time available to finalize the 2015 ADP prior to the December 2014 Council meeting, and practical limitations on planning for deployment (including contracting with an observer provider) and associated processes that need to be in place by January 1, 2015.

- December 2014: NMFS will make any necessary adjustments to finalize the 2015 ADP and release it to the public.

### *1.3 2013 Preliminary Annual Performance Review*

The 2013 ADP described the deployment methodology for the first year of sampling under the restructured North Pacific Groundfish Observer Program (Observer Program). As outlined in the 2013 ADP, the 2014 ADP builds off of analysis and recommendations described in the 2013 Preliminary Annual Performance Review, which was presented to the Council during its June 2013 meeting. The Preliminary Annual Performance Review was the first report on the performance of the newly restructured program. However, because in June 2013 the new program was only several months old, the Preliminary Annual Performance Review could only evaluate the first 16 weeks of data under the restructured program.

The Preliminary Annual Performance Review highlighted deployment attributes from the first 16 weeks of 2013 that appear to be working well and are improvements in coverage, compared to 2012. The randomized deployment methodology, the electronic logging and reporting of trips, and notification to selected vessels were working as expected. There were also improvements in coverage in the hook-and-line fisheries in the Gulf of Alaska (GOA); specifically fisheries associated with GOA Pacific cod and Pacific halibut. For example, in the Pacific cod hook-and-line fishery in Federal reporting area 610, 9 out of 10 weeks with fishing effort had observer coverage in 2013, whereas 6 out of 11 weeks with fishing effort had coverage in 2012. In addition, the halibut hook-and-line fishery in area 640 had coverage in 2013. This same fishery had no coverage in 2012. Coverage improvements in some trawl fisheries were also observed. For example, coverage was more evenly distributed throughout the year in the Pacific cod trawl fishery in reporting area 620. The amount of coverage in the Bering Sea remained consistent with patterns observed in 2012, which was likely due to the full coverage compliance agreement for Bering Sea and Aleutian Islands (BSAI) trawl catcher vessels.

The Preliminary Annual Performance Review also noted a number of potential departures from the anticipated sampling design that could be sources of bias (Section 2.6); the effect of these changes will be better understood after a full year of information under the restructured program is available. NMFS and the Council will further investigate these items based on the information in the 2014 Annual Performance Review.

Following the conclusions of the Preliminary Annual Performance Review (Chapter 2), NMFS did not recommend major changes in the sampling design for the 2014 ADP.

### *1.4 2014 Deployment Methods*

The 2014 ADP proposes to deploy observers into the partial coverage category using random sampling with equal probability specific to either the trip or vessel strata defined in section 1.4.1 and to allocate sampling effort between the trip and vessel strata in the same proportions as were used in the 2013 ADP (section 1.4.1). This allocation between vessel and trip selection is in alignment with the Council recommendation (Appendix A), and the anticipated deployment rate for trip selection is higher than vessel selection. This priority is intended to balance the need to provide inseason managers with information to monitor

prohibited species catch (PSC) on larger vessels while not severely compromising sampling rates in the vessel selection pool.

#### 1.4.1 At-Sea Selection Pools (strata)

Deployment into the at-sea selection strata for 2014 will follow the same equal probability method described in the 2013 ADP. The at-sea selection strata applies to vessels in the partial coverage category (50 CFR 679.51(a)) and includes vessels exempted from full coverage requirements (50 CFR 679.51(a)(2)(iv)). For the purpose of observer deployment, deployment strata are defined as follows:

- No selection: Vessels less than 40 ft length overall (LOA) or fishing with jig gear, which includes handline, jig, troll, and dinglebar troll gear, are in the “no selection” pool. In addition, vessels participating in the Electronic Monitoring Pilot Study will be in the no selection pool. These vessels will not be selected for observer coverage in 2014.
- Vessel selection: Vessels that are fishing hook-and-line or pot gear and are greater than or equal to 40 ft, but less than 57.5 ft in LOA are in the vessel selection pool. NMFS intends to randomly select vessels in the vessel selection pool for mandatory observer coverage approximately 60 days prior to the start of each 2-month selection period. Selected vessels will be required to carry an observer for all trips taken within a selected 2-month period.
- Trip selection: This stratum comprises two classes of vessels: (1) all vessels fishing trawl gear and (2) vessels fishing hook-and-line or pot gear that are also greater than or equal to 57.5 ft LOA. NMFS developed a system, termed the Observer Declare and Deploy System (ODDS), to facilitate the random assignment of observers to trips.

A set of Frequently Asked Questions about trip and vessel selection pools can be found at <http://alaskafisheries.noaa.gov/sustainablefisheries/observers/faq.htm>.

#### 1.4.2 Projected At-Sea Deployment (sample size)

In this 2014 ADP, NMFS estimates the projected number of days that will be observed and the deployment rate for the at-sea partial coverage fleet. Without 2014 data, NMFS cannot project with certainty the amount of observer coverage or sample size that can be achieved in 2014. However, sample sizes are required in order for NMFS to conduct vessel selections and determine trip selection rates for ODDS. Therefore, NMFS estimates the projected number of days that will be observed and the deployment rate through simulation using the best available information from the last full year of observer coverage (2012) and then adjusts the estimated coverage rate during the year, if necessary, based on the actual effort to date relative to the funds available. The actual (realized) coverage rates and actual numbers of days covered in 2014 will be included in the Annual Performance Review.

The basic components of the analysis necessary to estimate coverage levels in 2014 include (1) the amount of fishing effort projected for 2014, (2) estimates of observer costs, and (3) a target

budget for 2014. For these calculations, NMFS needs to make assumptions. These assumptions include the number of fishing activities (effort days) the partial coverage fleet will engage in during 2014 and the amount of travel funds expended by the contractor for deploying observers in 2014. The following describes the assumptions and how NMFS used them to determine sample sizes and anticipated rates of coverage for the 2014 ADP.

NMFS projects fishing effort for the upcoming year by using data from the most recent full year. For the 2013 ADP, NMFS used effort data from 2011 to project effort for 2013. Similarly, for this 2014 ADP, NMFS used data from *eLandings* to generate a list of vessel activity from 2012 to estimate the amount of fishing effort for 2014. This dataset was merged with data queries from the Catch Accounting System to define vessel activity (e.g., CP or CV, state GHL fishery). The landings made by catcher vessels and exempted catcher/processor vessels that would have constituted the partial coverage category under the 2013 ADP were identified from 2012 data, and assigned to either the trip-selection or vessel-selection stratum. Since the rules governing observer coverage in 2012 were not identical to those that will govern observer deployment in 2014, activities from 2012 were re-coded using the fields such as vessel length, target fishery, program management code (e.g., IFQ), vessel activity and GHL fishery into full, partial, or zero coverage categories. For partial coverage categories, NMFS placed activities into either the vessel- or trip-selection stratum using the criteria defined in this ADP. Activities in 2012 re-coded as belonging to the vessel-selection stratum were assigned a 2-month time period. Unique trips in 2012 were identified using the data fields titled report id, vessel id, and trip-start date, following the results of past analyses (see 2013 ADP Appendix 2). Using 2012 data, the estimated effort in the partial coverage fleet is 37,097 days. This is an increase from 31,803 days that was estimated for 2013 using 2011 data.

Cost estimates are based on the costs of an observer day and a “not-to-exceed” travel budget for 2014 derived from confidential contract information negotiated between NOAA's acquisition and grants office and the selected observer provider. NMFS assumed that the entire not-to-exceed amount of travel in the observer provider contract would be expended in 2014. Under this assumption, this not-to-exceed amount was deducted from the target budget available to deploy observers.

The actual budget available for 2014 will be based on revenue generated from an ex-vessel value-based fee, plus any additional Federal funding allocated to deploying observers in 2014. Revenue from the fees is generated by applying a standard ex-vessel price against landings of Federal groundfish species and Pacific halibut. NMFS publishes the standard ex-vessel prices each December in the Federal Register (<http://www.alaskafisheries.noaa.gov/sustainablefisheries/observers/>). Standard ex-vessel prices for groundfish are calculated by averaging the three most recent years' volume and value from the State of Alaska Commercial Operators Annual Report, *eLandings* reports, and methods established by the Commercial Fisheries Entry Commission. Standard ex-vessel prices for halibut individual fishing quota (IFQ), halibut community development quota, and sablefish IFQ are calculated by averaging the previous year's volume and value from the IFQ Buyer's Report (submitted to NMFS by registered buyers). NMFS will know the actual amount of funds available for deploying observers in late December 2013.

At the time of releasing the 2014 ADP, fisheries were ongoing; therefore, NMFS did not know the actual budget available for deploying observers in 2014. Instead of projecting fee revenue for mid-July through December 2013, NMFS identified a target budget of \$4.8 million to use for the simulations. This target budget aims to ensure that the coverage rate and number of days observed between 2013 and 2014 are comparable.

Sample size and resulting coverage rate estimates were generated through simulation using the identical approach used for the 2013 ADP. This approach is considered the best available science because each and every vessel in both pools of the partial-coverage fleet do not undertake identical numbers of trips and days in a year, and the approach provides NMFS with a full range of potential outcomes from random sampling (selections) of different vessels and trips.

The simulated deployment rate was determined from an evaluation of estimated annual program costs assessed against the risk of exceeding the Observer Program's available funds. Only 2012 data re-coded as belonging to the trip- or vessel-selection strata were used in simulations. One simulation consisted of a random draw of unique trips ( $i$ ) within the trip-selection stratum, and unique vessel ( $v$ ) and time period ( $p$ ) combinations in the vessel-selection stratum. Total program costs from a single simulation trial ( $C_S$ ) were determined by summing the number of simulated days in the trips that would have been sampled in the trip-selection stratum ( $d_{TS}$ ), multiplying these by the cost per day ( $c$ ), and adding these trip-selection costs to vessel-selection costs that were similarly determined by multiplying the cost per day by the sum days for all trips ( $d_{VS}$ ) made by selected vessels ( $v$ ) in each time period, or

$$C_S = \left( \sum_{i=1}^n d_{TS} + \sum_{p=1}^6 \sum_{v=1}^V \sum_{i=1}^n d_{VS} \right) \cdot c$$

In this way each simulation trial mimics an ADP selection draw for the year. If NMFS applied the maximum rate possible with available budgets in simulations, the outcome would be a mean value among  $C_S$  that equals the total available budget. Thus, there would be equal probability that spending by the Observer Program during 2014 would be over-or under-budget. To reduce the likelihood of the latter outcome, simulations were performed in an iterative fashion until their outcomes reached a critical value. Specifically, an initial distribution set of 1,000  $C_S$  with a high starting value for the deployment rate was evaluated against the desired outcome that the number of simulations whose total costs exceeded the available budget divided by 1,000 was below 0.12. If the desired outcome was not achieved, the initial rate of sampling was adjusted downward by 0.001, another set of simulations was generated, and the evaluation was conducted again. This entire process was repeated until a set of simulations achieved the desired outcome. In each simulation, the deployment rate for vessel-selection was set to 0.74 that of the rate in trip-selection preserving the weighting used in the 2013 ADP.

Based on the final set of simulation trials, NMFS estimates it can afford 4,718 observer days in 2014 in the partial coverage category. This is an increase of an additional 596 observer days relative to the projected number of observer days in 2013. Based on these calculations, NMFS projects a deployment rate of 0.1370 (13.7%) of trips for trip selection and 0.1019 (10.2 %) of vessels for vessel-selection when averaged across the year. The anticipated deployment rate is projected to decrease slightly in 2014 compared to 2013 (anticipated deployment rate in 2013 was approximately 14–15% in trip selection and 11% in vessel selection). This change is due to

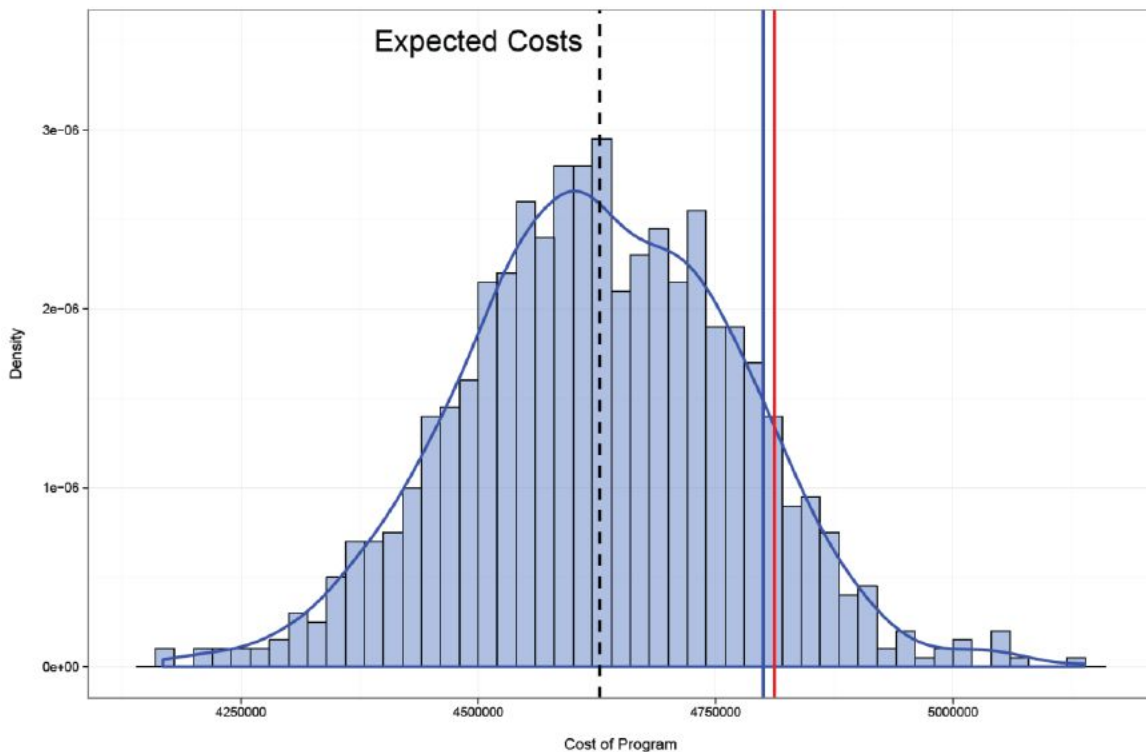
the increase in anticipated effort from 2013 to 2014 since, as noted above, the effort calculations from 2011 (used in the 2013 ADP) to 2012 (used in this 2014 ADP) increased from 31,803 to 37,097.

The estimated deployment rates for 2014 work out to be equivalent to 3,662 days from 999 trips taken on 292 vessels in the trip selection pool and 1,056 days from 284 trips taken on 83 vessels in the vessel selection pool. NMFS will program a rate of 0.1370 into ODDS for the trip selection pool at the start of 2014. Table 1-1 gives the estimated sample size of the number of vessels for each 2-month time period in the vessel selection pool.

**Table 1-1** The estimated number of vessels that NMFS anticipates to observe in the vessel selection pool in each time period in 2014. For reference, the total number of vessels that fished and the simulated number of trips and days anticipated to be observed are also provided.

Time Period	Total vessels	Vessels observed	Trips observed	Total days observed
<b>January February</b>	85	9	58	162
<b>March April</b>	154	16	40	151
<b>May June</b>	233	24	57	242
<b>July August</b>	177	18	45	198
<b>September October</b>	200	20	70	255
<b>November December</b>	48	5	14	49

The histogram of  $C_S$  (total cost or budget) values from the final set of simulated trials is depicted in Figure 1-1. Based on the final set of simulations, it is expected that on average NMFS will spend \$172,500 less than the total available budget. Any cost savings realized will be used in the following year of deployment.



**Figure 1-1** Anticipated cost distribution (in dollars) of observer deployment in the partial coverage category for 2014. The mean value is depicted in the vertical dashed line, while the budget at which 90% of the expected costs are below is depicted as the red vertical line, which is set close to the total budget (blue vertical line).

### 1.4.3 Tender Deliveries

Some issues associated with the complexity of sampling tender deliveries were raised in the Annual Performance Review (Chapter 2) and the Council’s June 2013 motion (Appendix A). The Annual Performance Review indicated that vessels fished longer and made more deliveries when delivering to a tender unobserved than under the opposite conditions.

From a sampling perspective, defining sampling strata for catcher vessels delivering to a tender is complex due to the flexibility and unpredictability of the operation type. For example, throughout the course of a year, catcher vessels may deliver to tenders, shoreside processors, or even both during a single trip (split delivery). The quantity and identity of catcher vessels delivering to tenders will also change between years, depending on economic conditions. In addition to the complications from the diverse and potentially ephemeral fishing scenarios involving tenders, the types of adjustment NMFS may make to sampling through the ADP are constrained by regulations. In particular, tenders are not defined in current regulations in either the full or partial coverage category; therefore, certain regulations governing observer activities (e.g., observer safety, ODDS) are not extended to tender vessels. Modifying the definitions of the full and partial coverage categories to include tenders would require a regulatory amendment. Changing the definition of a trip for a catcher vessel delivering to a tender also constitutes a

regulatory change. For all of these reasons, it is not possible to create a new deployment stratum for tender deliveries in the ADP without a change in regulations.

NMFS recognizes that tender activity may represent an important source of variance and/or bias in catch data. We recommend assessing tender activity once a full year if information is available and, if warranted, evaluate regulatory strategies to address the issue.

#### 1.4.4 BSAI Full Coverage Compliance Agreement

In 2013 NMFS implemented an industry proposal for trawl vessels fishing for Pacific cod to volunteer to carry an observer at all times when fishing in the BSAI (Section 2.2.2). The additional coverage benefited the management of that fishery and reduced the population of trips in the partial coverage category, thus increasing the coverage rates for the trips remaining in partial coverage. NMFS is extending voluntary full coverage through 2014, and recognizes this activity would be best addressed in the long-term through a regulatory change.

As was noted in the 2013 ADP, if full coverage is not implemented correctly it has the potential to undermine the catch estimation process. Deployment of observers under a voluntary coverage rate where vessels get to choose when they have full coverage would undermine the goal of the restructured Observer Program to obtain unbiased, independent information on the activities of the fleet. In addition, it is necessary to modify the stratification methods in the Catch Accounting System to match the change in the sampling stratification. A stratum has to be created that is specific to the voluntary full coverage vessels, and the criteria used to define the full coverage strata must be programmable into the Catch Accounting System.

Entities participating in the BSAI Pacific cod trawl fishery that want full coverage in 2014 must submit a signed compliance agreement to NMFS on or before December 1, 2013 (Appendix C). Vessels operating under a full coverage compliance agreement would pay partial coverage observer fees as required in regulation, but would also need to contract directly with observer providers and also directly pay for those observer costs. In addition, vessels operating under the full coverage compliance agreement must comply with the partial coverage regulations, including logging trips into ODDS.

#### 1.4.5 Chinook Salmon Sampling in the Gulf of Alaska

The sampling of Chinook salmon for genetics in the GOA is a priority for NMFS in 2014. This information is used to identify the origin of Chinook salmon caught as bycatch in groundfish fisheries and is important for the management of Chinook PSC. NMFS proposes to revise the 2013 methods for collecting Chinook salmon in the GOA to improve the representativeness of samples.

The 2013 ADP set a priority to monitor salmon in the GOA pollock fishery at the time of offload, including salmon offloaded from unobserved trips. This priority followed the implementation of Amendment 93 to the GOA FMP (77 FR 42629, July 20, 2012), which required all vessels fishing for pollock in the central and western GOA to retain salmon until delivery to a processing facility. While this facilitated dockside sampling by observers, it did not

provide an at-sea method to verify that all salmon were retained on unobserved trips. Unlike the Bering Sea pollock fishery, pollock trawl vessels delivering to shoreside plants in the GOA operate under partial coverage observer requirements. Since at-sea verification of full-retention requirements are not in place for the GOA pollock fishery, salmon bycatch sampling by observers represents an incomplete census that has the potential for bias.

To obtain the best possible information and make efficient use of funds in 2014, NMFS investigated alternative sampling of Chinook bycatch on observed GOA pollock trawl trips (Appendix B). The analysis showed that the number of genetic samples is anticipated to increase under the new method compared with the sampling methods used in 2013 (Appendix B).

Based on this analysis, in 2014 NMFS will sample Chinook salmon from randomly selected trips for both pollock and non-pollock trawl vessels fishing in the GOA. Under this sampling protocol, NMFS anticipates salmon bycatch genetic samples will be obtained from a census of Chinook salmon for observed trips on trawl vessels delivering pollock shoreside. For vessels in the full coverage category, including catcher/processors and vessels participating in the Rockfish Program, Chinook salmon genetic samples will be collected from the at-sea samples. At-sea sampling methods will also be used to collect salmon bycatch samples from vessels in the GOA non-pollock fisheries and vessels delivering to tenders. The number of genetic samples obtained from these fisheries is likely to be low; however, sampling at-sea will follow the sampling protocol that enables catch to be extrapolated to the fishery and will provide some information on Chinook bycatch from these operations. As described in Section 1.4.3 changes to deployment and sampling involving tender operations would require regulatory amendments. NMFS will continue to explore alternative sampling methods.

The change in the Chinook salmon genetic sampling protocol also changes the way funds are spent on observer coverage since dockside observers previously did genetic sampling. Under the 2014 ADP, NMFS will not deploy dockside observers and instead puts all funding towards at-sea coverage, which is anticipated to result in considerable cost savings for each salmon sampled (Appendix B).

#### 1.4.6 Conditional Release Policy

The 2013 ADP provided conditional releases from observer coverage for vessel operators who provided reasonable information that accommodating an observer would displace crew members or additional IFQ permit holders. In 2014 NMFS plans to continue to implement this Council policy. Please note, however, that NMFS only intends to issue releases to vessels in the vessel selection stratum in 2014. NMFS's experience in 2013 was that vessels within the trip-selection stratum have been able to accommodate observers, with one exception when an IFQ holder was brought aboard one vessel on single trip, thereby displacing the observer. Within the vessel selection stratum, NMFS will continue to review accommodation issues on a case-by-case basis, recognizing that in some situations reasonable accommodations for an observer can be made with minor modifications to vessel operations (e.g., removing stored equipment from an existing bunk or augmenting existing sleeping areas similar to crew's). As noted in Chapter 2, conditional releases issued by NMFS have the potential to cause biased estimates of catch and

discard. Therefore on-going assessment of this policy will be needed as the program continues to mature.

### *1.5 Communication and Outreach*

NMFS will continue to communicate the details of the ADP to affected participants through public meetings and posting information on the Internet. Information about the Observer Program is available at:

<http://www.alaskafisheries.noaa.gov/sustainablefisheries/observers/default.htm>

and Frequently Asked Questions are available at:

<http://www.alaskafisheries.noaa.gov/sustainablefisheries/observers/faq.htm>

NMFS will conduct a series of public outreach meetings to answer questions about the program and gain insight from vessel operators and processors about their experience with the first year of the program. Our goal is to reach a broad range of communities while operating within budget constraints. For economic efficiency some meetings may be conducted via phone and WebEx. We envision the outreach events occurring between the end of November 2013 and February 2014 and have proposed locations and timing based on feedback that we received from the Council and the OAC last year (Table 1-2).

Table 1-2 Proposed public outreach meeting locations and schedule.

<b>Location</b>	<b>Date</b>
Seattle, Fish Expo	Nov 20-22
Petersburg	Dec 3
Anchorage (evening session during the December Council meeting)	Dec 11
Homer	Dec 5
Kodiak	Jan
Newport	Jan
Sitka	Jan
Juneau	Jan

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## Chapter 2 Preliminary 2013 Annual Performance Review

*This is the Preliminary 2013 Annual Performance Review that NMFS presented to the Council in June 2013.*

### North Pacific Groundfish and Halibut Observer Program

**June 11, 2013**

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*Disclaimer: This document is intended to provide scientific data and where appropriate, advice in the areas of regulatory management, natural science, mathematics, and statistics as they relate to observer deployment and sampling in the groundfish and halibut fisheries of the North Pacific. Any opinions expressed in this document are those of the authors and do not necessarily represent the position of their representative organizations.*

## *2.1 Introduction*

In partnership with the North Pacific Fishery Management Council (Council), the National Marine Fisheries Service (NMFS) restructured the North Pacific Groundfish Observer Program (Observer Program). The new North Pacific Groundfish and Halibut Observer Program went into effect on January 1, 2013. The restructured program enables ongoing analysis and evaluation of the deployment of observers and the data collected in the program through an Annual Deployment Plan (ADP) and associated review process. The ADP process was developed to provide enough flexibility so that new scientific information could be incorporated, on annual basis, to adjust observer coverage to improve estimation, and maintain transparent public review of deployment.

As outlined in the 2013 ADP (NMFS, 2013). NMFS will present an annual report to the Council during its June meeting that provides an evaluation of observer activities, costs, sampling levels, issues, and proposed changes to the deployment plan for the following year. The annual report will inform NMFS, the Council, and the public about how well various aspects of the program are working, and consequently lead to recommendations through the ADP. This report is the first of the annual reviews and contains a scientific evaluation of the restructured program in early 2013. The report for 2013 is limited in the types of comparisons and inferences that can be made because only the first 16 weeks of data that had been collected under the restructured program is considered at the time of this writing to be quality controlled for this purpose. Thus, as stated in the 2013 ADP, this report is a progress report on implementation during the first 16 weeks of 2013. The first full annual review of the 2013 Observer Program will occur in June 2014.

As a first step towards developing a draft ADP for 2014, NMFS is providing recommendations and analysis from the Observer Science Committee (OSC) for Council comment. The final ADP will contain the NMFS analysis and recommendation on deployment using a synthesis of Council input and OSC recommendations on deployment methods. The OSC is an interagency working group enabled by the Observer Program that provides scientific advice to NMFS on deployment methods. Group members author this report.

Council recommendations will be considered by NMFS for incorporation into the draft ADP. The draft ADP will be available for review by the Council, the Scientific and Statistical Committee (SSC), the Plan Teams, and other Council advisory groups by September 1, 2013. NMFS will consider recommendations made by the Council during its October 2013 meeting to modify the draft ADP, recognizing limitations on the types of analysis that can be completed prior to finalizing the ADP in early December 2013.

This OSC report is broken into two sections: the Assessment of the Sampling Frame and the Proposed Deployment Plan. The assessment of the sampling frame provides an evaluation of observer activities, costs, sampling levels, and issues. As noted above, 2013 is the first year of the restructured program, so the assessment is a status report of implementation to-date in 2013. The Proposed Deployment Plan describes the proposed sampling design for 2014. In the future, the Proposed Deployment Plan will use information from the prior year's deployment to identify areas where improvements are needed 1) to collect the data necessary to manage the fisheries; 2) maintain the scientific goals of unbiased data collection; and 3) accomplish the most effective and efficient use of the funds collected through the observer fee. Since a full year of data has not yet been collected under the restructured program, the Proposed Deployment Plan for 2014 relies heavily on analysis conducted in the 2013 ADP.

## 2.2 *Assessment of the Sampling Frames*

The number of vessels, trips, observer coverage rates, and compliance with ADP assumptions were evaluated for each stratum. Here a stratum is defined as fishing operations subject to different observer coverage rules. Only those operations under the authority of NMFS to deploy observers under the 2013 ADP were considered in these evaluations.

These evaluations depend on identifying individual fishing trips. This can be accomplished for the partial coverage trip-selection stratum by combining information stored in the Alaska Fisheries Science Center's Fisheries Monitoring and Analysis Division observer databases (NORPAC and ODDS) and the Alaska interagency reporting system (eLandings). Since some observer deployment and at-sea data may not be immediately available to the Observer Program, only the first sixteen weeks of 2013 were included in analyses.

### 2.2.1 Dockside Deployments

Dockside observer duties vary between those observers that are deployed to monitor deliveries that occur in full-coverage operations and those that are deployed outside of full coverage operations. Full-coverage dockside operations include only those processors that take deliveries from American Fisheries Act vessels delivering pollock in the Bering Sea and Aleutian Islands. These processors are required by federal regulation to have observers available to sample shoreside deliveries while they are processing (accepting) deliveries of BSAI AFA pollock. In these full-coverage operations, an observer records delivery information, salmon bycatch information (e.g. total number of fish), collects specimens for genetic analysis from salmon, and collects otoliths and lengths from groundfish (to support stock assessments). Observers collect salmon genetic tissues according to the protocols of Pella and Geiger (2009), which requires a systematic sample of every  $n^{\text{th}}$  salmon to ensure a uniform random sample of the bycatch is obtained.

Observers in plants not receiving AFA pollock deliveries are in the partial coverage category. The 2013 ADP established the collection of tissue samples from Chinook salmon in the Gulf of Alaska pollock fishery as sampling priority for shoreside observers. Observers in this situation are supposed to be notified by industry of a pollock delivery- if this condition is not met the delivery will not be monitored. Once in the plant, the partial-coverage observer records delivery information, salmon bycatch information (e.g. total number of fish) and collect specimens for genetic analysis from salmon according to the protocols of Pella and Geiger (2009). Shoreside counts of salmon are used to estimate salmon bycatch in the Catch Accounting System (CAS) only when the trip is observed whereas genetic samples are collected from both observed and unobserved trips.

Since catch delivered by a tender is sorted at sea and may include the harvests of several vessels, the observer does not sample from or monitor these offloads. They record only the basic information on the tender vessel from information on the landing report: date, gear, area fished, delivered weight and program management code.

In the first sixteen weeks of 2013, a total of 748 deliveries of AFA pollock were made. True to expectations of the 2013 ADP, all of these deliveries were observed dockside and none of the observers were restructured observers (that is, employed by the observer provider company under contract by

NMFS to provide coverage for the partial coverage strata). During the same time period, 439 non-AFA pollock deliveries were made and eighty-eight percent of these were observed and sampled for salmon genetics (Table 2-1). In 2013, Kodiak was the principal port of deployment for partial coverage dockside observers since this port received the most Gulf of Alaska pollock deliveries and the port is relatively easy to reach. Kodiak had all but one delivery observed.

Table 2-1 Number of non-AFA pollock deliveries observed and unobserved.

Port	Unobserved	Observed	Total	Percent observed
Akutan	31	6	37	16.2
Inshore Floating- Dutch	2	6	8	75.0
King Cove	9	0	9	0.0
Kodiak	1	368	369	99.7
Seward	6	0	6	0.0
Sand Point	2	8	10	80.0
Total	51	388	439	88.4

## 2.2.2 BSAI Cod Voluntary 100% Fleet

Forty trawl vessels signed a compliance agreement with NMFS to carry full observer coverage when fishing Pacific cod in the BSAI. Of these vessels, 35 vessels ranging in size from 85 to 149 feet length-over-all (LOA) conducted 353 trips during the first sixteen weeks of 2013. The remaining 5 vessels that signed agreements did not land fish predominantly comprised of Pacific cod in the BSAI. NORPAC data confirms that all BSAI 100% Cod trips were observed. No restructured observers were used for voluntary deployments, in accordance with agreements specified in the 2013 ADP and letters of agreement sent to NMFS by participating parties.

## 2.2.3 Full Coverage Fleet

The catcher processor vessels Kruzof, Judi B, and Amber Nicole requested and were removed from the full coverage stratum using exemptions at 50 CFR 679.51(a)(2)(v). A total of 2,647 trips were made by 151 vessels ranging from 51 to 376 feet LOA in the full coverage stratum during the first sixteen weeks of 2013. NORPAC data used to identify which trips are observed show that 99.7% of these trips were observed. However other data sources in NORPAC (e.g. haul information) indicate that the three trips with missing records were in fact observed. No restructured observers were used in accordance with the 2013 ADP.

## 2.2.4 Partial Coverage Fleet

The Partial Coverage category includes vessels whose fishing operations are not required by federal regulation to always carry an observer. This category is divided into two sampling strata depending on the method used to deploy observers: trip-selection and vessel-selection.

- Trip selection vessels are those that are required to log trips into the Observer Declare and Deploy System (ODDS) using a NMFS supplied username and password. Each logged trip is assigned a random number that determines whether a trip is to be observed. The sampling frame for trip-selection is generated one trip at a time.
- Vessel-selection vessels are those that are selected to have every trip observed for a two-month period of the year. From the pool of vessels that fished in the same two-month period in 2012, a number of vessels are randomly chosen for observer coverage. Only those vessels selected for coverage are provided access to the Vessels Assessment Logging System (VALS) in which they may petition NMFS for a conditional release of observer coverage. A conditional release is a case where the NMFS has decided under certain conditions to release the vessel from the observer coverage requirement for a period of time. If a vessel requests a conditional release from coverage through the VALS, NMFS follows up by contacting the vessel, conducting a visit and inspection of the vessel, and recording the results of the vessel assessment to be used in future vessel selections.

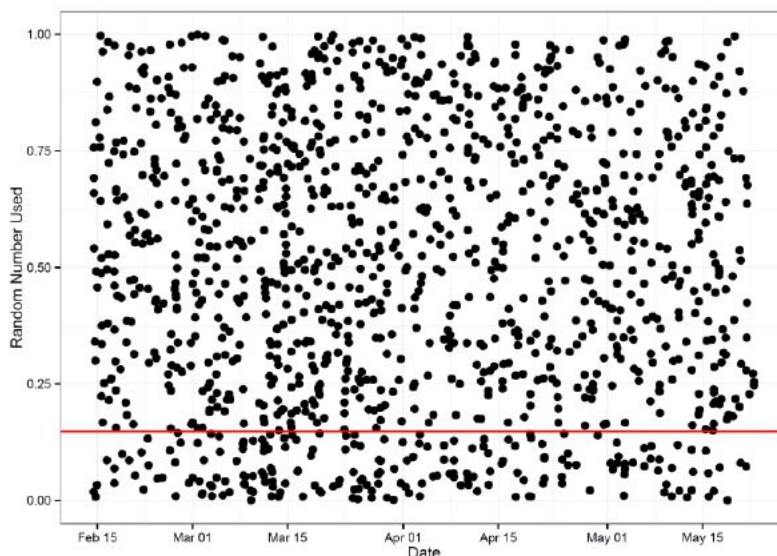
### 2.2.5 Trip Selection

A total of 1,300 trips were made by 206 vessels ranging from 58 to 176 feet in length in this stratum during the first sixteen weeks of 2013. Observer (NORPAC) data indicates that 17.7% of these trips were observed.

#### *ODDS Performance*

Non-randomness in the random selection of trips for observer coverage can lead to bias in deployments of observers that could be reflected in the final catch estimates. When a trip is logged into the ODDS, it is assigned a random number. If the random number generated for that trip is below a pre-programmed critical value, the trip is selected for observer coverage. After the launch of the 2013 Observer Program, a feature was added to ODDS to permanently store the random number assigned to a trip to allow tracking and evaluation of the generation and assignment of random numbers. Between February 14<sup>th</sup> and May 22<sup>nd</sup>, 1,272 trips were logged into the ODDS. From these records, there appears to be no pattern in the random number over time (Figure 2-1). Selection of trips for observer coverage based solely on the assigned random number is at 15.8 %, which is very similar to the anticipated rate of 14-15% in the 2013 ADP.

The rate of selected trips from the ODDS random number is not the same as the rate of observed trips. The differences are due to the fact that not all trips that are entered into ODDS are actually realized by the vessel. There is an opportunity for an ODDS user to cancel every trip that has been selected for coverage. However, ODDS automatically selects the operators next logged trip to be observed if the vessel operator had cancelled a “to-be observed” trip.



**Figure 2-1. Random number used in ODDS organized by logged trip date. Each number is tied to a logged trip. Trips below the red line were selected for observer coverage based on the random number.**

### 2.2.6 Vessel Selection

A total of 141 vessels ranging from 40 to 57 feet LOA in length made 507 deliveries in this stratum during the first sixteen weeks of 2013. Over both two-month sample periods, 11.8% of trips in this stratum were observed.

Two vessel-selections were conducted during the first 16 weeks of 2013. The NMFS targeted a fixed sample size based on the 2013 ADP. The targeted number of observed vessels for each two-month period (sample size) was equivalent to 11% of the number of vessels that fished in each selection period during 2011.

In each selection, a list of vessels identified as likely vessels to fish in the desired time period based on past activity were generated. Each vessel was assigned a random number. Vessels were then put into ascending order according to their random number, and the first  $n$  vessels were selected for observer coverage where  $n$  is the number of vessels to be selected.

The Agency over-sampled (that is, selected more vessels to carry observers than was necessary) in each selection to allow for changes in the vessels anticipated to fish in the upcoming two month-period. To evaluate how much over-sampling was necessary, the similarity between the list of vessels in this stratum that fished between 2009 & 2010, 2010 & 2011, and 2011 & 2012 were evaluated prior to the selection.

The weighted average across the three years indicated that the NMFS should expect that 77% of the vessels that fished in the first two months of 2012 would also fish in the first two months of 2013. For this first selection period, 74 vessels were identified as potential candidates for selection and assigned random numbers (fished in the same two months in 2012). The NMFS targeted sample size was seven vessels to carry observers during January and February of 2013. Therefore the NMFS selected nine vessels to carry observers during the first two months of 2013 (Table 2-2). Three of these selected vessels did not have valid Federal Fisheries Permits, reducing the number of valid selected vessels to six. Of the

74 vessels that were identified as potential candidates from 2012, only 28 actually fished in the first period of 2013 (a smaller set of vessels fished in both years than expected) and six new vessels fished as well. Only two of 34 vessels that fished in the first two months of 2013 were observed in this stratum. This equates to a coverage rate of 5.8% of the vessels that fished in the January – February period (Table 2).

In the second two-month period (March-April), 181 vessels were identified as potential candidates to carry observers and assigned random numbers. Making the same comparisons as for the Jan-Feb period, the NMFS expected that only 73% of the vessels identified from 2012 activity would fish in 2013. Based on the Jan-Feb randomization process, the NMFS anticipated that 14% of selected vessels would surrender their FFPs and 28% would be granted conditional releases. Hence, although the NMFS targeted 17 vessels to carry observers during March and April of 2013, twenty-nine were selected for coverage (Table 2-2). One hundred and nine (61%) of the 181 potential candidate vessels from 2012 actually fished in the third and fourth months of 2013. A total of 135 vessels fished during March and April of 2013, and of these 13 carried observers. Based on vessels, this equates to a coverage rate of 9.6% (Table 2-2).

Table 2-2 Vessel-selection metrics from the first and second selection draws of 2013. The first vessel-selection draw was for January-February and the second was for March-April.

	First Draw	Second Draw
Targeted Sample Size (# of vessels to carry observers in 2013)*	7	17
Vessels selected to carry observers	9	29
Vessels from 2012 anticipated to fish in 2013 (Sampling Frame)	74	181
Vessels that fished in 2013	34	135
Vessels that fished in 2013 but did not do so in 2012 (new vessels**)	6	26
Vessels in 2013 actually observed	2	13
Vessels coverage rate in 2013	5.8%	9.6%
Draw efficiency (vessels selected that actually carried observers)	22%	44%

\*equivalent to 11% of the number of vessels that fished in 2011. \*\* these vessels had no chance of being selected for coverage.

## 2.3 *Special conditions*

### 2.3.1 Conditional releases

#### Requested by the Vessel Operators

Trips were conditionally released when vessels provided a robust argument that either crew or an IFQ holder would be displaced by an observer. Of the 32 conditional release requests by vessel operators, 21 were granted (66%). Most release requests (28 requests) originated from vessels in the vessel selection stratum. Of the granted releases, 14 were crew releases (67%), 6 were IFQ holder releases (29%), and one was due to a life raft having inadequate capacity to accommodate an observer (5%). The

duration of released periods (during which an observer is not required) ranged from a minimum of 4 days to several months (max 109 days), with the median duration being 38 days. The size of vessels requesting releases ranged from 41 feet to 58 feet LOA.

To evaluate the distribution of trip outcomes, all trips occurring within a calendar week that were observed, not-observed, and those that were released from coverage were summarized across both vessel and trip selection strata (Table 2-3).

Table 2-3 The total number of trips taken in the first sixteen weeks of 2013 by vessels in the partial coverage category. Trip totals will not sum to totals in other tables because some trips contain deliveries that span multiple weeks and are “double-counted” in this table.

Week	Total # Trips:	Total # Trips:
	Trip Selection	Vessel Selection
1	54	2
2	86	4
3	97	6
4	146	28
5	164	18
6	133	21
7	92	5
8	60	19
9	71	27
10	58	23
11	147	51
12	104	62
13	63	54
14	79	57
15	60	43
16	104	93

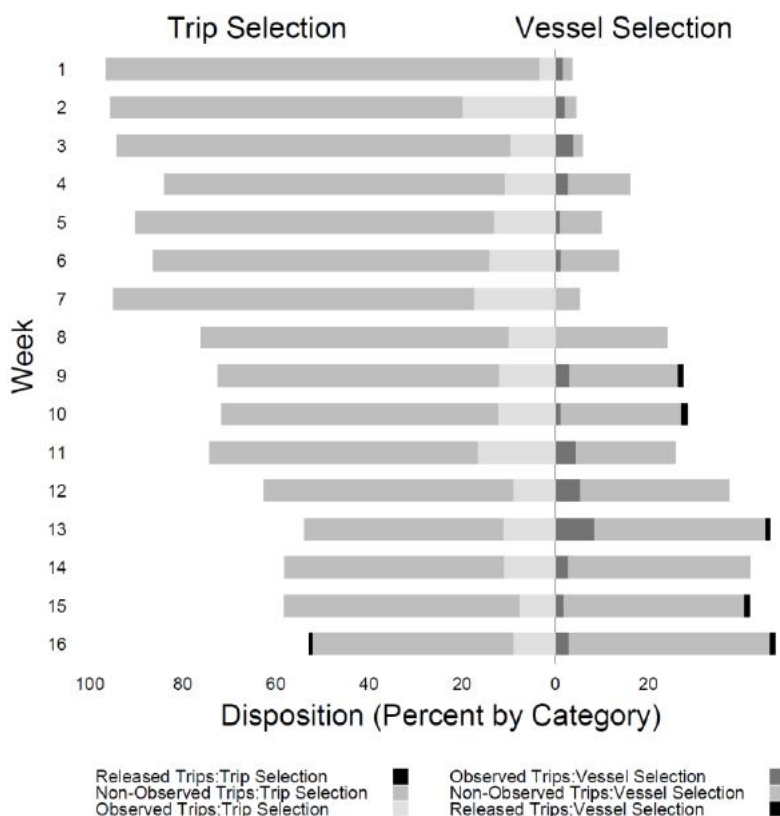


Figure 2-2. The relative percentages of trip dispositions for trip and vessel selection strata as a function of calendar week. Trip totals for each week are provided in Table 2-3.

### Requested by Observer Provider

A total of 20 trips were not observed that should have been due to the failure of an observer to appear at the scheduled time of departure. These NMFS-issued releases were almost all during the first month of the program when a larger than expected number of “selected to be observed” trips resulted in a shortage of trained observers to deploy (Table 2-4).

Table 2-4 NMFS issued trip releases due to a lack of an observer.

Port	Jan	Feb	Mar	Apr	May	Totals
<b>Adak</b>	0	0	1	0	0	1
<b>Akutan</b>	3	0	0	0	0	3
<b>Dutch Harbor</b>	7	0	0	0	0	7
<b>Kodiak</b>	5	0	0	0	0	5
<b>Sand Point</b>	3	0	0	0	1	4
<b>Totals</b>	18	0	1	0	1	20

### 2.3.2 Deliveries to a Tender vessel

New definitions of a trip for the purposes of observer coverage requirements differ depending on the type of activity a vessel is engaged in. For a catcher vessel delivering to a shoreside processor or

stationary floating processor, a trip is defined as the period of time that begins when a catcher vessel departs a port to harvest fish until the offload or transfer of all fish from that vessel. In contrast, for a catcher vessel delivering to a tender vessel, a trip is defined as the period of time that begins when a catcher vessel departs from port to harvest fish until the vessel returns to a port in which a shoreside processor or stationary floating processor with a valid FPP is located (§679.2). The definition of a tender trip allows a vessel to stay at-sea fishing and make multiple deliveries without ending the trip. There may be incentive to preferentially fish and make deliveries to a tender when unobserved. This situation should only occur in the trip-selection stratum; since in vessel-selection boats are observed for all activities during a two-month period. For comparison, trips were tallied by observed status, tender delivery status, and deployment stratum (Table 2-5). Methods used to identify tender trips are described in the next section.

Trips tallied by fishery, defined as a combination of gear, location, and predominant species (target), observer status, tender status and deployment strata are also provided (Table 2-6).

For those trips (in the partial coverage trip-selection stratum) that included at least one delivery to a tender, the number of deliveries per trip tended to be greater in unobserved trips compared to observed trips (Figure 2-3). Note that few trips with tender deliveries were observed and only a few observations are available for comparisons.

Similarly, distributions of trip duration (number of days per trip) showed evidence that observed trips were typically shorter than unobserved trips (Figure 2-4) in the trip-selection stratum. This trend was less evident in the vessel selection stratum. Again, note that there are limited data presented here from which inferences can be drawn.

Table 2-5 Number of deliveries made in each stratum, by observation status, whether a delivery was made to a tender vessel (offload type) and the sampling unit used (Rate Type). \*: Observer data confirms that all trips were observed. This number is less than 100% because a field in NORPAC had not yet been updated in observer debriefing at the time of this writing.

<b>Sampling Frame</b>	<b>Observed</b>	<b>Count</b>	<b>Observed</b>	<b>Offload Type</b>	<b>Rate Type</b>
Vessel-Selection	43	440	9.8%	NonTender	Trip
Trip-Selection	220	1196	18.4%	NonTender	Trip
Full-Coverage	2,627	2,635	99.7%*	NonTender	Trip
No-Coverage	0	236	0.0%	NonTender	Trip
Vessel-Selection	17	67	25.4%	Tender	Trip
Trip-Selection	16	134	11.9%	Tender	Trip
Full-Coverage	12	12	100.0%	Tender	Trip
No-Coverage	0	39	0.0%	Tender	Trip
Vessel-Selection	60	507	11.8%	All	Trip
Trip-Selection	236	1330	17.7%	All	Trip
Full-Coverage	2,639	2,647	99.7%*	All	Trip
No-Coverage	0	275	0.0%	All	Trip
Vessel-Selection	15	172	8.7%	All Non Tender	Vessel
Vessel-Selection	5	27	18.5%	At Least One Tender	Vessel
Vessel-Selection	15	149	10.1%	All	Vessel

Table 2-6 Number of deliveries to a tender vessel organized by gear, NMFS area\_Target species, observation status and partial coverage selection pool. Gear codes: HAL=Hook and Line, POT=Pot, TRW=Trawl. Target codes: COD=Pacific cod, POL=walleye pollock. Since all deliveries are labeled as belonging to a tender trip if one delivery in that trip were made to a tender, some gear, areas, and target species combinations in this table do not represent activities typically associated with tender deliveries.

Gear_Area_Target	Total Deliveries	Deliveries Observed	Selection Pool
HAL_620_COD	1	0	Vessel
HAL_630_COD	48	7	Vessel
POT_610_COD	9	8	Vessel
POT_620_COD	1	0	Vessel
POT_630_COD	6	0	Vessel
POT_BS_COD	2	2	Vessel
HAL_620_COD	7	1	Trip
HAL_620_HBT	1	0	Trip
HAL_620_POL	1	0	Trip
HAL_630_COD	5	0	Trip
POT_610_COD	15	1	Trip
POT_620_COD	4	0	Trip
POT_630_COD	13	1	Trip
POT_BS_COD	13	0	Trip
TRW_610_COD	31	1	Trip
TRW_610_POL	8	1	Trip
TRW_620_COD	34	7	Trip
TRW_620_POL	20	4	Trip
TRW_630_ATH	2	0	Trip
TRW_630_COD	2	0	Trip

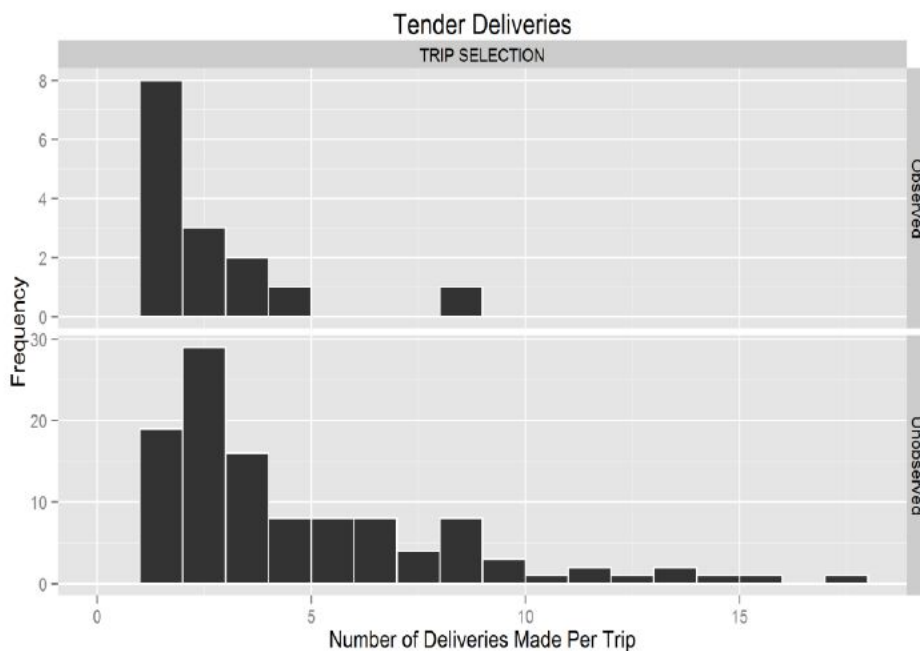


Figure 2-3. Distribution of the number of deliveries made in a trip in which at least one delivery was made to a tender vessel presented by observation status. Distinguishing individual trips (groups of tender deliveries) for vessel-selection operations is not possible with available data.

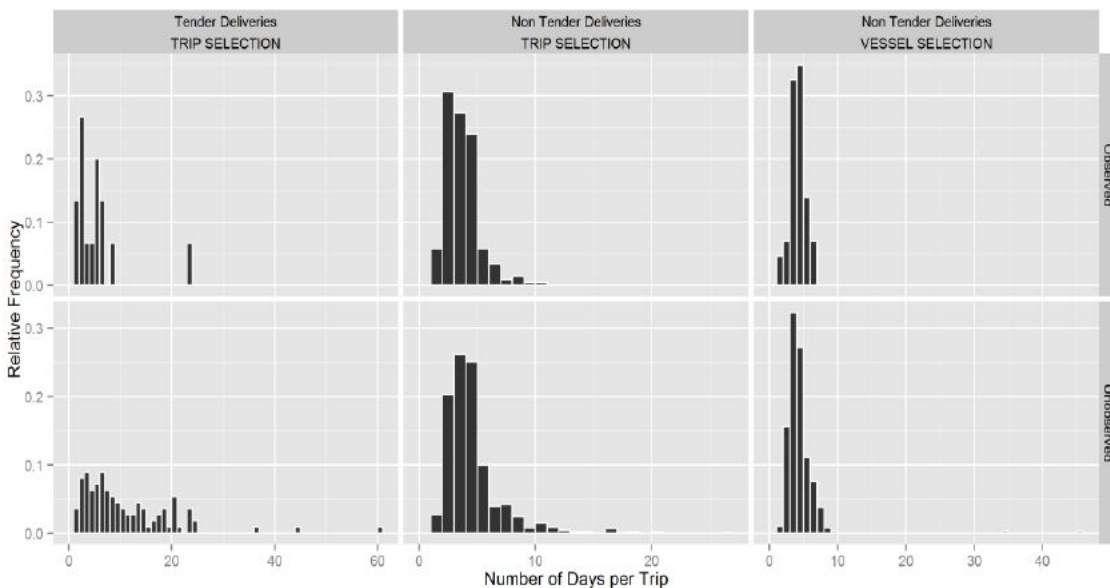


Figure 2-4. Distribution of the number of days fished in a trip by vessels in the partial coverage pool organized by observation status and whether or not the delivery was made to a tender. Separating deliveries from trips for vessel-selection operations is not possible with available data. The relative frequencies (vertical axis) in each plot sum to one.

## 2.4 Between Year and Strata Comparisons

### 2.4.1 Identification of Individual Fishing Trips in Landings Data

This section includes data collected from January 1, 2012 to May 23, 2013. To accurately assess deployment patterns and observer coverage rates under the restructured observer program, it was necessary to identify individual fishing trips, both observed and unobserved in the landings data. In the partial trip-selection stratum, individual fishing trips are the sampling unit and form the basis for observer coverage selection. Currently, landings data do not identify fishing trips, but instead individual deliveries are recorded based on management program (IFQ, CDQ, etc.), NMFS reporting areas, and other variables. When deliveries are made to two different processing plants or to tenders, determining which landings correspond to individual fishing trips can be difficult. For the partial coverage trip-selection stratum however, the ODDS data can be used to group most landings to the appropriate trip, although currently there is no explicit linkage between the two data sources. Therefore the following routine was used in an attempt to match trips logged into ODDS and the associated landings data.

The landings data (from eLandings database) had 35,091 landings records. These represent one record for each delivery, NMFS reporting area, and management program with trip targets, gear types, and dates also identified. Based on this information, the landings that occurred under the partial coverage stratum of the restructured (2013) observer program were identified.

Data from the ODDS trip log system contained records for 2,122 logged trips in 2013. Trips were required to be logged if the vessel was in the partial-coverage-trips stratum or part of the BSAI voluntary Pacific cod cooperative. Cancelled trips and BSAI cod trips were removed from the data. All remaining trips were ordered within each vessel and the date range between when a trip's logged start date (planned trip start) and the next trip's logged start date was identified. This date range was used to identify landings records (based on landing date) that were probably made on that logged trip; all landings that fell within this date range were attributed to that logged trip. For each logged trip, there may be several landings

since deliveries may be split, be associated with multiple management programs, or from several NMFS reporting areas. In addition, multiple deliveries to tenders are grouped to a single fishing (logged) trip. There were 23 landings where the appropriate logged ODDS trips could not be identified. This may be because the trip started in December 2012, the logged fishing dates were inaccurate (changed before the trip began and the new dates not updated in ODDS), or the trip was not logged. Where possible, we attempted to identify and appropriately process these cases, however, this was not always possible given time and information constraints.

For landings made outside of the partial coverage trip-selection stratum, the landing report number was assigned as their trip identifier (this assumes one report ID for each trip). In contrast, trip identifiers were assigned to landings in the trip-selection coverage stratum to include all landings associated with that fishing trip based on ODDS records.

#### 2.4.2 Achieved Coverage Rates in Early 2013

To assess the distribution of observer coverage in the various fisheries, graphs depicting the intensity of coverage by week of the year and gear-area-target species combination were constructed (Figure 2-5). Only the first 16 weeks of data were included from each year. Each cell in the plot depicts a specific type of fishing (vertical axis) for a given week (horizontal axis); e.g. Bering Sea yellowfin sole trawl fishing in week 3 of 2012. Note that in the Gulf and Aleutian Islands, area is defined as the NMFS reporting area while all the reporting areas in the Bering Sea are pooled.

Each cell is labeled with the number of trips (as defined above) that fall within the cell while the color of the cell label indicates the number of trips that were in the zero-coverage stratum, noting that there is a difference between a cell with no observed trips when none were required and having no coverage where all trips were subject to at least some observer coverage requirement. A cell where none of the trips required any coverage (zero coverage stratum, e.g. 2012 halibut target in any area) has a black label. A cell where some of the trips did not have observer requirements has a brown label (mix of zero coverage trips and partial or full coverage trips occurred), and cells where all trips would have been subject to coverage requirements have a white label (all trips were in either partial or full coverage strata). In addition, the cell (background) color indicates the proportion of trips in a cell that were observed; if none of the trips in a cell are observed the label is bold and italicized hence differentiating two close shades of grey (little coverage and no coverage; Figure 2-5).

Some trips can occur in multiple cells, for example if fishing occurred in two different NMFS areas or the trip spanned multiple weeks. Hence the total number of ‘trips’ in these cells is greater than the actual number of fishing trips (leave port, go fishing, return to port) that occurred. In addition, the number of trips in each cell includes trips that fall into different sampling strata (e.g. full and partial coverage).

Using the same type of graph in Figure 2-5 but focusing only on the 2013 observer deployments, trips were separated into the same cells (weeks and gear-area-target species) according to the sampling strata (Figure 2-6). Cells in which no trips were observed have white labels (number of trips), while cells with some trips observed have black labels. As expected, no fishing was observed in the zero-observer coverage required stratum, and there are only two cells in the full observer coverage stratum that did not have all trips observed (Figure 2-6). These full coverage trips were probably observed; however, all the data from these trips are not yet available.

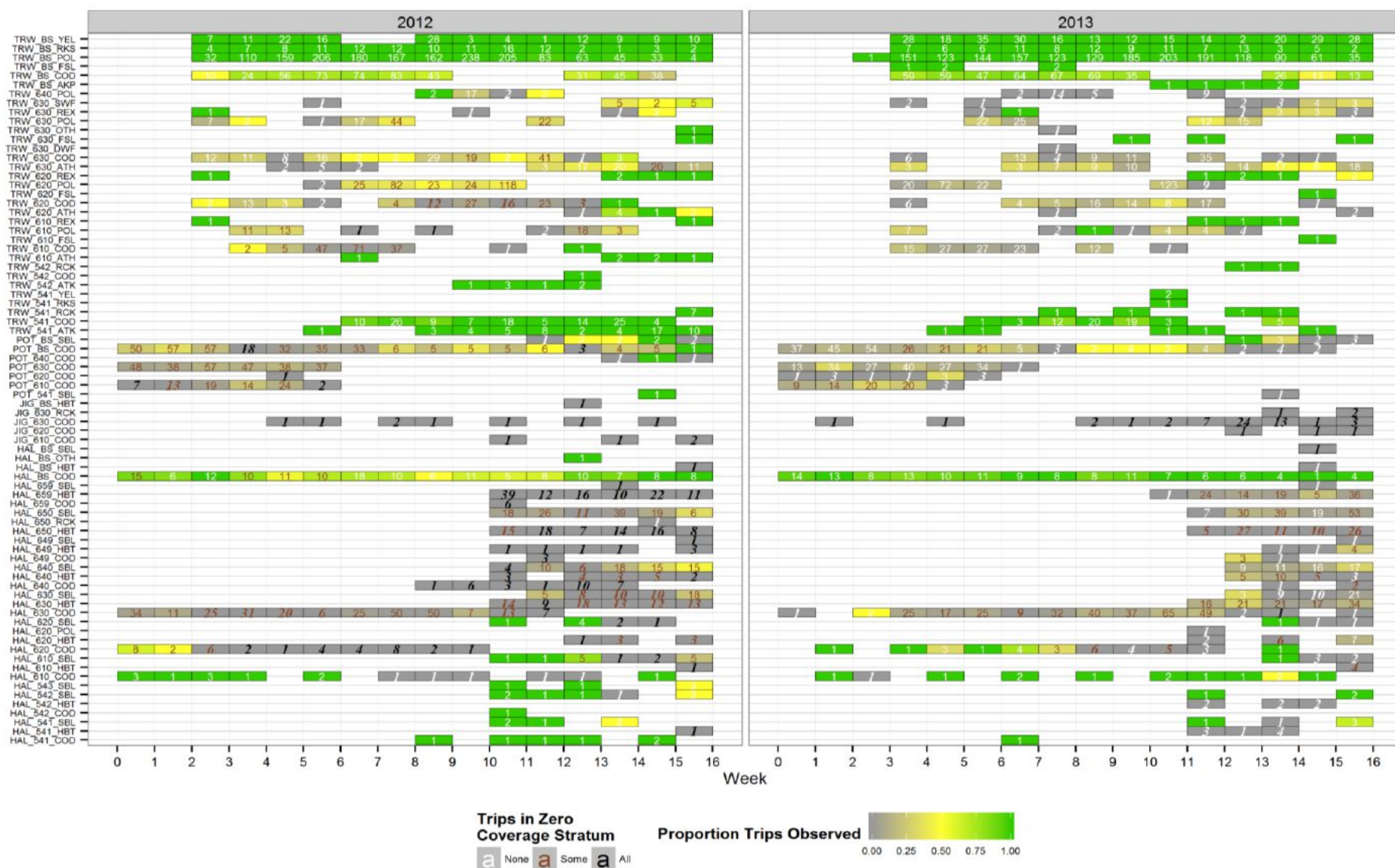


Figure 2-5 Distribution of fishing trips by gear-area-target species (vertical axis) for each week (horizontal axis). The cell label (text in the cell) indicates the number of fishing trips that occurred. The color of the text indicates which sample strata are represented in the cell, e.g. if all trips that occurred in the cell were in the zero-coverage stratum (e.g. <40ft) the label is black. Cell color indicates the proportion of trips that were observed. Cells with no observed trips have a bold, italicized label. Gear codes: HAL=Hook and Line, POT=Pot, TRW=Trawl. NMFS Areas were aggregated and coded as BS for those that occur in the Bering Sea, but not for those in the Aleutian Islands or Gulf of Alaska. Trip Target Codes follow those in Appendix E.

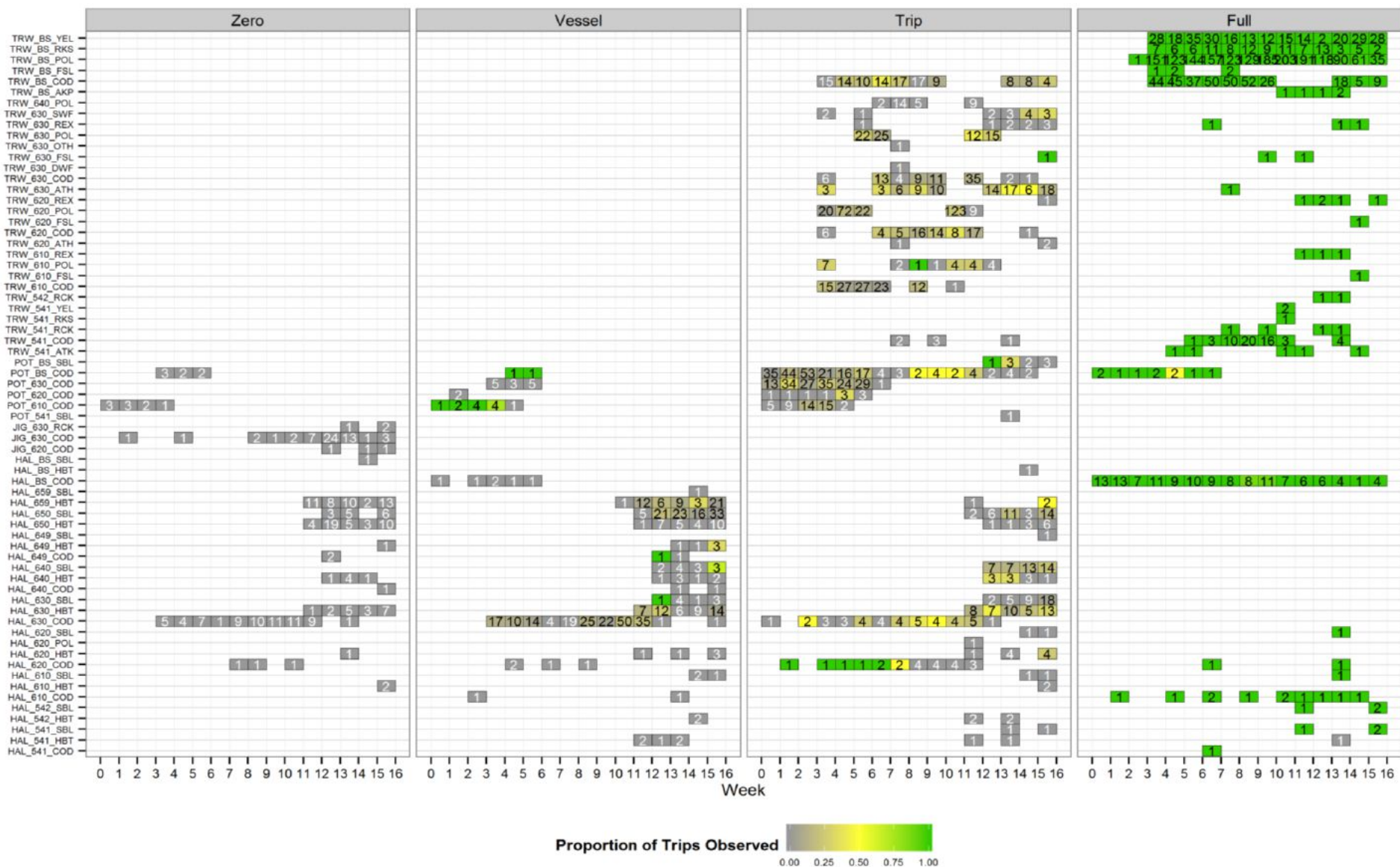


Figure 2-6 Distribution of fishing trips within each sampling stratum by gear-area-target species (vertical axis) for each week (horizontal axis). The cell label indicates the number of fishing trips that occurred. The color of the cell indicates the proportion of trips that were observed; cells with no observed trips have a white cell label (number of trips).

## 2.5 Billable Days

It is important to realize that while most discussion about observer deployment in this preliminary review has been focused on coverage *rates* planned vs. those achieved; NMFS budgets determine coverage *amounts* (sample size). The amount of observer days billable under contract divided by the number of fishing days is the rate of observer deployment in days. The days billable represents a finite budget while the amount of fishing effort is variable. Consequently, the observer deployment rates are variable, and these rates may need to change during the year. The planned coverage rate used in the 2013 ADP was calculated from budget, cost per unit (days), and fishing effort data from two years prior. As already stated, realized coverage rates are based on the intersection between current budget, fishing effort and projected (deployment) rates of coverage.

The amount of billable days was aggregated by week and compared to the projections used in the 2013 ADP. While these values are continuously compared and updated by the Observer Program, here we limit data to the first 16 weeks of 2013 (Figure 2-7). The actual billable days has continually exceeded projections in the Trip Selection stratum.

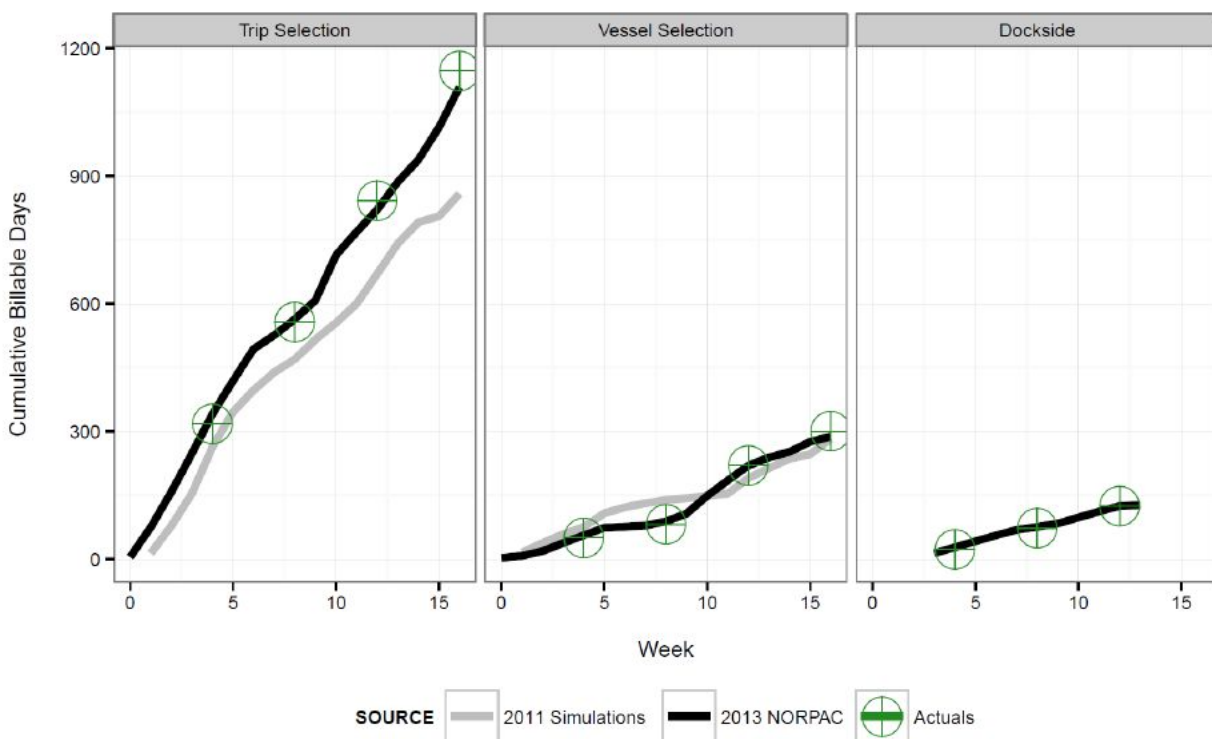


Figure 2-7 Trajectories of the cumulative number of billable days projected from simulations (2013 ADP) and 2013 actual monthly costs.

## 2.6 *Departures from Intended Sampling Design*

These are preliminary results and only represent the first few months of 2013; hence caution should be used when trying to interpret the importance of these findings.

- Contrary to the belief that all Pollock offloads were monitored dockside, only 88% of Pollock deliveries outside of the AFA actually were observed.
- Conditional releases issued by NMFS have the potential to cause biased estimates of catch and discard if these vessels behave in a different manner (locations, catch, discard rates and species) than those vessels that are not released.
- The lack of a definitive list of vessels from which to make selections for observer coverage in the vessel-selection portion of the partial coverage stratum also makes for inefficient selection draws. Reasons for this include:
  - Many vessels that were identified as potential vessels for observer coverage from 2012 data did not fish in the following year.
  - Vessels that did not fish in the previous year are not included in the selection process (new vessels are not subject to being observed).
  - Since each vessel-selection draw is conducted 60 days in advance of the first day of the scheduled period to carry an observer, those draws are not as efficient as possible since they cannot be informed from the results of the draw immediately prior.
- There are data issues that make analyses of observer deployment difficult. For example:
  - For trip-selection, while the ODDS data can be used to group most landings to the appropriate trip, currently there is no explicit linkage between the two data sources.
  - Identifying trips in vessel-selection and no-selection pools is difficult to accomplish if there are multiple landing reports submitted for a trip.
- There are many factors that impact the ability of NMFS to accurately predict what budgets and selection rates are appropriate. These include:
  - Trip length may be different when observed compared to when unobserved,
  - Fleet size and fishing effort may be different from past years,
  - The realized selection rate may not equal the programmed selection rate.

## 2.7 *Proposed Deployment Plan for 2014*

Given the preliminary nature of the available data, our group does not recommend major changes to the 2013 ADP at this time. However, we see that the definition of a trip currently allows for differences in vessel behavior when delivering to a tender. For example, in the limited data collected so far in 2013, trips in trip-selection made to a tender have more deliveries when unobserved and also tend to be longer in duration.

## 2.8 *References*

- NMFS (National Marine Fisheries Service). 2013. 2013 Annual Deployment Plan for Observers in the Groundfish and Halibut Fisheries off Alaska. 39 pages plus appendices. Accessed on May 27<sup>th</sup>, 2013 at [http://alaskafisheries.noaa.gov/sustainablefisheries/observers/ADP\\_Final\\_2013.pdf](http://alaskafisheries.noaa.gov/sustainablefisheries/observers/ADP_Final_2013.pdf).
- Pella, J.J. and H.J. Geiger. 2009. Sampling considerations for estimating geographic origins of Chinook salmon bycatch in the Bering Sea Pollock fishery. Alaska Department of Fish and Game, Special Publication No. 09-08, Anchorage.

## **Appendix A. Council motions on the Annual Performance Review and ADP**

### **June 2013 Council Motion**

#### **June 7, 2013 Observer Program**

##### **Council motion**

**The Council makes the following recommendations and requests in development of the 2014 Annual Deployment Plan:**

1. The 2014 ADP should continue to reflect a priority for monitoring vessels managed under PSC limits in the trip selection pool. The Council recognizes that this necessarily modifies an equal probability sampling design such that higher observer coverage rates are provided in the trip selection pool, and lower rates in the vessel selection pool, consistent with the 2013 ADP.
2. Maintain the policy that observers should not displace crew members or IFQ holders, nor should vessel modifications be required to accommodate an observer.
3. Request NMFS provide information that would help inform a decision as to whether to create a new criterion for receiving a conditional release from observer coverage in 2014 based on a de-minimus amount of halibut or sablefish IFQ in an IFQ holder's account.
4. Request NMFS assess whether the 2014 ADP can address the observer effect associated with tender deliveries (disproportionately high numbers of deliveries to tenders when vessels unobserved, or longer trips when unobserved and delivering to tenders), or whether a regulatory change is necessary.
5. Include available information that shows, within the vessel selection pool in 2013: 1) the average number of trips taken within each 2 month deployment period; and 2) the average length of trips within the 2 month period.
6. Include information as to the tradeoffs and considerations that should be taken into account in evaluating whether the 2 month deployment period for those in the vessel selection pool should remain, or be reduced (e.g., one month). Include consideration of a provision that if a vessel is selected for a coverage period and chooses not to fish during that period, the vessel is automatically selected for the next coverage period.

**The Council also requests NMFS provide additional information for review in October, separate from the ADP:**

1. Provide more detailed information on program costs, recommendations for ways to modify

deployment to achieve cost savings, and fishery data resulting from the 2013 deployment.

2. Revisions to the heat maps and other descriptive or graphical approaches that provide the ability for the Council and public to better understand coverage changes by fisheries from 2012 to 2013 with the most recent information available to NMFS. One example: include a comparison (in the partial coverage category) of trawl coverage in 2012 vs 2013 and fixed gear coverage in 2012 vs 2013.
3. Assess current observer coverage to provide an evaluation of the reliability of indices of Chinook salmon genetic stock identification information for GOA pollock trawl and rockfish trawl fisheries.

**The Council makes the following recommendations for the annual performance review (June 2014):**

1. Include information on the volume of catch observed in both vessel and trip selection pools.
2. Include information on achieved coverage rates by gear type.(trawl vs fixed gear).
3. Include information on trip length by observed and unobserved vessels in both the trip and vessel selection pools. Within the vessel selection pool, break out the IFQ fleet.
4. A review of the trip selected and vessel selected pools in consideration of whether vessels should have an option to choose either one, or whether the deployment plan should place every vessel in the partial coverage category in the trip selection pool (Dec. 2012 request).
5. An evaluation of the difference between observer coverage in the vessel and trip selection pools (a review of the sampling method) (Dec. 2012 request).
6. An evaluation of ways to insert cost effective measures into the deployment plan (Dec. 2012 request).
7. An evaluation of detailed programmatic costs (Dec. 2012 request).

**October 2013 Council Motion**

**C-1 Observer Program motion  
North Pacific Fishery Management Council  
October 3, 2013**

The Council supports the overall provisions for observer coverage described in the 2014 Draft Annual Deployment Plan and the specific Observer Advisory Committee (OAC) recommendations on pages 3-5 of the September OAC report. The Council also recommends continuing the policies that allow vessels to make an annual selection for 100% coverage in the BSAI Pacific cod fishery, not displacing IFQ crew members, and conditional release of vessels to address space and safety concerns.

The Council requests NMFS consider the suggestions provided on page 6 of the OAC report regarding how to prioritize deployment of the 14 cameras available in the NMFS electronic monitoring pilot project in 2014.

The Council requests NMFS explore whether allowing clean up IFQ trips in multiple regulatory areas is best addressed through a regulatory amendment to the observer program or the IFQ program.

The Council requests that the tables showing preliminary catch data and data on observer coverage from the B-2 supplemental be updated with the entire 2013 data set and included in the June 2014 program performance review. In addition, these tables should show the percentage of catch observed using these same categories. The methods used to calculate total mortalities of halibut in metric tons should also be reviewed and refined in these tables.

The Council requests that the agency incorporate the SSC comments and recommendations on the 2014 Annual Deployment Plan and the annual performance review scheduled for June 2014.

## **Appendix B. An evaluation of current and alternative methods to sample Chinook salmon bycatch in the Gulf of Alaska (Walleye pollock fishery)**

### *Purpose*

The purpose of this evaluation is for the Observer Program is to obtain an unbiased and cost-effective genetic sample set to produce stock composition estimates of the Chinook bycatch from the Gulf of Alaska pollock fishery.

### *History of salmon bycatch sampling*

Recent requests to obtain salmon bycatch samples for genetic stock composition analysis were made to the Observer Program by Auke Bay Laboratories in 2005 with the stated goal of analyzing approximately 3600 chinook and 2700 chum salmon from the 2005 B and 2006 A pollock fisheries operating in the Bering Sea. The sampling demands of the "salmon genetic project" (as originally termed by the Observer Program) have incrementally increased over time. In 2005, the project originally instructed observers to obtain 25-30 samples per cruise<sup>1</sup>. In 2006 and 2007, this number was increased to 60 · cruise<sup>-1</sup>. In 2008, this number was again increased to 120 · cruise<sup>-1</sup>, with the additional instructions to 'spread out' sampling in time during the observer's cruise.

In 2009 the Observer Program began incorporating the collection of salmon tissues for stock of origin genetic analysis into the regular duties of observers. Observers were instructed to obtain genetic samples from any salmon that were contained within their species composition samples taken at sea. These species composition and genetic samples were collected as part of a hierarchical nested design with randomization at each level. In 2010, observers were additionally instructed to sample every pollock offload from catcher vessels for salmon bycatch. They did this by employing a random temporal design that achieved ~8% sample fraction of the total offload (random five minutes of every hour).

In 2009, a report was commissioned by the Alaska Department of Fish and Game to instruct how the Federal Groundfish Observer Program should implement a sampling design to meet the data requirements of geographic stock origins based on genetic markers (Pella and Geiger, 2009). The authors proposed a systematic random sampling regimen for the collection of both Chinook and chum bycatch samples, whereby observers would sample every  $n^{\text{th}}$  fish from the available (presumed census) of salmon. Because all Chinook salmon stocks are not randomly distributed in the ocean, systematic random sampling of the bycatch (so that each fish caught in the bycatch had an equal probability of being included in the sample set), was deemed as the best method for producing unbiased stock composition estimates of the salmon bycatch. In addition, the sample set must be large enough to facilitate analysis of stock identification at pre-determined time and space domains.

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<sup>1</sup> A cruise is defined by the Fisheries Monitoring and Analysis Division, who administers the NPGOP, as an observer deployment lasting up to 90 days.

That same year, the North Pacific Fishery Management Council (NPFMC) passed Amendment 91 to the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area that specified a cap regarding the number of Chinook salmon that can be taken as bycatch in the groundfish fishery. Federal Regulations currently requires that all vessels participating in the Bering Sea trawl fishery retain all Chinook salmon from the bycatch and provide unobstructed physical access for the observer to count each fish and collect any scientific data or biological samples (50 CFR 679.21). Amendment 91 provided a suite of tools that allow observers the ability to access the entire population of salmon encountered in the BS pollock fishery. The tools include but are not limited to:

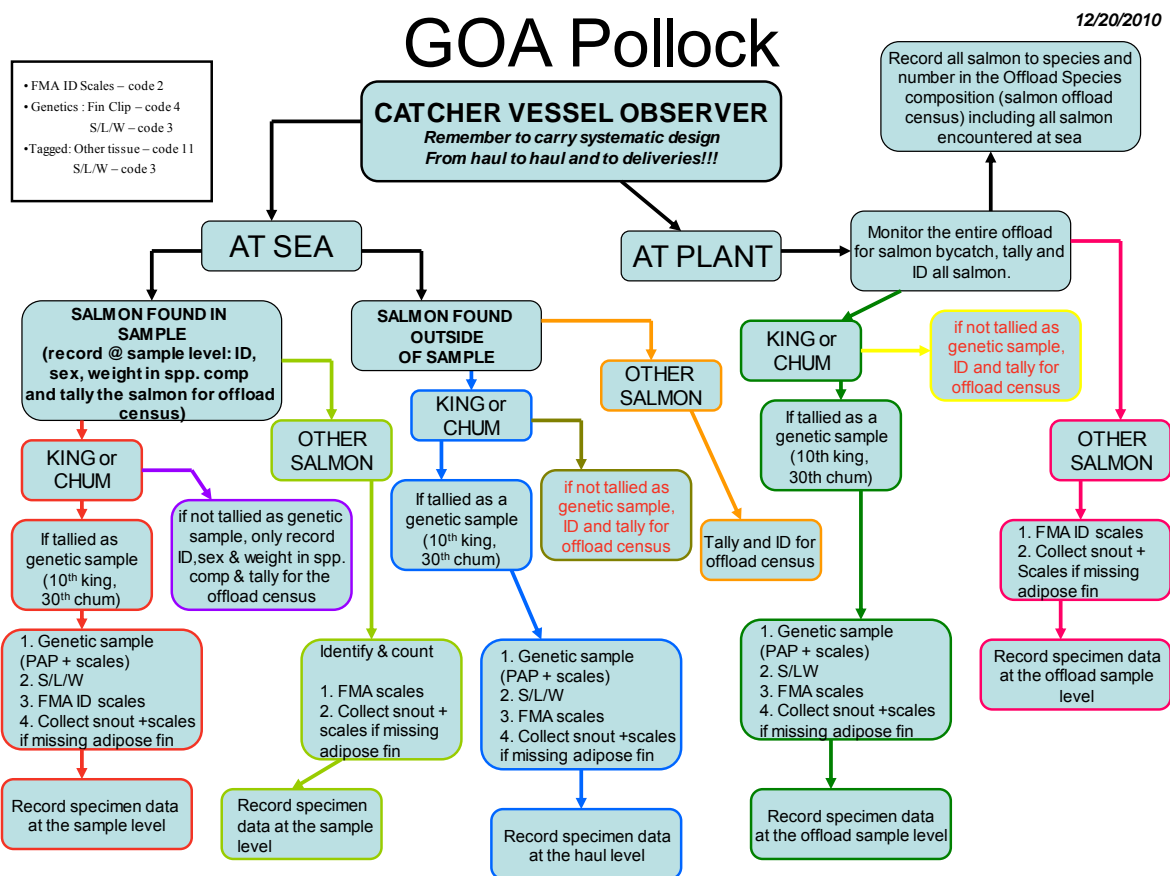
- 100% observer coverage on all pollock vessels. This allows the observer to monitor for and ensure no salmon are discarded at sea, and all salmon are delivered to the plant.
- Plant specific performance measures. All plants were required to alter their sorting lines to facilitate complete and accurate sorting of the offload. This included requiring that all salmon be sorted from the catch at the designated sorting area. All salmon must be retained in a secure location until sampled by an observer. An offload can not start until the previous offloads salmon catch is removed from the area.
- 200% (2 observers simultaneously) coverage at the plants. This ensures that an observer is present at all times during an offload. Additionally, the plant observer is better positioned to track potential after scale salmon and enter data in a timely manner.

The Observer Program aims to maintain similar, if not identical at-sea and dockside sampling duties by observers throughout the North Pacific. Therefore in 2011, the Observer Program adopted a systematic sampling of salmon bycatch from the Gulf of Alaska pollock fishery. However, whereby in the Bering Sea pollock fishery vessels were prohibited from discarding salmon bycatch at sea due to Amendment 91, no such restriction was in place within the Gulf of Alaska pollock fishery. Consequently, observers were given a suite of instructions to attempt to maintain a 1 in every  $n^{th}$  salmon from the bycatch at sea and dockside (Figure B-1).

In 2012, Amendment 93 to the Gulf of Alaska Fishery Monitoring Plan was codified in the Federal Register. Under this Amendment, full-retention requirements for Chinook salmon bycatch were enacted for trawl operations in the Gulf of Alaska. This allowed the Observer Program in 2013 to use dockside observers to sample salmon bycatch in this fishery (Figure B-2) according to the protocols outlined in Pella and Geiger (2009).

#### *Issues related to the current protocol*

The systematic method of sampling genetic tissues recommended by Pella and Geiger (2009) require that observers have access to all salmon bycatch within a fishery. However the provisions made for observers to obtain quality data collection greatly differ between Amendment 91 in the BSAI and Amendment 93 in the GOA. Although Amendment 93 requires that vessels retain all salmon, without 100% observer coverage only observed vessels are monitored for compliance of this rule. Additionally, the sorting facilities at most plants that receive GOA pollock (AFA plants excluded) are insufficient to achieve accurate sorting of catch. Salmon are often found inside the factory and may or may not be given to the observer.

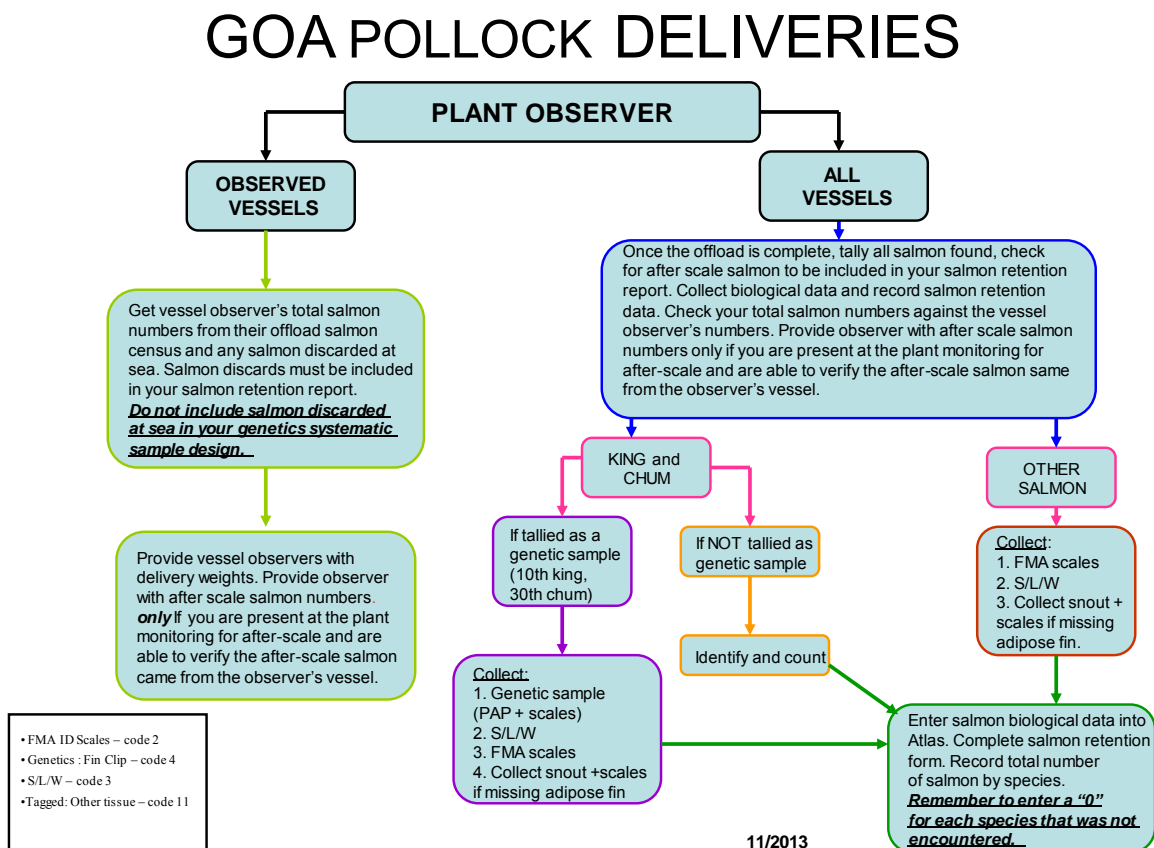


**Figure B-1. Decision flow chart for the observer identifying the duties associated with salmon bycatch tissue collection for the identification of stock of origin that was in place in 2011. It is an example of the complexities of sampling salmon genetics at a constant rate where full-retention requirements of bycatch are not in place.**

For the aforementioned reasons there exists concern within the Observer Program that observers in the Gulf of Alaska may not be able to (1) obtain a true unbiased census from which to enumerate salmon and obtain genetic samples, (2) coordinate the rate at which those samples are obtained, and (3) have the available financial resources to conduct the analysis of the resulting genetic tissues.

The data to substantiate these concerns differ between Fishery Management Plan Areas. A preliminary analysis of the efficacy of the implementation of the Pella and Geiger (2009) protocol by the Observer program has revealed that in the Bering Sea sampling rates have been very close to target rates (Guthrie et al. 2013; Kondzela et al. 2013). Since observer coverage is mandated by law and paid for by industry in the BSAI under A91, there are not cost concerns on the part of the Agency. However, this situation is different in the Gulf of Alaska, where a preliminary review of the 2013 Observer Program revealed that less than 90% of the pollock deliveries in the Gulf of Alaska were observed (Chapter 2, section 2.6). In addition, dockside observers in the Gulf of Alaska are paid for by direct contract between the Agency and an

Observer Provider from fees collected from industry. There is a direct tradeoff between observer days paid for in the Gulf of Alaska processing plant and observer days paid for sampling at-sea since both are paid for out of NMFS funds collected from landings in the partial coverage category of the fleet. In addition, observers stationed in processing plants that receive pollock deliveries and process every  $n^{th}$  salmon bycatch means that the cost per sample is inversely proportional to the amount of bycatch in the fishery (the more salmon collected, the lower the cost per-sample).

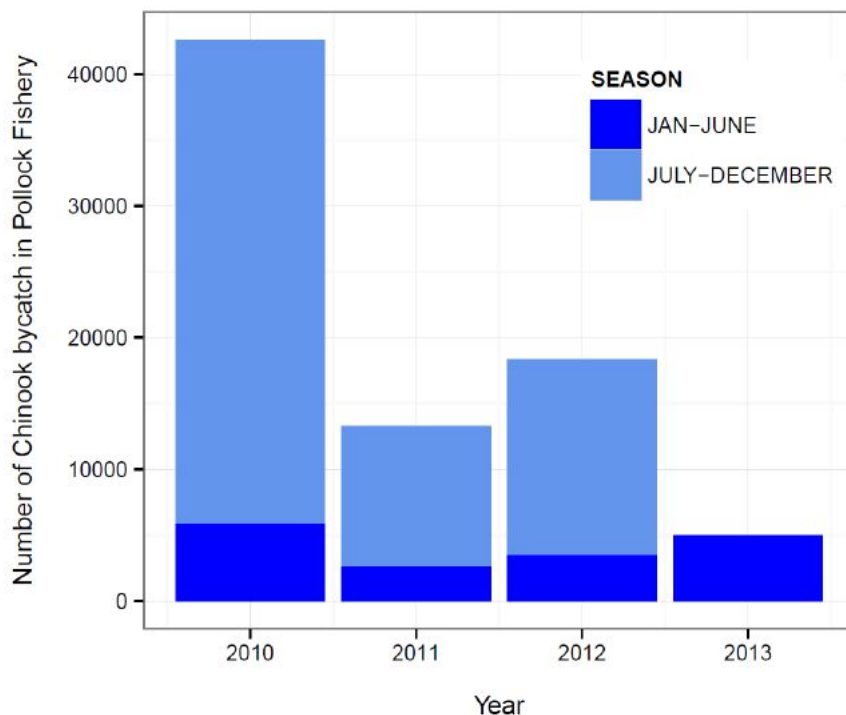


**Figure B-2. Salmon bycatch sampling duties for plant observers in the Gulf of Alaska pollock fishery for 2013. The methods are facilitated by full-retention requirements enabled by Amendment 93 to the GOA FMP.**

### *Evaluating Different Protocols: Sample size and cost*

Continued collaboration between the AFSC Observer Program and the Alaska Regional Office with the implementation of the 2013 Observer Program has facilitated the development of an integrated data set whereby data in the Catch Accounting System can be linked to the interagency database *eLandings* and the Observer Program database NORPAC. The result is a dataset containing observed and unobserved trips, as well as the number of Chinook salmon estimated in the delivery and the number of Chinook salmon genetic samples obtained by observers dockside in the Gulf of Alaska pollock fishery. We evaluated this data from 2012 and 2013 to ask the question: *What genetic samples could we have expected if the at-sea “vessel*

*observer” had followed the fish during the offload at the plant and taken a genetic sample from every Chinook they encountered?* This question is asked because this alternative method reflects the sampling design that was in place in the Gulf of Alaska prior to 2013 (Figure B-1, with the exception that all Chinook salmon are sampled on observed trips) and represents a tradeoff between efficiency of observer days and sample size that is counter to current methods. In the Pella and Geiger (2009) method all deliveries are to be observed and a subset of all bycatch salmon is removed for genetic tissues. This method carries high cost and demands for monitoring and compliance, however sampling every  $n^{th}$  fish ensures a constant sampling rate with respect to the genetic samples and limits the sample variance for the genetic analysis. In the alternative method a random subset of deliveries is observed and every bycatch salmon within the delivery is sampled for genetic tissues. This alternative method has a lower cost but carries increased analytic burdens for generating salmon stock of origin estimates. While the amount of uncertainty for each method is unknown, comparisons of the costs and sample yield between the two methods can be made. Making comparisons between methods over multiple years and seasons is warranted since the number of Chinook salmon caught as bycatch in the Gulf of Alaska pollock fishery is not constant throughout the year or between years Figure B-3. Here we define seasons by the first and second half of the year.



**Figure B-3. Number of Chinook bycatch in the Gulf of Alaska Pollock Fishery by year and season.**

The number of Chinook salmon bycatch ( $s$ ) estimated by the Catch Accounting System for each trip ( $i$ ), the number of genetic tissues actually obtained ( $g_{act}$ ), and the number of genetic tissues that would have been obtained if observers deployed on observed trips at-sea had sampled every  $s$  (i.e., the alternative method;  $g_{alt}$ ) were summed across all trips each season and are presented in Table B-1. To be conservative in our estimate for the alternative method, trips where a delivery was made to a tender were given a number of zero genetic tissues obtained. The alternative

method would have resulted in between 1.8 and 4.3 times more genetic tissues than current methods among seasons ( $g_{alt}/g_{act}$ ) and over 3 times more genetic tissues across all seasons.

**Table B-1. Number of Chinook salmon bycatch (S), the number of genetic tissues actually obtained using current methods ( $g_{act}$ ) and the number of tissues that are anticipated to be obtained on the trips that observers were actually deployed on at-sea using the alternative method ( $g_{alt}$ ).**

	JANUARY-JUNE 2012			JULY-DEC. 2012			JANUARY-JUNE 2013			Totals		
Port Code	S	$g_{act}$	$g_{alt}$	S	$g_{act}$	$g_{alt}$	S	$g_{act}$	$g_{alt}$	S	$g_{act}$	$g_{alt}$
Akutan	73	0	3	24	1	0	118	2	3	215	3	6
Inshore Floating Processor	5	0	0	311	0	0	33	2	8	349	2	8
King Cove	177	0	0	2,263	0	8	96	0	0	2536	0	8
Kodiak	2,614	251	997	6,732	342	2,177	4,587	446	811	13,933	1,039	3,985
Seward	28	2	0	44	0	0	57	0	0	129	2	0
Sand Point	619	71	256	5,407	282	511	77	8	4	6,102	361	770
<b>Total</b>	<b>3,516</b>	<b>324</b>	<b>1,256</b>	<b>14,781</b>	<b>625</b>	<b>2,695</b>	<b>4,969</b>	<b>458</b>	<b>826</b>	<b>23,265</b>	<b>1,407</b>	<b>4,777</b>
<b>Observed Portion</b>		<b>9%</b>	<b>36%</b>		<b>4%</b>	<b>18%</b>		<b>9%</b>	<b>17%</b>		<b>6%</b>	<b>21%</b>

The values for  $g_{alt}$  represent only one possible outcome from the alternative method (the salmon genetics samples expected from the actual trips observed at-sea). Since in the 2013 ADP observers are deployed randomly, we needed to explore the likely outcomes of sampling from different sets of trips because not all trips catch the same amount of Chinook salmon bycatch. Therefore we carried out further comparisons between methods using simulations. The total number of observed trips ( $n$ ) was used to yield the sample size to use in simulations each season. From the database of available trips and the estimated number of salmon bycatch in each, we made a random selection of  $n$  trips and summed the number of salmon genetics among all  $n$  trips ( $g_{sim}$ ). Since every trip does not contain the same number of salmon bycatch, this process was done 1000 times, to create a distribution of  $g_{sim}$  that encompasses the range of possible outcomes. As an analogy, this process resembles repeated lottery draws, where there are a bunch of ping pong balls (trips), each with a number (salmon), and only a few of those balls are selected and the sum of the numbers is equal to the expected number of salmon genetic tissues obtained. To be conservative in our estimate in simulations, trips where a delivery was made to a tender were given a number of zero genetic tissues obtained.

The results of our simulations allows us to further explore the expected number of observer days required to conduct Chinook salmon bycatch genetics sampling and to compare that to the number of days actually used to conduct these activities in each season. Observer Program staff with a history of conducting this activity were polled to answer the question of how long a Gulf of Alaska pollock delivery takes to monitor. A value of 4 hours was the most common response. In addition, it was assumed based on past experience of FMA staff that a conservative estimate to sample each fish was five minutes. Therefore, for each trip in each simulation,  $g_{sim}$  was multiplied by 0.08 hours and the value of four was added to the total. To calculate the number of observer days, it was assumed that an observer day would equal a 12 hour shift. Therefore the hourly total workloads each simulated trip were divided by 12 and rounded up to the nearest whole number to yield a number of observer days per simulated trip. Summing this value by

each simulation yielded the total number of expected observer days. This value was compared to the actual number of dockside observer days from NORPAC.

With the number of expected genetics tissues and the number of days required to sample them for each trip, we were able to multiply the number of days by the cost of an observer day to yield a total cost for dockside sampling for each sampled trip. The cost of an observer day under both actual and alternative methods was given the value under the 2013 ADP Contract to compare the efficiency of the methods under the same cost per unit basis (day). The value of  $g_{sim}$  divided by the cost in days yields the cost per  $g_{sim}$ . Summing  $g_{sim}$  across trips for each simulation resulted in the expected distribution of  $g_{sim}$  to compare against the actual costs performed with the same calculations (with actual day and sample number values).

The result of these comparisons are presented in Figure B-4 and summarized in Table B-2. The alternative method would have resulted in more genetic tissues collected over fewer days resulting in substantial gains in economic efficiency in all three seasons. The current method cost per sample estimates are between 3 and 10 times more expensive compared to those estimated from the alternative method across seasons. If the actual sampling effort and results were conducted under the existing observer contract, the results from table 2 can be used to sum the total costs of the actual and alternative method across seasons. While the actual cost of an observer day cannot be revealed, the alternative method represents a comparative total savings of almost a third of a million dollars across the three seasons examined here (~ \$310,000).

**Table B-2. Comparative results of dockside sampling for Chinook salmon bycatch in the Gulf of Alaska pollock fishery. For clarity the median value from simulations is given for the Alternative method.**

	JANUARY-JUNE 2012		JULY-DEC. 2012		JANUARY-JUNE 2013	
Port Code	Actual	Alternative	Actual	Alternative	Actual	Alternative
Sampled Chinook salmon (g)	324	1,079	625	2,244	458	913
Observer days	318	148	304	107	127	92
Cost per sample (\$)	763	107	378	37	216	78

For these reasons, it is recommended that the 2014 ADP adopt the alternative method with respect to genetic sampling for Chinook salmon with the recognition that the analyses performed here are limited in scope to economic efficiency on a cost per datum basis.

In summary, the alternative sampling approach is expected to reduce dockside observer costs and increase the amount of information available for genetic analysis. As shown in Table B-2, relying on vessel observers to collect information will substantially reduce observer costs associated with genetic sampling. In non-tender situations, vessel observers will attempt a census of Chinook bycatch on all observed trips, which eliminates the need to use systematic sampling to gain a consistent sampling rate (everything is counted). Genetic samples will also be obtained from pollock vessels delivering to tenders through at-sea sampling. At-sea sampling will provide some information on Chinook bycatch from these operations. However, the number of genetic samples obtained from these fisheries is likely to be low. There currently is not a feasible protocol that would improve sampling tender operations, but the NMFS recognizes the

importance of capturing fishing activity from these operations and will continue to explore alternative sampling methods.

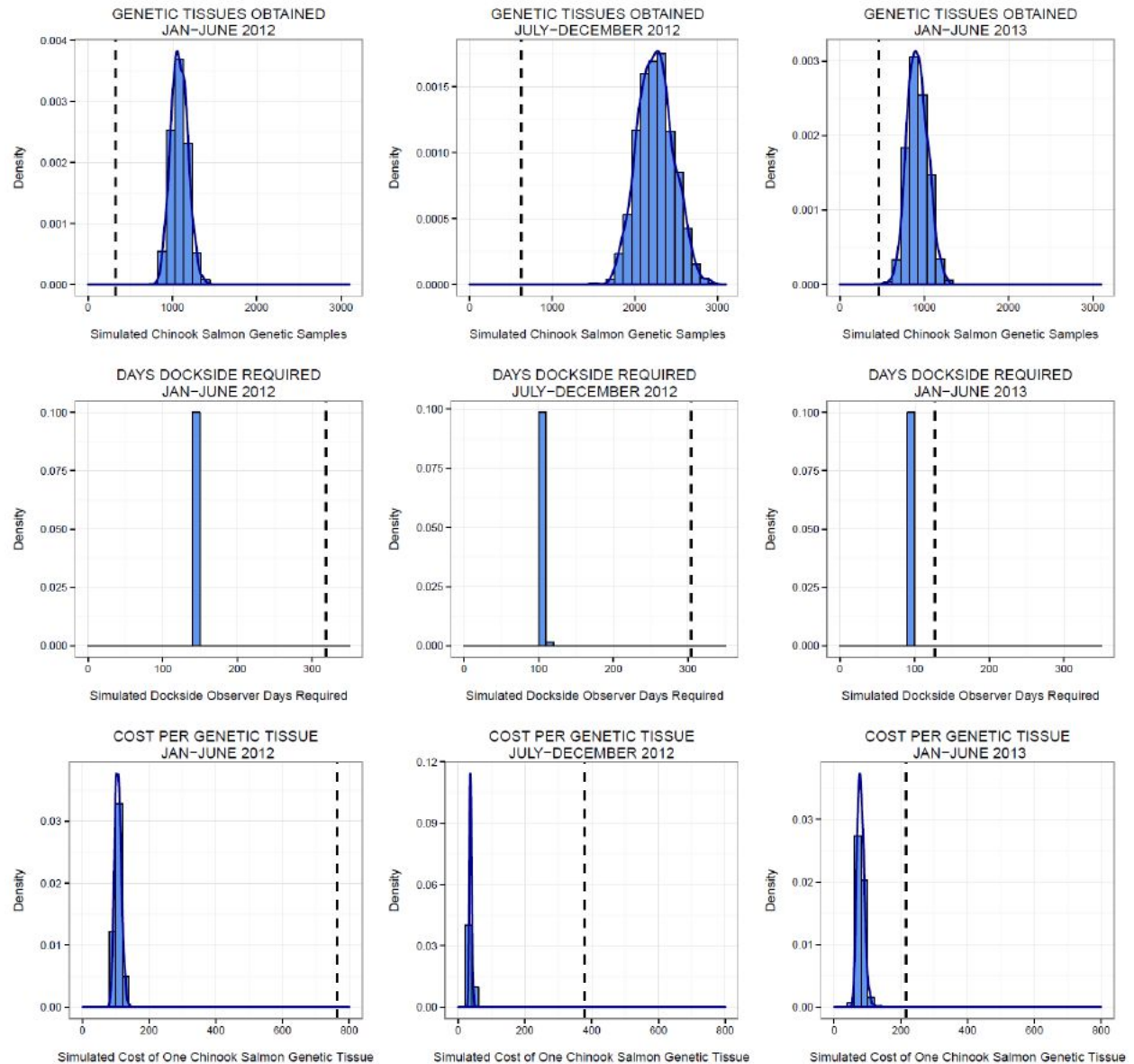


Figure B-4. Simulated values (blue histograms representing the alternative sampling method) and actual values (dashed vertical lines representing the current sampling method) for the number of genetic samples obtained (top row), the number of dockside observer days to collect those samples (middle row), and the cost of each genetic sample (bottom row). Columns represent each season. The y-axis “density” may be thought of as equivalent to likelihood for simulated values (larger values are more likely). In all cases the alternative method resulted in more genetic tissue samples at a lower cost than current methods.

## References

Guthrie, C. M. III, H. T. Nguyen, and J. R. Guyon. 2013. Genetic stock composition analysis of Chinook salmon bycatch samples from the 2011 Bering Sea and Gulf of Alaska trawl fisheries. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-244, 28 p.

Kondzela, C. M., C. T. Marvin, S. C. Vulstek, H. T. Nguyen, and J. R. Guyon. 2013. Genetic stock composition analysis of chum salmon bycatch samples from the 2011 Bering Sea walleye pollock trawl fishery. U.S. Dep. Commer., NOAA Tech. Memo. NMFS-AFSC-243, 39 p.

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## **Appendix C. Full Coverage Compliance Agreement Letter for the BSAI Pacific Cod Fleet**

### **EXAMPLE LETTER REQUESTING FULL COVERAGE IN BSAI PACIFIC COD FISHERY**

(Include your return mailing address)

(Date your letter)

James W. Balsiger  
National Marine Fisheries Service  
P.O. Box 21668  
Juneau, Alaska 99801

Dear Dr. Balsiger:

We are writing to request that the National Marine Fisheries Service assign the attached list of vessels with 100% observer coverage for 2014 any time these boats are fishing in the Bearing Sea Aleutian Islands (BSAI) in 2014. This will enable trawl catcher vessels in the BSAI Pacific cod fishery to take observer coverage in addition to that required for the partial observer coverage category.

We understand that we will be required to comply with all applicable regulations, including logging all fishing trips that are not AFA pollock prior to the start of a trip. Trips will be logged in the Observer Declare and Deploy System (ODDS).

Once the trips are logged, we understand that we will procure an observer through one of the five certified observer providers and pay for this observer coverage directly to the observer providers. In addition, we understand that the observer fee liability under §679.55 would continue to apply.

We agree to, and understand, the following:

1. individuals taken over and above existing observer coverage requirements are observers as defined at §679.2;
2. vessel owners and operators will comply with the prohibitions protecting observers that are at §679.7(g) and will meet the vessel responsibilities described at §679.51(e);
3. vessel owners and operators are subject to general requirements applicable to observers described at §600.746;
4. vessel owners or operators must log all fishing trips and follow applicable regulations when they are in the partial coverage category; and
5. landings will be subject to the observer fee under §679.55.

Sincerely,

Vessel Name: \_\_\_\_\_

Federal Fisheries Permit Number: \_\_\_\_\_

ADF&G Vessel Number: \_\_\_\_\_

Printed Name of the vessel owner: \_\_\_\_\_

Signature of the vessel owner: \_\_\_\_\_

Vessel Name: \_\_\_\_\_

Federal Fisheries Permit Number: \_\_\_\_\_

ADF&G Vessel Number: \_\_\_\_\_

Printed Name of the vessel owner: \_\_\_\_\_

Signature of the vessel owner: \_\_\_\_\_

Vessel Name: \_\_\_\_\_

Federal Fisheries Permit Number: \_\_\_\_\_

ADF&G Vessel Number: \_\_\_\_\_

Printed Name of the vessel owner: \_\_\_\_\_

Signature of the vessel owner: \_\_\_\_\_

Vessel Name: \_\_\_\_\_

Federal Fisheries Permit Number: \_\_\_\_\_

ADF&G Vessel Number: \_\_\_\_\_

Printed Name of the vessel owner: \_\_\_\_\_

Signature of the vessel owner: \_\_\_\_\_

## Appendix D. List of abbreviations

Abbreviation	Species (common name) or complex
POL	Walleye pollock
COD	Pacific cod
DWF	Deep water flatfish
SWF	Shallow water flatfish
HBT	Pacific halibut
RCK	Rockfish
FSL	Flathead sole
SBL	Sablefish
ATH	Arrowtooth flounder
REX	Rex sole
ATK	Atka mackerel
RKS	Rock sole
GRT	Greenland turbot
AKP	Alaska plaice
KAM	Kamchatka flounder
YEL	Yellowfin sole
OTH	Other

# Potential Regulatory Amendment for Tender Activity under the Observer Program December 2013<sup>1</sup>

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## 1 Introduction

Beginning in 2013, the Council and National Marine Fisheries Service (NMFS) implemented a restructured observer program for the groundfish and halibut fisheries of the North Pacific. The new observer program places all vessels and processors in the groundfish and halibut fisheries off Alaska into one of two categories: (1) a full coverage category, where vessels and processors obtain observers by contracting directly with observer providers, and (2) a partial coverage category, where NMFS will have the flexibility to decide when and where to deploy observers based on an annual deployment plan.

At the October 2013 meeting, the Council reviewed the draft 2014 Annual Deployment Plan (ADP), which identified that tender activity in the GOA may represent an important source of variance and/or bias in catch data from the partial coverage category. Discussion of the issue through the Council's Observer Advisory Committee (OAC) and at the meeting noted that first, a potential bias in the catch data could occur if vessels are making extended, unobserved deliveries to a tender, and second, salmon genetic sampling is not occurring with trawl tender deliveries. To address these issues, the Council requested that sufficient scoping information be brought forward at the December 2013 meeting for the Council to initiate a regulatory amendment. The Council prioritized the tendering issue over other potential regulatory amendments to the program<sup>2</sup> which had been previously tasked, because it addresses a bias in data quality, if fishing behavior on observed vessels delivering to tenders is not representative of vessels that are not observed.

This paper provides a short background on tender activity, identifies the two issues of concern to the Council, and some possible options for addressing them.

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<sup>1</sup> Prepared by: Diana Evans, Council staff, with input from Sally Bibb, Josh Keaton, Mary Alice McKeen, and Jennifer Mondragon, of NMFS Alaska Region; Martin Loefflad, NMFS AFSC FMA; Nathan Lagerwey and Mike Killery, NOAA OLE; and Jon McCracken, Council staff.

<sup>2</sup> In June 2013, the Council tasked staff to develop a discussion paper outlining the main issues associated with three proposed regulatory amendments to the restructured program, in order for the Council to consider initiating an amendment package to revise the Observer Program. The three proposals are (1) to evaluate moving the BSAI Pacific cod trawl catcher vessel (CV) fleet into the full coverage category; (2) for vessels that have previously operated as CVs and catcher processors (CPs) within a single year, to consider options to allow for an annual election of whether they should be considered CPs or CVs under the program; and (3) to change the method of observer fee collection for the IFQ fleet to use standardized current year ex-vessel prices.

## **2 Background on tender vessels**

A tender vessel is defined in regulation as a vessel that is used to transport unprocessed fish or shellfish received from another vessel to an associated processor (50 C.F.R. 679.2). In order to operate in Federal waters of the GOA or BSAI, a tender vessel must have a Federal fisheries permit (§ 679.4(b)). A single tender vessel can receive deliveries from multiple fishing vessels, depending on its capacity, and the regulations that limit tender activity. The use of tenders allows fishing vessels to keep fishing, without the delay and associated costs associated with travel to and from port. Throughout the course of a year, catcher vessels may deliver to tenders, shoreside processors, or even both during a single trip (split delivery), and the vessels that engage in these activities change from year to year.

In the partial coverage observer category, the primary fisheries where tender vessels are used are the GOA pollock (trawl vessels) and GOA Pacific cod (all gear types) target fisheries. There is also some tendering in the Bering Sea pot cod fishery. Tender vessels are often stationed in areas where there is no internet connection, or communication ability. When the catcher vessel delivers to the tender, a fish ticket is issued by the tender vessel, which estimates the weight of delivered catch. The tender submits the fish ticket data to the shoreside processor on its return, and the processor must enter the fish ticket information into eLandings<sup>3</sup> within 7 days of the initial delivery.

NMFS and the Alaska Department of Fish and Game (ADFG) are also implementing a tender component to eLandings, called tLandings. Originally developed for salmon tender reporting, the system is being expanded to some groundfish tendering in 2013. This system enables electronic data entry on board tender vessels without an internet connection. The application and landings reports (fish tickets) are stored on a portable thumb drive. Using the tLandings application, tender operators can create and print fish tickets similar to the current method used shoreside. When the tender makes a delivery to the shoreside processor, then landing data are uploaded into the eLandings system.

Tender vessels are not required to have observer coverage, and the regulations governing observer activities do not extend to tender vessels. For example, for vessels and processors that are subject to the observer program, regulations at § 679.51 specify vessel and processor responsibilities, which include providing safe conditions, access, notification, communication equipment, and assistance, including with transfer of observers at sea. Because the tender vessel provides the delivering vessel with a fish ticket, it must, at a minimum, have the ability to weigh the catch as it comes onboard. Some tender vessels may also have requisite space on board to allow some sorting of the catch, and the ability to accommodate an observer station.

Under the 30% observer coverage requirements that were in place before 2013, observers were sometimes ‘deployed’ from tender vessels. At that time, it was the responsibility of the vessel to contract with an observer provider to meet its obligations. When participating in tender fisheries, vessels could pay a water taxi to transport the observer to the fishing grounds, or ask the observer to get a ride out on an incoming tender vessel. Vessels would also share an observer, where one vessel would drop off the observer at the tender with its delivery, and another vessel would bring the observer onboard for its next trip.

## **3 What are the issues of concern**

There are two potential issues that have been identified with respect to tender activity, as discussed below.

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<sup>3</sup> eLandings is the Interagency Electronic Reporting System for reporting commercial fishery landings in Alaska.

### 3.1 Tender activity may be causing a bias in data quality due to unrepresentative observed versus unobserved fishing practices

The first issue of concern with respect to tender activity is that it may be that vessels are behaving differently when observed and delivering to tenders than they do when they are unobserved and engaging in the same practice. This difference in behavior may introduce a bias into the program data.

In the trip selection pool of the partial coverage category, vessel owners or operators are required to log each trip in the Observer Declare and Deploy System (ODDS), and they are immediately informed whether the trip has been randomly selected for observer coverage. The definition of a “trip” depends on the type of activity a vessel is engaged in. For a catcher vessel delivering to a shoreside processor or stationary floating processor, a trip is defined as the period of time that begins when a catcher vessel departs a port to harvest fish until the offload or transfer of all fish from that vessel. In contrast, for a catcher vessel delivering to a tender vessel, a trip is defined as the period of time that begins when a catcher vessel departs from port to harvest fish until the vessel returns to a port in which a shoreside processor or stationary floating processor with a valid FPP is located (§679.2). The definition of a tender trip allows a vessel to stay at sea, fishing, and make multiple deliveries without ending the trip.

The June 2013 Annual Performance Review (APR), a preliminary evaluation of observer coverage in the partial coverage category during the first sixteen weeks of 2013, included data on catcher vessels delivering to tenders (Faunce et al 2013). The June 2013 APR indicated that there may be incentive for vessels in the trip selection pool to fish more, and make more deliveries to a tender, when unobserved. Differences in behavior between unobserved and observed vessels can introduce bias in estimation, if fishing behavior on observed vessels is not representative of fishing behavior on unobserved vessels<sup>4</sup>. The APR identified that observed trips for catcher vessels delivering to tenders were typically shorter than unobserved trips for catcher vessels delivering to tenders, noting that data was limited to evaluate whether this trend is statistically important. During the time period evaluated, few (16) trips with tender deliveries were observed; by comparison, 136 trips with tender deliveries were unobserved. Table 1 shows the breakdown of trips delivering to tenders, by gear, area and target fishery.

**Table 1 Number of observed versus total trips including delivery to a tender vessel in the trip selection pool, organized by gear, target species (pollock or Pacific cod), and NMFS reporting area, in January-April 2013.**

Gear Type	Target fishery	Western GOA – 610	Central GOA – 620	Central GOA – 630	Bering Sea
		Number of observed trips among the number of total trips			
Trawl	Pollock	1 of 8	4 of 20		
	Pacific cod	1 of 31	7 of 34	0 of 2	
Hook and Line	Pacific cod		1 of 7	0 of 5	
Pot	Pacific cod	1 of 15	0 of 4	1 of 13	0 of 13

Source: Table 6 in Faunce et al 2013.

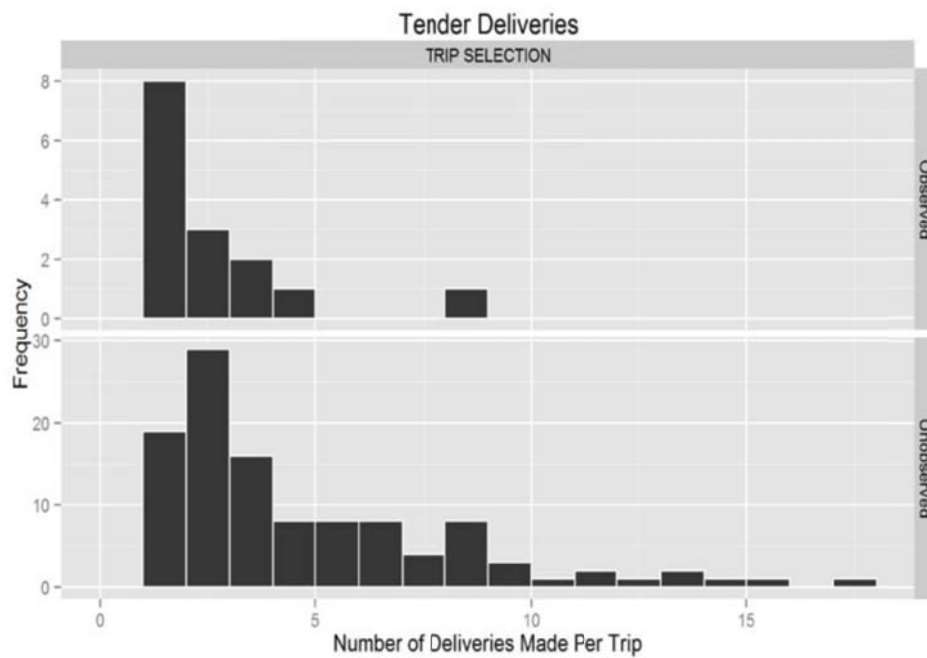
Among trip selection pool trips delivering to tenders, those that are unobserved make more deliveries, and stay at sea longer, than those that are observed. Figure 1 and Figure 2, from the June 2013 APR, compare observed and unobserved trips during the first sixteen weeks of 2013 which resulted in at least one delivery to a tender vessel. Figure 1 illustrates the distribution of the number of deliveries made on a tender trip, when vessels are observed versus unobserved. When observed, over half of all trips made just two deliveries, the minimum that would show up in the data, with a few vessels making 3, 4, or 5 deliveries during a trip, and a single vessel making 9 deliveries. When unobserved, the distribution of the number of deliveries changes. While the majority of unobserved trips still result in between 2 and 4 deliveries, vessels making just 2 deliveries represent only about 20% of the total. Also, about a third of all

<sup>4</sup> This potential bias should only occur in the trip selection stratum, since in the vessel selection pool, vessels are observed for all activities during a two-month period.

unobserved trips involve between 5 and 10 deliveries, and an additional 9 trips each make between 11 and 18 deliveries.

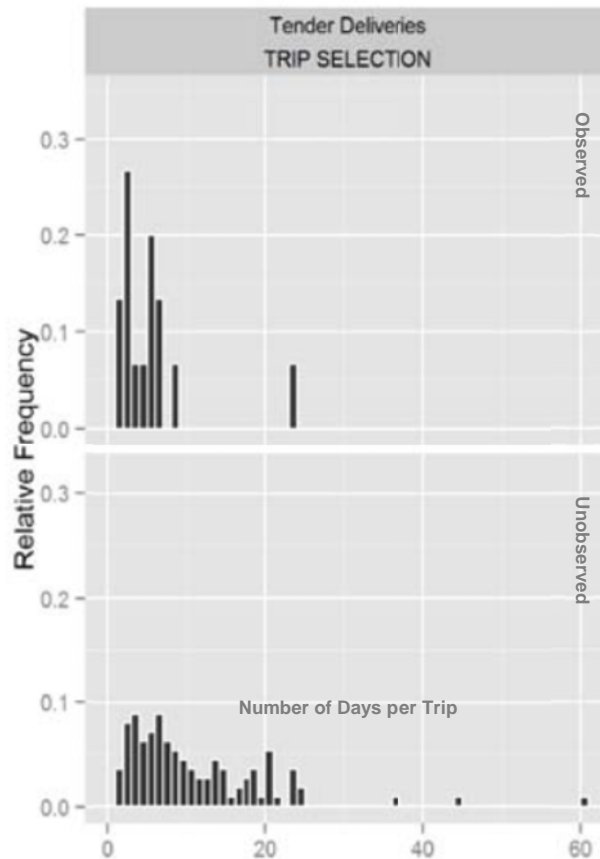
Figure 2 illustrates the comparative number of days fishing in a trip by vessels delivering to a tender, based on whether or not the trip is observed. For observed vessels, approximately 40% of all trips last between 1 and 2 days, and 95% of all trips are completed within 8 days. For unobserved vessels, the distribution is much less acute. Only a tenth of trips are completed within 1 to 2 days, and about a third are completed within 6 days. Over 60% are completed within 10 days, and 10% of all trips last longer than 20 days. The preliminary data indicate that vessels are exhibiting a different fishing behavior in terms of whether to remain at sea, fishing and delivering to tenders, versus returning to port, when observed versus unobserved.

**Figure 1** Distribution of the number of deliveries made in a trip in which at least one delivery was made to a tender vessel, presented by observation status, in January-April 2013.



Source: Figure 3 in Faunce et al 2013.

**Figure 2** Distribution of the number of days fished in a trip by vessels in the trip selection pool, organized by observation status and whether or not the delivery was made to a tender, in January-April 2013. The relative frequencies (vertical axis) in each plot sum to one.



Source: Figure 4 in Faunce et al 2013.

The proposed rule for the restructured observer program originally defined a trip exclusively as the period of time that begins when a catcher vessel departs a port to harvest fish until the offload or transfer of all fish from that vessel. This would have meant that while a trip might end at the time a vessel delivers to a tender, a new trip must begin with the vessel departing from a port, effectively removing the efficiency of using tenders when fishing far from port. In response to public comment on the proposed rule (see Comment 40 in 77 FR 70062), NMFS added an additional definition of a trip to address vessels delivering to a tender vessel. Public comment cited specifically that the final rule should provide a method for Western GOA CVs, which deliver the majority of their pollock and cod landings to tender vessels, to obtain observer coverage without having to transit back to Sand Point or King Cove. NMFS agreed that requiring these vessels to return to port would significantly impact the vessels' operations.

At the September 2013 Observer Advisory Committee (OAC) meeting, it was discussed that the ability to change behavior when delivering to a tender is being perceived by fishermen as a loophole in the program. It is therefore being viewed as a source of inequality, as vessels are disproportionately impacted by the costs associated with having to carry an observer. This is affecting fishermen's sense of whether the program is being implemented fairly.

### **3.2 Deliveries to tenders interfere with the ability to take genetic samples of salmon bycatch in the GOA**

The second issue of concern that has been identified with respect to tender activity is that when trawl vessels deliver GOA pollock and associated salmon bycatch to tenders, the salmon are not censused and genetically sampled, as happens when pollock is delivered to a shoreplant. Not including these salmon in the sampling protocol represents a data quality issue for developing hindcasts of the stock of origin for Chinook salmon bycatch. The Council has prioritized implementation of a robust sampling protocol for Chinook salmon in the GOA trawl pollock fisheries, to be able to better understand the stock composition of Chinook salmon taken as bycatch<sup>5</sup>. To facilitate this sampling, full retention is required by regulation for all salmon species taken in the pollock trawl fisheries, and a salmon sampling mechanism is included in the observer program ADPs. A related issue of concern with respect to tenders is that the offload census of salmon bycatch, which occurs shoreside by the observer, provides far more precise data for managing the PSC limit in place for Chinook salmon in the GOA pollock fishery, and is unavailable for tender deliveries.

The 2013 observer Annual Deployment Plan (ADP) accommodated the Council priority for salmon sampling in the pollock fishery by deploying dockside observers to ensure that all trawl offloads in the pollock fishery would be monitored. The onboard observer already monitors deliveries from observed vessels for salmon bycatch, so the dockside observers were intended to fill the gap for unobserved deliveries. Under the 2013 sampling protocol, dockside observers sampled salmon bycatch according to the protocols outlined in Pella and Geiger (2009), which rely on obtaining a complete census of all salmon taken as bycatch, after which 1 in every  $n^{\text{th}}$  salmon is sampled. As reported by the agency, however, the June 2013 APR revealed that complete monitoring of pollock deliveries in the GOA was not being achieved, due, in part, to vessels delivering to tenders. There was no provision in the 2013 ADP for plant observers to monitor either deliveries at the tender, or the tender's offload at the plant. As discussed above, tender vessels are not subject to observer coverage, and there are no regulations in place to allow NMFS to deploy observers on tender vessels to monitor deliveries. Under the 2013 ADP, NMFS had not proposed to monitor tender vessels offloading to the plant. Monitoring the offload of tender vessels would only provide information useful for genetic sampling, because once a catcher vessel has delivered to a tender, the catch from observed and unobserved vessels is mixed together in the tender hold, and therefore cannot be used to improve data for catch accounting, in the way that monitoring an observed pollock offload at a shoreside delivery improves the precision of salmon bycatch estimates relative to the GOA pollock Chinook salmon prohibited species catch limit.

In response to the Council's request for GOA salmon sampling in the GOA pollock trawl fishery, the agency was able to apply the Pella and Geiger salmon sampling protocols because the character of the fishery is such that there is very little discarding at sea in the pollock target fishery, and they thought they could have a high level of confidence that they were censusing all the salmon bycatch in the fishery. As discussed above, this did not prove to be the case in 2013 because of tender deliveries. Additionally, the Council has since expressed a priority for sampling salmon bycatch in the non-pollock trawl fisheries, and due to the very different nature of these target fisheries (where catch is regularly sorted at sea), a different sampling protocol is required. For the 2014 ADP, the agency has proposed an alternative salmon sampling plan that uses the randomization built into the observer selection process for the trip selection pool. Instead of sampling a systematic selection of salmon bycatch across all observed and unobserved pollock deliveries, the alternative approach will sample every salmon that is encountered during the randomized observed trips that occur in the GOA pollock fishery. This should provide data that will accomplish the Council's intent of identifying stock of origin Chinook salmon bycatch composition for the GOA pollock fishery, and will also allow for cost savings for the observer program as a whole.

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<sup>5</sup> The Council has also prioritized implementing a sampling protocol for Chinook salmon in the GOA non-pollock trawl fisheries as well; a proposed rule is currently being prepared to implement the full retention requirement in these fisheries.

For the 2014 salmon sampling protocol to be effective, the behavior of vessels fishing with an observer must be representative of vessels fishing without an observer. Therefore, if a solution is found to address the bias in catch data issue discussed in Section 3 above, the same solution will serve to ensure that the salmon sampling protocol is robust. However, the 2014 protocol relies on obtaining every salmon caught as bycatch on an observed trip in the pollock target fishery. Currently, the customary shoreside practice of allowing observers to monitor the offload pollock vessels in order to census salmon bycatch is not applied when delivering to tenders, as there is no regulatory provision to allow the observer to census the offload at the tender. Deploying dockside observers to monitor the offload of the tender at the plant would not help in this instance, as by that time observed and unobserved catch would be mingled in the hold.

#### **4 Potential options to address the concern**

There are several potential options that could be evaluated to address the issue with unrepresentative fishing causing a potential data bias with respect to vessels delivering to tenders, and salmon sampling concerns. These are listed below, along with some preliminary discussion points.

##### **Prohibit tendering**

One option is to prohibit tendering. The Council has the authority to regulate tender vessels under the MSA, and they are required to have a FFP in order to operate. The Council has restricted the use of tenders in the past, for example in the GOA pollock fishery as a Steller sea lion protection measure, and as a management measure to slow the pace of fishing. Prohibiting the use of tenders would address both concerns that have been identified with respect to tender activity: causing a bias in data quality due to observed fishing activity being unrepresentative of unobserved activity, and omitting salmon from sampling protocols. Logistically, this option would be simple to regulate and enforce.

The use of tender vessels is, however, longstanding in the Alaska fisheries, and may improve efficiency by allowing fuel and time savings. Tender vessels are particularly important in the western GOA, where the location of pollock and Pacific cod fishing grounds may be further from port, and the fleet is largely comprised of smaller trawl vessels (57-60 ft LOA). There are likely to be economic costs from prohibiting the use of tenders, and these may be disproportionately distributed among participants with different vessel sizes and resident in different areas.

##### **Deploy observers for catcher vessels from tenders**

A second option is to redefine a trip so that each delivery constitutes a separate trip (recall, under the current definition of a trip where a catcher vessel is delivering to a tender vessel, the “trip” begins and ends in a port, no matter how many deliveries to the tender occur during the “trip”), and allow a vessel to pick up an observer at the tender vessel. Under this option, the program would need to be able to deploy observers directly from the tender vessels.

In order to implement this option, regulatory amendments would be required in two areas. First, the definition of a tender trip would no longer be required, and the original definition of a fishing trip would be revised so that a trip can begin when a catcher vessel either departs a port to harvest fish, or departs from a tender to go fishing. Second, tenders are not part of the full or partial coverage category so certain regulations governing observer activities are not extended to tender vessels. These include prohibitions protecting observers at 50 CFR 679.7(g), vessel operator responsibilities at § 679.51(e), and general requirements at § 60.746. There would need to be some way to regulate tenders to require them to provide safe transportation and housing for an observer to be deployed from their vessel.

In terms of safety, this option could result in increased risk, as it inherently would increase the number of personnel transfers occurring at sea. There is evidence that this option is feasible, however, as it did occur under the old observer program. With respect to the first data quality concern identified, it could resolve the issue of unobserved vessels acting in a different way to observed vessels, by placing each delivery, whether to a tender or to a shoreplant, on an equal probability of being observed. This option would not resolve the second issue, of ensuring that salmon bycatch delivered to a tender is available for sampling.

There are, however, a number of logistical issues that the agency would need to work out under this option. When this occurred under the old program, the onus was on industry to provide themselves with an observer; now the onus is on NMFS (or the observer contractor) to get their observer to the appropriate place to be deployed. First, with respect to transportation of the observer, would NMFS require tender vessels to transport the observer if requested? Would NMFS pay the cost of transportation by water taxi, if a vessel is not available? Would vessels be reimbursed for the cost of the trip? Other requirements might need to be available on the tender vessel to house the observer, while waiting for deployment on the next observed trip. Deploying observers off tender vessels would require a change to the current observer contract. The tradeoff between the additional cost, and observer at sea days, should be evaluated.

Another logistical issue is how to deal with the potential lack of communication in areas where the tender vessels may be located, and fishing vessels operating. The ODDS system is dependent on vessels logging their upcoming trips online or on the phone, and there is a limit to how many trips may be logged at one time. The implementation of this option might necessitate limiting the number of deliveries a vessel may make without coming back to an area where the vessel operator can again log trips into ODDS. Given that the preliminary data to date show that a large number of trips do involve six or fewer deliveries, this may be feasible without severely impacting current fishing practice, however there are vessels that fish continually for longer time periods (some as long as 60 days).

The existing issues involved with ensuring that an observer is in the right place for a planned observed trip are exacerbated when the deployment location is on the fishing grounds, and the agency will have to consider the logistics further. A change to ODDS may be required to include a notification of a planned trip that will begin at a tender. Additionally, the agency will need to ensure that observers are not stranded, for example at a tender vessel from which a return transportation mechanism has not been devised.

#### **Allow catcher vessel observers to monitor deliveries on tenders**

Another option is to change the regulations to allow catcher vessel observers to work directly on tender vessels during the offload of catch, in a similar way to how they operate at shoreplants. This could be applied either independently, or in conjunction with the option above.

As with the option to deploy observers directly from a tender vessel, this option would result in an increase in the number of at sea transfers undertaken by observers, with an associated increase in safety risks. While this option would not address the concern regarding unrepresentative fishing by observed vessels, it could directly resolve the concern with respect to improving data quality both for salmon sampling, and for inseason management of the Chinook salmon PSC limit in the pollock fishery. By allowing observers to monitor and census salmon in pollock deliveries to tender vessels, the catch accounting system would be able to use the more reliable census numbers for accounting for salmon bycatch, rather than the less precise at sea sampling counts. With respect to salmon genetic sampling, this option would allow the full implementation of the new salmon sampling protocol for vessels delivering to tenders, which requires observers to sample all salmon that are encountered by the vessel on an observed trip.

As above, implementation of this option would require a change to the regulations governing observer activities. Additionally, tender vessels would be required to provide appropriate space on the tender vessel for an observer to sample the offload of a catcher vessel on which the observer has been working, just as the observer would otherwise monitor the offload of a pollock vessel shoreside. This would likely require the development of a comparable Catch Monitoring and Control Plan for tender vessels, including specifying the availability of a sampling area, restricting the transfer flow rate of the offload to allow the observer remove salmon bycatch, and other provisions.

An analysis of this option would need to consider whether these additional requirements would prohibit some vessels that are currently involved in tendering from participating in this activity. There is a large variety in the characteristics of the vessels that, at any one time, may operate as a tender. As a result, the additional costs involved in complying with these requirements will likely vary greatly across impacted vessels.

### **Place all catcher vessels delivering to a tender in the vessel selection pool**

A final option is to place any vessel delivering to a tender vessel in the vessel selection pool, or, defined another way, to prohibit vessels in the trip selection pool from delivering to a tender. This could potentially be considered either for vessels participating in a particular fishery during a defined season, or be required as an annual election for vessels intending to deliver to tenders during the course of the coming year. The option could also potentially be extended for all vessels participating in a particular target fishery, for example pollock.

This option could address the data quality concern outlined above, with respect to unrepresentative fishing behavior, because if a vessel in the vessel selection pool is selected for observer coverage, all trips during the selected two month period will be observed. This option does not address the salmon sampling concern.

One difficulty with this option is that it would base the assignment of a vessel to the pool on a characteristic that is flexible and unpredictable. A vessel's decision as to whether to deliver to a tender or a shore plant may vary by year, season, or even trip. Vessels are currently assigned to the vessel or trip selection pools based on fixed characteristics of the vessel. Placing vessels in the vessel selection pool based on vessel activity that can change from trip to trip is logistically difficult. It is likely that some kind of prior notice, or pre-registration to deliver to a tender, would be required as a regulatory amendment. Based on current notification patterns in the vessel selection pool, vessels would need to inform NMFS at least 3 months in advance that they intended to deliver to a tender, in order to be considered in the vessel selection pool random selection. Enforcement is more complicated when the selection of the observer coverage pool is not based on fixed characteristics, such as vessel length. This option would effectively allow vessel owners a choice to self-select which pool a vessel wanted to participate in, and the agency would have to define the constraints carefully in order to avoid the possibility of gaming the system, and introducing unintended consequences in terms of different data biases.

In its September 3, 2013, letter to the Council on the 2014 ADP, NMFS reported on its consideration of whether to recommend placing all catcher vessels delivering to a tender in the vessel selection pool to reduce the opportunity to manipulate trip length. However, NMFS did not recommend this approach for 2014, due both to the preliminary nature of the information available to evaluate the potential data quality concerns, and the complexity of the issue.

The Council may also want to consider this option in the context of other requested Council evaluations looking at the vessel and trip selection pools. The Council has asked for a discussion in June 2014 about whether the ADPs should go forward with two distinct vessel selection and trip selection pools, or

whether the program would be better served with having a single pool for all participants. Given these outstanding questions, it may not be worth exploring the issue of moving participants delivering to tenders into a different vessel class until this larger question is resolved.

### **Options considered but rejected**

The agency considered an option to prohibit tendering only when an observer is onboard. In order to begin an observed trip, a vessel would need to return to port to pick up the observer, and the vessel would not be able to deliver to a tender during that observed trip. This would create a disparity between the requirements for vessels when observed or when unobserved, which would be unpopular. It would also, however, fail to address the issue of fishing behavior while observed being unrepresentative of fishing behavior while unobserved – it would just solidify in regulation the difference, rather than having it be the result of a choice by the vessel operator. For this reason, this option is not presented as a solution to the tender activity concerns that have been identified.

## **5 Council action**

At the December 2013 meeting, the Council may choose whether to initiate a regulatory amendment to address observer coverage associated with vessels delivering to tenders. Section 4 describes different options that could be evaluated to address this issue, and articulates some of the general advantages or disadvantages of the various options. Should the Council decide to initiate an amendment, the Council should consider articulating the purpose and need for such an amendment, as well as a discussion of which of the options should be further evaluated in an analysis.

Also, if the Council chooses to initiate a regulatory amendment, the Council may wish to consider how the analysis of this issue should be prioritized compared to other observer program evaluations. The Council has already indicated that this regulatory amendment should be prioritized over other, potential amendments which will be evaluated in an upcoming staff discussion paper (i.e., moving the BSAI Pacific cod CV fleet into full coverage, allowing vessels that act as both CPs or CVs an annual choice as to whether to be in full or partial coverage, and changing the basis of observer fee collection for the IFQ fleet). During the first half of 2014, the agency will also be preparing the annual Observer Program Performance Review, which will be presented to the Council in June 2014. This will be the first analysis of a complete year of data under the restructured program, to see whether the deployment plan achieved its scientific goals. The Council has also asked for other evaluations to be presented in conjunction with the 2014 performance review, including an evaluation of the vessel and trip selection pools to see whether there should still be two separate pools, and an evaluation of programmatic costs of the program, including ways to insert cost effectiveness. Given that the same pool of staff expertise is necessary to complete all of these analyses, the Council may wish to articulate how the tendering regulatory amendment should be prioritized with these other Council requests.

Additionally, in June 2013, the Council also reviewed a separate discussion paper on tendering in the GOA, which addressed not only observer issues, but also patterns in the use of tenders by GOA community in recent years, and management implications with respect to the flow of catch accounting data resulting from the use of tenders. The Council requested that the paper be updated with information about AFA vessels are operating as tenders in GOA fisheries, the timeliness of catch accounting data flow, and the implications for collecting salmon genetic samples (also addressed in this paper). It is currently scheduled to come back to the Council in February; the Council may wish to consider how, procedurally, the other paper should interact with the observer coverage component of tender activity.

## 6 References

Faunce, C., J. Gasper, F. Wallace, J. Cahalan, J. Mondragon, T. Amar, S. Lowe, and R. Webster. Annual Performance Review, North Pacific Groundfish and Halibut Observer Program, First and Preliminary 2013 Version. NOAA.

## 7 Relevant Regulations

The following provides a listing of relevant regulations that may need to be revised in an amendment analysis. The list is not necessarily exhaustive.

### 7.1 Definition of a Fishing Trip

#### 50 CFR 679.2: Fishing trip means: ...

- (3) Groundfish and Halibut Observer Program. With respect to subpart E of this part, one of the following periods:
- (i) For a catcher vessel delivering to a shoreside processor or stationary floating processor, the period of time that begins when a catcher vessel departs a port to harvest fish until the offload or transfer of all fish from that vessel.
  - (ii) For a catcher vessel delivering to a tender vessel, the period of time that begins when a catcher vessel departs a port to harvest fish until the vessel returns to a port in which a shoreside processor or stationary floating processor with a valid FPP is located.

**Tender vessel** (see also the definition of “buying station” under this section) means a vessel that is used to transport unprocessed fish or shellfish received from another vessel to an associated processor.

**Buying station** means a tender vessel or land-based entity that receives unprocessed groundfish from a vessel for delivery to a shoreside processor, stationary floating processor, or mothership and that does not process those fish.

### 7.2 Observer Requirements for vessels and plants

#### 50 CFR 679.51 Observer requirements for vessels and plants

##### (a) Observer requirements for vessels

- (5) Observer coverage duration. If selected, a vessel is required to carry an observer for the entire fishing trip.
- (i) A fishing trip selected for observer coverage may not begin until all previously harvested fish has been offloaded and an observer is aboard the vessel.
  - (ii) An observer may not be transferred off a catcher vessel until the observer confirms that all fish from the observed fishing trip are offloaded.
  - (iii) A vessel must make a minimum of one delivery to a tender vessel to be subject to paragraph (3)(ii) of the fishing trip definition at § 679.2.

##### (e) Responsibilities

###### (1) Vessel responsibilities.

An operator of a vessel required to carry one or more observers must:

- (i) Accommodations and food. Provide, at no cost to observers or the United States, accommodations and food on the vessel for the observer or observers that are equivalent to those provided for officers, engineers, foremen, deck-bosses, or other management level personnel of the vessel.
- (ii) Safe conditions.
  - (A) Maintain safe conditions on the vessel for the protection of observers including adherence to all U.S. Coast Guard and other applicable rules, regulations, or statutes pertaining to safe operation of the vessel.

- (B) Have on board:
- (1) A valid Commercial Fishing Vessel Safety Decal issued within the past 2 years that certifies compliance with regulations found in 33 CFR Chapter I and 46 CFR Chapter I;
  - (2) A certificate of compliance issued pursuant to 46 CFR 28.710; or
  - (3) A valid certificate of inspection pursuant to 46 U.S.C. 3311.
- (iii) Transmission of data. Facilitate transmission of observer data by:
- (A) Observer use of equipment. Allowing observers to use the vessel's communications equipment and personnel, on request, for the confidential entry, transmission, and receipt of work-related messages, at no cost to the observers or the United States.
  - (B) Communication equipment requirements. In the case of an operator of a catcher/processor, mothership, a catcher vessel 125 ft. LOA or longer (except for a vessel fishing for groundfish with pot gear), or a catcher vessel participating in the Rockfish Program:
    - (1) Observer access to computer. Making a computer available for use by the observer. This computer must be connected to a communication device that provides a point-to-point connection to the NMFS host computer.
    - (2) NMFS-supplied software. Ensuring that the catcher/processor, mothership, or catcher vessel specified in paragraph (e)(1) of this section has installed the most recent release of NMFS data entry software provided by the Regional Administrator, or other approved software.
    - (3) Functional and operational equipment. Ensuring that the communication equipment required in paragraph (e)(1)(iii)(B) of this section and that is used by observers to enter and transmit data, is fully functional and operational. "Functional" means that all the tasks and components of the NMFS supplied, or other approved, software described at paragraph (e)(1)(iii)(B)(2) of this section and the data transmissions to NMFS can be executed effectively aboard the vessel by the communications equipment.
- (iv) Vessel position. Allow observers access to, and the use of, the vessel's navigation equipment and personnel, on request, to determine the vessel's position.
- (v) Access. Allow observers free and unobstructed access to the vessel's bridge, trawl or working decks, holding bins, processing areas, freezer spaces, weight scales, cargo holds, and any other space that may be used to hold, process, weigh, or store fish or fish products at any time.
- (vi) Prior notification. Notify observers at least 15 minutes before fish are brought on board, or fish and fish products are transferred from the vessel, to allow sampling the catch or observing the transfer, unless the observers specifically request not to be notified.
- (vii) Records. Allow observers to inspect and copy the vessel's DFL, DCPL, product transfer forms, any other logbook or document required by regulations, printouts or tallies of scale weights, scale calibration records, bin sensor readouts, and production records.
- (viii) Assistance. Provide all other reasonable assistance to enable observers to carry out their duties, including, but not limited to:
- (A) Measuring decks, codends, and holding bins.
  - (B) Providing the observers with a safe work area adjacent to the sample collection site.
  - (C) Collecting bycatch when requested by the observers.
  - (D) Collecting and carrying baskets of fish when requested by observers.
  - (E) Allowing observers to determine the sex of fish when this procedure will not decrease the value of a significant portion of the catch.
  - (F) Collecting all seabirds that are incidentally taken on the observer sampled portions of hauls using hook-and-line gear or as requested by an observer during non-sampled portions of hauls.
- (ix) Transfer at sea.
- (A) Ensure that transfers of observers at sea are carried out during daylight hours, under safe conditions, and with the agreement of observers involved.
  - (B) Notify observers at least 3 hours before observers are transferred, such that the observers can collect personal belongings, equipment, and scientific samples.

- (C) Provide a safe pilot ladder and conduct the transfer to ensure the safety of observers during transfers.
- (D) Provide an experienced crew member to assist observers in the small boat or raft in which any transfer is made.

(2) Shoreside processor and stationary floating processor responsibilities.

A manager of a shoreside processor or a stationary floating processor that is required to maintain observer coverage as specified under paragraph (d) of this section must:

- (i) Safe conditions. Maintain safe conditions at the shoreside processing facility for the protection of observers by adhering to all applicable rules, regulations, or statutes pertaining to safe operation and maintenance of the processing facility.
- (ii) Operations information. Notify the observers, as requested, of the planned facility operations and expected receipt of groundfish prior to receipt of those fish.
- (iii) Transmission of data. Facilitate transmission of observer data by:
  - (A) Observer use of equipment. Allowing observers to use the shoreside processor's or stationary floating processor's communication equipment and personnel, on request, for the entry, transmission, and receipt of work-related messages, at no cost to the observers or the United States.
  - (B) Communication equipment requirements
    - (1) Observer access to computer. Making a computer available for use by the observer. This computer must be connected to a communication device that provides a point-to-point connection to the NMFS host computer
    - (2) NMFS-supplied software. Ensuring that the shoreside or stationary floating processor specified in paragraph (e)(2) of this section has installed the most recent release of NMFS data entry software provided by the Regional Administrator, or other approved software.
    - (3) Functional and operational equipment. Ensuring that the communication equipment required in paragraph (e)(2)(iii)(B) of this section and that is used by observers to enter and transmit data, is fully functional and operational. "Functional" means that all the tasks and components of the NMFS supplied, or other approved, software described at paragraph (e)(2)(iii)(B)(2) of this section and the data transmissions to NMFS can be executed effectively aboard the vessel by the communications equipment.
    - (iv) Access. Allow observers free and unobstructed access to the shoreside processor's or stationary floating processor's holding bins, processing areas, freezer spaces, weight scales, warehouses, and any other space that may be used to hold, process, weigh, or store fish or fish products at any time.
    - (v) Document access. Allow observers to inspect and copy the shoreside processor's or stationary floating processor's landing report, product transfer forms, any other logbook or document required by regulations; printouts or tallies of scale weights; scale calibration records; bin sensor readouts; and production records.
    - (vi) Assistance. Provide all other reasonable assistance to enable the observer to carry out his or her duties, including, but not limited to:
      - (A) Assisting the observer in moving and weighing totes of fish.
      - (B) Providing a secure place to store sampling gear.

(3) The owner of a vessel, shoreside processor, stationary floating processor, or buying station is responsible for compliance and must ensure that the operator or manager of a vessel, shoreside processor, or stationary floating processor required to maintain observer coverage under paragraphs (a) or (b) of this section complies with the requirements given in paragraphs (e)(1) and (e)(2) of this section.

### 7.3 General MSA requirements for observers

#### §600.746 Observers.

(a) *Applicability.* This section applies to any fishing vessel required to carry an observer as part of a mandatory observer program or carrying an observer as part of a voluntary observer program under the Magnuson-Stevens Act, MMPA (16 U.S.C. 1361 *et seq.*), the ATCA (16 U.S.C. 971 *et seq.*), the South Pacific Tuna Act of 1988 (16 U.S.C. 973 *et seq.*), or any other U.S. law.

(b) *Observer safety.* An observer will not be deployed on, or stay aboard, a vessel that is inadequate for observer deployment as described in paragraph (c) of this section.

(c) *Vessel inadequate for observer deployment.* A vessel is inadequate for observer deployment if it:

(1) Does not comply with the applicable regulations regarding observer accommodations (see 50 CFR parts 229, 285, 300, 600, 622, 635, 648, 660, and 679), or

(2) Has not passed a USCG Commercial Fishing Vessel Safety Examination, or for vessels less than 26 ft (8 m) in length, has not passed an alternate safety equipment examination, as described in paragraph (g) of this section.

(d) *Display or show proof.* A vessel that has passed a USCG Commercial Fishing Vessel Safety Examination must display or show proof of a valid USCG Commercial Fishing Vessel Safety Examination decal that certifies compliance with regulations found in 33 CFR Chapter 1 and 46 CFR Chapter 1, and which was issued within the last 2 years or at a time interval consistent with current USCG regulations or policy.

(1) In situations of mitigating circumstances, which may prevent a vessel from displaying a valid safety decal (broken window, etc.), NMFS, the observer, or NMFS' designated observer provider may accept the following associated documentation as proof of the missing safety decal described in paragraph (d) of this section:

(i) A certificate of compliance issued pursuant to 46 CFR 28.710;

(ii) A certificate of inspection pursuant to 46 U.S.C. 3311; or

(iii) For vessels not required to obtain the documents identified in (d)(1)(i) and (d)(1)(ii) of this section, a dockside examination report form indicating the decal number and date and place of issue.

(e) *Visual inspection.* Upon request by an observer, a NMFS employee, or a designated observer provider, a vessel owner or operator must provide correct information concerning any item relating to any safety or accommodation requirement prescribed by law or regulation, in a manner and according to a timeframe as directed by NMFS. A vessel owner or operator must also allow an observer, a NMFS employee, or a designated observer provider to visually examine any such item.

(f) *Vessel safety check.* Prior to the initial deployment, the vessel owner or operator or the owner or operator's designee must accompany the observer in a walk through the vessel's major spaces to ensure that no obviously hazardous conditions exist. This action may be a part of the vessel safety orientation to be provided by the vessel to the observer as required by 46 CFR 28.270. The vessel owner or operator or the owner or operator's designee must also accompany the observer in checking the following major items as required by applicable USCG regulations:

(1) Personal flotation devices/ immersion suits;

(2) Ring buoys;

(3) Distress signals;

(4) Fire extinguishing equipment;

(5) Emergency position indicating radio beacon (EPIRB), when required, shall be registered to the vessel at its documented homeport;

(6) Survival craft, when required, with sufficient capacity to accommodate the total number of persons, including the observer(s), that will embark on the voyage; and

(7) Other fishery-area and vessel specific items required by the USCG.

(g) *Alternate safety equipment examination.* If a vessel is under 26 ft (8 m) in length, and in a remote location, and NMFS has determined that the USCG cannot provide a USCG Commercial Fishing Vessel Safety Examination due to unavailability of inspectors or to unavailability of transportation to or from an inspection station, the vessel will be adequate for observer deployment if it passes an alternate safety equipment examination conducted by a NMFS certified observer, observer provider, or a NMFS observer program employee, using a checklist of USCG safety requirements for commercial fishing vessels under 26 ft (8 m) in length. Passage of the alternative examination will only be effective for the single trip selected for observer coverage.

(h) *Duration.* The vessel owner or operator is required to comply with the requirements of this section when the vessel owner or operator is notified orally or in writing by an observer, a NMFS employee, or a designated observer provider, that his or her vessel has been selected to carry an observer. The requirements of this section continue to apply through the time of the observer's boarding, at all times the observer is aboard, and at the time the observer disembarks from the vessel at the end of the observed trip.

(i) *Effect of inadequate status.* A vessel that would otherwise be required to carry an observer, but is inadequate for the purposes of carrying an observer, as described in paragraph (c) of this section, and for allowing operation of normal observer functions, is prohibited from fishing without observer coverage.

[63 FR 27217, May 18, 1998, as amended at 67 FR 64312, Oct. 18, 2002; 72 FR 61818, Nov. 1, 2007]

# **Regulatory Impact Review / Initial Regulatory Flexibility Analysis to Amend Regulations for Participants in the Bering Sea/Aleutian Islands Regulatory Areas.**

## **COST RECOVERY FROM AMENDMENT 80, GROUND FISH AND HALIBUT/SABLEFISH COMMUNITY DEVELOPMENT QUOTA, AMERICAN FISHERIES ACT AND ALEUTIAN ISLANDS POLLOCK QUOTA RECIPIENTS, AND THE FREEZER LONGLINE COALITION**

### **Third Review Draft**

**December 2013**

Lead Agency: National Marine Fisheries Service, Alaska Region  
National Oceanic and Atmospheric Administration

Responsible Official: James Balsiger, Administrator  
Alaska Regional Office, National Marine Fisheries Service

For further information contact: X, National Marine Fisheries Service,  
Alaska Region  
P.O. Box 21668, Juneau, AK 99802  
(907) 586-XXXX

**Abstract:** This document is a Regulatory Impact Review/Initial Regulatory Flexibility Analysis analyzing implementation of a cost recovery program for the Amendment 80 program, the groundfish and halibut/sablefish Community Development program, the American Fisheries Act program, and the Freezer Longline Coalition. The measures under consideration would define the fee structure to collect of up to 3 percent of the ex-vessel value of species allocated to participants in these programs. The fee paid by beneficiaries of each program would offset the actual costs agencies incur that are directly related to the management, data collection, and enforcement of each program that would not have been incurred had the program not been implemented.

## Executive Summary

The proposed actions would implement a Limited Access Permit (LAP) program/CDQ cost recovery fee for the American Fisheries Act (AFA) and Aleutian Islands (AI) pollock, Amendment 80, Community Development Quota (CDQ) program for halibut and groundfish, and the Freezer Longline Coalition (FLC) for Bering Sea and Aleutian Islands (BSAI) Pacific cod. The MSA both authorizes and requires the collection of cost recovery fees for LAP programs and CDQ programs. MSA cost recovery fees may not exceed 3 percent of the ex-vessel value and must recover costs associated with the management, data collection, and enforcement, of these programs that are directly incurred by government agencies tasked with overseeing these fisheries.

Cost recovery fees would be collected from the AFA cooperatives, the Aleut Corporation, Amendment 80 cooperatives, Freezer Longline Coalition<sup>1</sup>, and CDQ groups. The cost recovery fee percentage would be determined annually by the Regional Administrator of the NMFS Alaska Region and published in a Federal Register (FR) notice. Along with the fee percentage, standard prices will be reported in an FR notice for each species directly allocated to the LAP program or CDQ program. Three options are considered to determine standardized prices. The first system would require Volume and Value reports to be implemented for all species except CDQ halibut and fixed gear sablefish. Prices for those species will be based on the current IFQ cost recovery reporting system. The second option would use Commercial Operator's Annual Report (COAR) data currently being submitted to the State of Alaska to estimate standard prices. The third option is to use the standard ex-vessel prices calculated for the Alaska state landings tax (using COAR data). The last two methods would use prices from the previous year as a proxy for current year prices. However, implementing that system would reduce the reporting burden on industry and would, in most years, only affect the fee percentage and not the cost recovery fee amount realized by an individual. Given the estimates of fee percentages that would be imposed on each program, it is unlikely that using the previous year's prices would result in the cost recover fee exceeding 3 percent of ex-vessel value in any year. Different pricing methodologies could be developed for different cost recovery fee programs, since the mix of species allocated and, therefore, the impacts of selecting prices, varies by program.

Based on the estimated gross ex-vessel revenue from the species directly allocated to the Amendment 80 sector over the years 2008 through 2011, the sector generated between \$77 million and \$112 million, annually. Relative to the estimated recoverable costs, these values result in a cost recovery fee of about 1.2 percent to 1.8 percent, depending on the year to generate a projected \$1.36 million to cover reimbursable costs. In 2011, the most recent year value data are available; the estimated fee is 1.22 percent. The CDQ program was estimated to annually generate between \$47 million and \$86 million during the years 2008 through 2011. Their recoverable costs are estimated to be \$630,000 per year. That translates to a fee percentage that ranges from 0.7 percent to about 1.3 percent over those years. The fee percentage for 2011, the most recent year data are available, was about 0.86 percent of the gross ex-vessel value of species directly allocated to the CDQ program. Over the same 2008 through 2011 period, the AFA/AI pollock fishery was estimated to annually generate from \$208 million to \$398 million. Recoverable costs for the AFA/AI pollock fisheries were estimated at \$1.21 million. These revenues and costs translate to an estimated fee percentage of 0.30 percent to 0.58 percent, with the most recent year being 0.34 percent of gross ex-vessel value. FLC annual revenues were estimated to be between \$42 million and \$99 million, from 2008 through 2011. Cost estimates for the sector were about \$370,000, based on 2012 estimates. The estimated cost recovery fees are estimated to range between 0.37 percent and 0.88 percent, based on recent conditions. None of the fisheries included under the proposed cost recovery programs are projected to have a

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<sup>1</sup> The FLC formed a cooperative called the Freezer Longline Coalition Cooperative (FLCC). That voluntary cooperative fishing program is designed to end the "race for fish" that has characterized the Alaska freezer longline fishery since its inception in the 1980s. Members of the FLC are also considered a person through their \$35.7 million federal loan to purchase freezer longliner groundfish licenses.

cost recovery fee of the maximum 3 percent when the program is implemented. However, fluctuations in TACs and ex-vessel prices in the future, or increases in agency costs could result in the fee increasing to the 3 percent maximum, or decreasing relative to the projected values provided in this analysis. Uncertainty associated with each of these factors precludes making specific projections of future trends. However, the 3 percent limit imposed on any cost recovery fee creates a cap that may not be exceeded, and any agency costs above that limit must be borne by the management agencies.

All costs recovery fees must be submitted to NMFS by the designated representative of the CDQ group, Cooperative, the Aleut Corporation, or the FLC. The entire fee liability payment must be submitted to NMFS using an approved electronic method by the deadline defined for their sector. However, NMFS would retain the option of reducing the allocation to a person<sup>2</sup> by the same percentage as the cost recovery fee that was not submitted. This flexibility would allow NMFS to issue quota to a cooperative so that members that paid the fee would not be penalized. Insufficient or late fee submissions may result in the sending of an IAD to the designated representative stating that the permit holder's estimated fee liability was not submitted and NMFS may disapprove any or part of the allocation or application for allocation transfers to or from the CQ permit holder.

It is expected that the cost of fee will be borne by the harvesting vessel owners (or shared by the owner and the harvesting crew as a cost of business). The amount of the fee will determine the annual impact, but the overall fee assessed is expected to be less than the benefits the quota recipients derive from harvesting or leasing their allocation. To the extent that a portion of the cost that is taken from the crew shares it will result in a reduction in crew revenue. The overall impact to the crew that results from the LAP programs will depend on how crew shares were modified under the program in general. Crew shares may be reduced, relative to the status quo, as a result of implementing the cost recovery program, regardless of whether their shares and crew payments increased or decreased after the LAP program was implemented.

Participants in the Amendment 80 and CDQ groundfish programs will be required to submit Volume and Value reports for the landings of species that are subject to the cost recovery fee. It is estimated, based on previous Volume and Value reports for the Central Gulf Rockfish Program that each annual submission will require two hours of staff time from the processors, in addition to their time spent filing numerous other required reports. Participants in the AFA and FLC cooperative may use price data that are currently submitted, or request that NMFS impose a Volume and Value Report to determine prices.

Communities are not expected to be substantially impacted by this action. This action will not change the amount of fish landed under the subject LAP programs and the CDQ program, nor will the action change the location of deliveries. The greatest potential impact to communities, as represented by the CDQ groups or the Aleut Corporation, would occur if the CDQ groups or the Aleut Corporation are unable to pass the cost of the fee on to their harvesters/partners when contracts are negotiated. Other communities may realize very modest impacts through reduced income of residents, and therefore reduced expenditures. Residents include any vessel owners or crew that realize reduced income as a result of cost recovery fee payments.

Because the cost recovery fee is a transfer payment<sup>3</sup>, it is excluded from net benefit calculations. Therefore, this action will not impact net benefits to the nation.

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<sup>2</sup> Person in this case refers to the CDQ groups or the cooperatives that are formed in the LAP programs

<sup>3</sup> Payments that are made without any good or service being directly received in return. They are essentially a redistribution of income within a market system.



**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**

*National Marine Fisheries Service*

*P.O. Box 21668*

*Juneau, Alaska 99802-1668*

December 2, 2013

**RECEIVED**  
DEC - 4 2013

Mr. Chris Oliver  
Executive Director  
North Pacific Fishery Management Council  
605 West 4th Avenue, Suite 306  
Anchorage, Alaska 99501-2252

Dear Chris:

In February 2013, the North Pacific Fishery Management Council (Council) recommended Amendment 44 to the Fishery Management Plan for Bering Sea/Aleutian Islands King and Tanner Crabs (FMP). Amendment 44 would modify the right of first refusal (ROFR) provisions in the Bering Sea and Aleutian Islands crab rationalization program. The ROFR provides specific community entities an opportunity to purchase community-designated processor quota share (PQS) or annual individual processor shares (IPQ) proposed for sale subject to the same terms and conditions. The FMP specifies the provisions required in a ROFR contract between a community entity and PQS/IPQ holder. Amendment 44 would modify the contract provisions in the FMP. We note that PQS/IPQ holders and community entities may need to establish new or revised ROFR contracts to be consistent with Amendment 44. When combined with proposed regulatory requirements, a ROFR contract consistent with Amendment 44 would be required before the National Marine Fisheries Service (NMFS) would issue annual IPQ or approve PQS or IPQ transfers. We believe that these proposed requirements are necessary and consistent with Council intent. We do not believe action is required by the Council. However, we wished to advise the Council and public of our proposed approach, and provide an opportunity for input from the Council. The following paragraphs provide additional detail.

Amendment 44, and the accompanying proposed rule would implement three actions. Under Action 1, the Council recommended amending the FMP to increase the time available for a community entity to provide notification of its intent to exercise a ROFR from 60 days to 90 days, and to increase the time allowed for a community entity to perform under a ROFR contract from 120 days to 150 days. Under Action 2, the Council recommended amending the FMP to: (1) remove an existing provision that states a ROFR lapses if a processor uses its annual IPQ outside a designated community for three consecutive years; and (2) require that a PQS holder establish a new ROFR with a community entity even if a community entity that held a ROFR privilege failed to exercise a ROFR. Under the second provision of Action 2, the PQS holder would designate the community entity that will hold the ROFR privilege. Under Action 3, the Council recommended regulatory provisions that would create several reporting requirements for

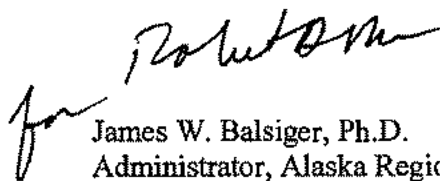


PQS/IPQ holders. These reporting requirements are intended to provide community entities and NMFS with better information concerning the use of PQS and IPQ, and ensure that all affected entities are aware of any proposed actions that could trigger a ROFR.

Under the proposed regulations needed to implement Action 3, NMFS would require that the PQS holder provide NMFS with confirmation that a required ROFR contract exists between a PQS/IPQ holder and the appropriate community entity. This confirmation would be required in the annual IPQ permit application, and in any PQS and IPQ transfer applications. To be consistent with Amendment 44, all ROFR contracts would need to contain the revised terms and conditions described under Action 1 and 2. Depending on the specific provisions contained in an existing ROFR contract, a PQS/IPQ holder and a community entity may need to establish a new or revised ROFR contract. By including the notification as part of these applications, NMFS realizes that if an applicant is unable to establish a revised ROFR contract with a community entity and provide confirmation to NMFS, an application would be considered incomplete. In that case, NMFS would withhold issuance of annual IPQ, or not complete the transfer of PQS or IPQ, depending on the application. We note that the analysis prepared for Amendment 44 did not include a discussion on the potential implications of this proposed regulatory approach and the potential effects on negotiations between community entities and PQS/IPQ holders. NMFS intends to revise the analytical documents prepared to support Amendment 44 to describe and assess this approach. That revised analysis will be provided for public review during public comment on Amendment 44 and the proposed rule.

Staff will be available at the Council meeting, if the Council has additional questions or concerns.

Sincerely,

  
James W. Balsiger, Ph.D.  
Administrator, Alaska Region

**North Pacific Fisheries Association and Saltwater Inc.  
Electronic Monitoring for Small Boats in Alaska**

**National Fish and Wildlife Foundation Project  
June 2012 - September 2013**

**Context:**

This project was conceived in the Fall of 2011 when it became known that:

- The restructure of the North Pacific groundfish observer program would require observer coverage on small (under 60') halibut and sablefish longline vessels starting January 1, 2013.
- Many fishermen in this fishery want the option to carry an electronic monitoring (EM) system rather than a human observer to meet their coverage requirements.
- The North Pacific Fishery Management Council (Council) determined that an EM program for the halibut and sablefish longline fisheries should be a "catch estimation" program that collects information on catch, discards and fishing effort. ("Compliance versus science.")
- At the time this project was conceived (Fall, 2011), there was only one EM service provider and they were based in Canada. NMFS considered that system adequate to gather data on compliance with discard and retention regulations, but not sufficient to gather the information needed for catch estimation. In February 2013, NMFS reiterated this concern:
  - *Despite numerous past and ongoing video monitoring pilot projects there are currently no operational video monitoring programs in NMFS managed fisheries where data extracted from video are used for science or management purposes. (NMFS White Paper, 2.15.13)*
- Fishery managers have indicated that higher quality digital images are needed for EM to become operational in fisheries where the management objective is catch estimation. This includes both higher frame rates and higher resolution.
- In this context, The North Pacific Fisheries Association (NPFA), a Homer-based fishermen's group, partnered with Saltwater Inc., an Alaskan observer company, to develop and test an alternative EM system for small halibut longline vessels.

**Project Objectives:**

- The primary objective of the project was to utilize local stakeholder expertise to develop, introduce, and test an advanced EM system that would be capable of providing high quality video images adequate for catch estimation and be appropriate to small longline fishing vessels.

- The second objective was to begin to build the local infrastructure necessary to implement a scalable EM program.
- The third objective was to test the utility of alternative, free, open-license data review software for the review of fisheries data.

#### **Project Actions:**

- The project began in June 2012 with a dockside meeting in Homer that included fishermen, NPFA members, Saltwater Inc. staff, representatives of the International Pacific Halibut Commission (IPHC) and the Alaska Department of Fish and Game (ADF&G). Saltwater set up and demonstrated the capabilities of a 360-degree camera and on-board monitor. Fishermen demonstrated their handling and sorting procedures and provided insights on fishing practices, camera placement and system configuration.
- With input from fishermen and fishery managers, Saltwater Inc. designed and tested a new EM system for this fishery. It was the first EM system to use internet protocol (IP) digital cameras, which provide higher resolution, greater frame rate speed, and more advanced data compression than traditional analog systems.
- The project successfully tested integrated motion detection combined with magnetic drum sensors as triggers for recording.
- The project successfully experimented with integrating a Garmin GPS sensor into the camera housing as a way to simplify the installation process.
- The new EM system was installed and tested on two working halibut boats. Saltwater consulted with both fishermen and NMFS to determine camera placement that would not constrain operations, but would capture the necessary images. The system involved two digital cameras, one that provided full coverage of activities on deck, and one that captured images of fish coming in over the rail. Different camera placement and camera configurations were tested to get the highest quality images of catch.
- The project developed the capacity of three local technicians (two from Anchorage and one from Homer) to carry out EM installs and repairs. We also successfully tested trouble-shooting via WiFi on one of the boats while it was in the Homer harbor. By the end of the project, all technical services were provided by Alaska-based technicians.

#### **Project Outcomes:**

- The collaboration between the volunteer fishermen who are intimately involved in this fishery, and Saltwater Inc., an Alaska-based observer company that understands the data requirements of fishery management, has been critical to developing a system that could work for both fishermen and fishery managers.

- The project demonstrated that a more advanced EM system - one that uses digital cameras-- can provide the higher quality images required by fishery managers for a catch estimation system. Partially as a result of this project, NMFS required digital cameras for an EM pilot program in this fishery which began in 2013. It seems likely NMFS will require these higher resolution digital cameras in future projects
- The project demonstrated that on small (under 60') halibut boats, a system that utilized two cameras – one at the rail and the other providing an overall back deck view – could capture the images required for catch accounting in this fishery. The side camera captured images that allow for individual hook counts as well as images of fish discarded at the rail – both important for catch accounting. Images from the deck camera were also of sufficient quality to allow for counts of fish brought on board.
- The project experimented with both motion detection and magnetic drum sensors. The combination worked well, though setting motion boxes for each vessel can be complicated and time consuming. In future projects we plan to further test alternative triggers with the goal of assuring that all fishing events are recorded while simplifying the installation process.
- The project demonstrated the potential of new video review software that is free and open-license. This is consistent with the national guidelines for EM projects, which NMFS issued in May 2013.

*NOAA Fisheries encourages the use of electronic technologies that utilize open source code or standards that facilitate data integration and offer long-term cost savings rather than becoming dependent on proprietary software.*

- The review software allows viewers to zoom in and enlarge individual frames for closer viewing. This is a significant step forward to the long-standing difficulties in EM of accurately identifying individual fish to the species level by either human reviewers or, in the future, using computer software.
- The project tested various ways to make the video review process more efficient using recorded event logs in the review software. The time-lag traditionally associated with EM data review process is a serious challenge noted by NMFS. Because video review currently represents approximately one-third of the total cost of EM, increasing the efficiency of the review process could mean significant cost savings.

#### **The Road Ahead:**

- There is a need to continue to test new technology, develop new efficiencies and find ways to provide better, more timely data to meet fishery manager
- needs if EM is going to be accepted as an alternative to human observers in this fishery. This project did not solve these challenges, but it did advance the process.
- We think competition is a good thing. It will ultimately result in lower costs to industry and the availability of a range of products to meet different needs.

- NMFS, in partnership with fishermen and EM service providers, needs to clearly define the specific objectives for an EM monitoring program in this fishery that align with the broader goals of the fishery management plan.
- Industry members need to get involved. This means sharing ideas with EM service providers and NMFS about how to make a system work for this fishery, volunteering to carry systems, taking responsibility for keeping the systems working at sea, and providing feedback. The best solution will come from the fishing grounds up.

**Subject:** Comments for Item B-2

**From:** George Malcolm Milne <milnemarine@yahoo.com>

**Date:** 12/2/2013 11:04 PM

**To:** "npfmc.comments@noaa.gov" <npfmc.comments@noaa.gov>

The attached report is submitted by the North Pacific Fisheries Association, PO Box 796, Homer, AK 99603



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:** REP 13-007

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**Agenda Date:** 12/9/2013

**Agenda Number:** B-3

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

ADF&G Report (including review of BOF scallop and pollock proposals; halibut subsistence report)

**Fall, James A. and David S. Koster. 2014. Subsistence Harvests of Pacific Halibut in Alaska, 2012. Alaska Department of Fish and Game, Division of Subsistence, Technical Paper No. 388--Public Review Draft, Anchorage.**

## **EXECUTIVE SUMMARY**

This report presents findings of a project designed to estimate the subsistence harvest of Pacific halibut *Hippoglossus stenolepis* in Alaska in 2012. The Alaska Department of Fish and Game (ADF&G) Division of Subsistence conducted the project under National Oceanic and Atmospheric Administration (NOAA) award number NA11NMF4370059 from the U.S. Department of Commerce, NOAA National Marine Fisheries Service (NMFS). In May 2003, NMFS published federal regulations implementing a subsistence halibut fishery in Alaska for qualified individuals who are residents of 118 rural communities or members of 123 Alaska Native tribes with traditional uses of halibut. The year 2012 was the tenth in which subsistence halibut fishing took place under these regulations. Subsistence fishers are required to obtain a Subsistence Halibut Registration Certificate (SHARC) from NMFS before fishing. During 2012, 9,944 individuals held SHARCs, compared to a high of 15,047 at the end of 2007 and a previous low of 10,953 at the end of 2010. The number of valid SHARCs in 2012 was 22% below the previous 9-year average.

Harvest information was collected by means of a postal (mailed) survey. The 1-page survey form was mailed to all SHARC holders in early 2013, with 2 follow-up mailings. Household visits supplemented the mailings in 5 communities in Southeast Alaska. In total, 7,054 surveys were returned, a response rate of 71%, the highest of any study year. Participation in the survey was voluntary.

According to the project findings, an estimated 4,394 individuals participated in the subsistence halibut fishery in 2012. This was the lowest number of participants since the SHARC program began. The previous low was 4,705 subsistence halibut fishers in 2011, and the highest estimate was 5,984 in 2004.

The estimated harvest in 2012 was 37,093 halibut ( $\pm 2.9\%$ ) comprising 686,991 lb (net weight;  $\pm 2.9\%$ ), the lowest totals for the 10 years of the project. ("Net weight" is 75% of "round" or live weight; the estimated harvest was 915,988 lb round weight.) This compares to an estimated high of 55,875 fish ( $\pm 3.0\%$ ) comprising 1,178,222 lb ( $\pm 3.0\%$ ) in 2005 and a previous low of 38,162 halibut ( $\pm 2.8\%$ ) comprising 697,656 lb ( $\pm 2.7\%$ ) in 2011. As measured in pounds, the 2012 harvest was about 2% lower than the estimated harvest in 2011, and 30% lower than the previous 9-year average from 2003–2011.

Of the total subsistence halibut harvested in 2012, 532,623 lb (78%) were harvested with setline (stationary) gear (i.e., longlines, or "skates") and 154,368 lb (22%) were harvested with hand-operated gear (i.e., rod and reel or handline). This was similar to the harvest by gear type in 2003–2011. Of those subsistence fishers using setline gear in 2012, the most (41%) usually fished with 30 hooks, the maximum number allowed by regulation in all areas except areas 4C, 4D, and 4E, where regulations establish no hook limit.

Subsistence fishers also harvested an estimated 9,568 rockfish *Sebastes* spp. and 2,247 lingcod *Ophiodon elongatus* in 2012 while fishing for halibut. These were the lowest estimates for any year of the study. The highest estimated harvests were 19,001 rockfish and 4,407 lingcod in 2004 and previous low harvests were 10,853 rockfish and 2,305 lingcod in 2011.

Based upon fishing locations, the largest portion of the Alaska subsistence halibut harvest in 2012 occurred in Regulatory Area 2C (Southeast Alaska), with areas ranking as follows:

- Area 2C (Southeast Alaska), 58% (396,043 lb);
- Area 3A (Southcentral Alaska), 37% (253,516 lb);
- Area 3B (Alaska Peninsula), 2% (15,959 lb);
- Area 4A (Eastern Aleutian Islands), 1% (9,543 lb);
- Area 4E (East Bering Sea Coast), 1% (8,384 lb);
- Area 4B (Western Aleutian Islands), less than 1% (1,698 lb);

- Area 4C (Pribilof Islands), less than 1% (1,176 lb); and
- Area 4D (Central Bering Sea), less than 1% (672 lb).

In 2003–2011 as well, Area 2C and Area 3A accounted for over 85% of the subsistence halibut harvests. The proportion of the statewide subsistence halibut harvest occurring in Area 2C has ranged from an estimated high of 60% in 2003 to an estimated low of 51% in 2005 and 2007. Correspondingly, the portion occurring in Area 3A has ranged from an estimated high of 39% in 2010 to an estimated low of 27% in 2003.

Preliminary data from the International Pacific Halibut Commission (IPHC) combined with the findings of this project indicate that 42.491 million pounds (net weight) of halibut were removed from Alaska waters in 2012. Of this total, the subsistence harvest accounted for 1.7%. Commercial harvests took 59.9% of the halibut, followed by bycatch in other commercial fisheries (22.5%), sport harvests (12.6%), and wastage in the commercial fishery (3.3%).

This report describes the results of the tenth annual project to estimate the subsistence halibut harvest in Alaska since NMFS adopted rules governing subsistence halibut fishing in May 2003. The harvest estimates based on the SHARC surveys for the 2003–2012 fishing seasons serve as a basis for understanding the overall harvest, annual variability in catch, and trends in harvest since implementation of the new regulations. Demonstrating changes in the magnitude of the Alaska subsistence halibut harvest resulting from the new regulations using the results of the SHARC surveys for 2003–2012 is problematic, however, because of the limitations of earlier harvest estimates at the statewide level. The subsistence harvest estimates for 2003–2012 for some of the larger communities—such as Sitka, Petersburg, and Kodiak, which account for the majority of the harvest—are not markedly different from the range of harvest estimates based on household surveys prior to the new regulations. The higher overall harvest estimates for 2004–2006 compared to 2003 may be due to more thorough registration of subsistence fishers, hence better harvest documentation. The lower total Alaska harvest in net pounds in 2008–2012 compared to the previous 5 years appears to be the result of fewer registered SHARC holders, fewer estimated participants in the fishery, lower average harvests per fisher, and a decline in the average size of the harvested halibut over the 10 years of the study (i.e., from 23.7 lb per fish in 2003 to 18.5 lb per fish in 2012). In Area 4, substantial drops in SHARC registrations and survey responses may be resulting in an underestimate of subsistence halibut harvests in that area.

The report concludes that 686,991 net pounds is a sound estimate of the Alaska subsistence halibut harvest in 2012. The estimate is based upon a scientific sampling of SHARC holders and a relatively high response rate. The total estimated harvest falls below the 1.5 million net pounds estimated for the subsistence harvest when the current regulations were developed by the North Pacific Fishery Management Council (see <http://www.fakr.noaa.gov/frules/70fr16742.pdf>, page 16,748). The 2012 harvest estimate was 30% below the average for the previous 9 project years and continued a trend of lower statewide harvests that began in 2005. The causes of this decline in estimated harvests are complex, and there is no certainty that the trend will persist.

Due to budget constraints, a survey to estimate subsistence halibut harvests in Alaska will not occur for harvest year 2013. The report recommends that monitoring of the subsistence halibut harvest in Alaska resume in the future, based on an analysis of the data collected for 2003–2012 and an ethnographic study of subsistence halibut fishing in selected communities, so that trends in the fishery in terms of participation, location of harvests, and harvest quantities can be better understood.

## **SUBSISTENCE HARVESTS OF PACIFIC HALIBUT IN ALASKA, 2012**

Division of Subsistence, Alaska Department of Fish and Game  
333 Raspberry Road, Anchorage, AK 99518  
January 2014

Through a grant from the National Marine Fisheries Service (NMFS), the Alaska Department of Fish and Game (ADF&G) Division of Subsistence conducted a study to estimate the subsistence harvests of Pacific halibut in Alaska in 2012. The full results of the study appear in the Division's Technical Paper No. 388, "Subsistence Harvests of Pacific Halibut in Alaska, 2012" (January 2014). Key points in the report include the following:

- In May 2003, the NMFS published final federal regulations for a subsistence halibut fishery in Alaska. Residents of 118 rural communities and designated rural areas, and members of 123 tribes are eligible to participate. Fishers must obtain a subsistence halibut registration certificate (SHARC) from NMFS before fishing ([www.fakr.noaa.gov/ram/subsistence/halibut.htm](http://www.fakr.noaa.gov/ram/subsistence/halibut.htm); 800-304-4846).
- 2012 was the tenth year in which subsistence halibut fishing took place under these regulations. Information about subsistence halibut harvests in 2003–2011 is reported in Division of Subsistence Technical Papers 288, 304, 320, 333, 342, 348, 357, 367, and 378, respectively.
- To estimate the 2012 harvests, a one-page survey form was mailed to SHARC holders in early 2013 or administered in person. After three mailings and community visits, 7,054 of 9,944 SHARC holders (71%) responded. Participation in the survey was voluntary.
- An estimated 4,394 individuals subsistence fished for halibut in 2012 (Figure 9).
- The estimated subsistence harvest was 37,093 halibut for 686,991 pounds net weight.
- Of this total, 78% was harvested with setline (stationary) gear (longline or skate) and 22% was harvested with hand-operated gear (handline or rod and reel).
- The largest subsistence harvests occurred in Southeast Alaska (Halibut Regulatory Area 2C), at 58% of the total, followed by Southcentral Alaska (Area 3A) at 37%. Table 6 and Figure 17 from the final report give more details on harvests by gear type and area.
- Based on place of residence of SHARC holders, communities with the largest subsistence halibut harvests in 2012 were Kodiak and Sitka (the largest eligible communities) (Figure 22).
- An estimated 9,568 rockfish were harvested by 1,161 fishers in the subsistence halibut fishery in 2012. Most (73%) were harvested in Southeast Alaska. An estimated 2,247 lingcod were harvested by 696 fishers in the subsistence halibut fishery in 2012. Most (68%) were harvested in Southeast Alaska.
- Based on preliminary data from the International Pacific Halibut Commission and this study, the estimated halibut removal in Alaska in 2012 was 42.491 million pounds, net weight. Subsistence harvests accounted for 1.7% of this total (Figure 33).
- The report concludes that the project was, overall, a success, with good response rates and a reliable estimate of subsistence halibut harvests. However, analysis suggests that fishers in some communities may not have renewed their SHARCs. Additional outreach among eligible tribes and rural areas is necessary to maximize enrollment of fishers in the SHARC program.
- Due to budget constraints, a survey to estimate subsistence halibut harvests in Alaska in 2013 will not take place. The report recommends that monitoring of the Alaska subsistence halibut harvest resume in the future to evaluate trends in the fishery.

For a copy of the full report, go to <http://www.adfg.alaska.gov/sf/publications/>, or call the Division of Subsistence of ADF&G at 907-267-2353 (Anchorage) or 907-465-4147 (Juneau).

Table 1.—Estimated harvests of halibut in numbers of fish and pounds net (dressed, head-off) weight by regulatory area and subarea, 2012.

Subarea	Regulatory area	Number of SHARCs fished <sup>c</sup>	Estimated subsistence harvest by gear type <sup>a</sup>									Estimated sport harvest		
			Set hook gear		Hook and line or handline			All gear						
			Estimated number fished	Estimated number halibut harvested	Estimated pounds halibut harvested <sup>b</sup>	Estimated number fished	Estimated number halibut harvested	Estimated pounds halibut harvested <sup>b</sup>	Estimated number fished	Estimated number halibut harvested	Estimated pounds halibut harvested <sup>b</sup>	Estimated number fished	Estimated number halibut harvested	Estimated pounds halibut harvested <sup>b</sup>
Southern Southeast Alaska	2C	1,454	1,183	7,497	163,184	616	2,667	40,878	1,454	10,164	204,062	735	2,541	43,043
Sitka Lamp Area	2C	736	693	3,346	75,770	163	456	7,666	736	3,803	83,436	259	522	8,295
Northern Southeast Alaska	2C	770	677	4,316	86,936	244	812	12,533	770	5,128	99,470	256	905	12,935
<b>Subtotal, Area 2C</b>		<b>2,859</b>	<b>2,462</b>	<b>15,160</b>	<b>325,890</b>	<b>977</b>	<b>3,935</b>	<b>61,078</b>	<b>2,859</b>	<b>19,095</b>	<b>386,967</b>	<b>1,200</b>	<b>3,967</b>	<b>64,274</b>
Yakutat Area	3A	88	69	545	11,949	41	253	3,813	88	798	15,762	29	141	2,345
Prince William Sound	3A	273	239	1,398	26,079	105	394	6,743	273	1,791	32,822	136	327	5,372
Cook Inlet	3A	258	167	2,210	34,026	169	2,109	26,310	258	4,319	60,337	116	536	7,246
Kodiak Island road system	3A	575	484	3,440	61,258	274	1,354	18,649	575	4,794	79,907	414	1,865	31,503
Kodiak Island–Other	3A	592	466	3,112	55,344	279	1,120	21,932	592	4,233	77,276	285	1,073	19,398
<b>Subtotal, Area 3A</b>		<b>1,580</b>	<b>1,237</b>	<b>10,705</b>	<b>188,657</b>	<b>774</b>	<b>5,231</b>	<b>77,447</b>	<b>1,580</b>	<b>15,936</b>	<b>266,104</b>	<b>839</b>	<b>3,942</b>	<b>65,864</b>
Chignik Area	3B	35	20	159	1,988	29	111	1,632	35	271	3,621	3	11	56
Lower Alaska Peninsula	3B	146	95	685	9,442	115	464	8,948	146	1,149	18,390	47	89	1,796
<b>Subtotal, Area 3B</b>		<b>181</b>	<b>114</b>	<b>844</b>	<b>11,430</b>	<b>142</b>	<b>575</b>	<b>10,581</b>	<b>181</b>	<b>1,419</b>	<b>22,011</b>	<b>50</b>	<b>100</b>	<b>1,852</b>
Eastern Aleutians–East	4A	67	38	355	4,972	50	459	7,844	67	814	12,816	25	200	2,714
Eastern Aleutians–West	4A	5	4	14	330	4	20	460	5	33	790	7	11	255
<b>Subtotal, Area 4A</b>		<b>70</b>	<b>39</b>	<b>369</b>	<b>5,302</b>	<b>52</b>	<b>478</b>	<b>8,304</b>	<b>70</b>	<b>847</b>	<b>13,606</b>	<b>32</b>	<b>211</b>	<b>2,969</b>
Western Aleutians–East	4B	9	9	12	280	6	15	257	9	27	537	6	0	0
<b>Subtotal, Area 4B</b>		<b>9</b>	<b>9</b>	<b>12</b>	<b>280</b>	<b>6</b>	<b>15</b>	<b>257</b>	<b>9</b>	<b>27</b>	<b>537</b>	<b>6</b>	<b>0</b>	<b>0</b>
St. George Island	4C	4	4	20	490	0	0	0	4	20	490	0	0	0
St. Paul Island	4C	7	4	35	346	4	11	812	7	46	1,158	0	0	0
<b>Subtotal, Area 4C</b>		<b>11</b>	<b>8</b>	<b>55</b>	<b>836</b>	<b>4</b>	<b>11</b>	<b>812</b>	<b>11</b>	<b>66</b>	<b>1,648</b>	<b>0</b>	<b>0</b>	<b>0</b>
St. Lawrence Island	4D	8	7	22	556	3	1	60	8	23	615	0	0	0
<b>Subtotal, Area 4D</b>		<b>8</b>	<b>7</b>	<b>22</b>	<b>556</b>	<b>3</b>	<b>1</b>	<b>60</b>	<b>8</b>	<b>23</b>	<b>615</b>	<b>0</b>	<b>0</b>	<b>0</b>
Bristol Bay	4E	10	5	0	0	10	34	403	10	34	403	3	0	0
Yukon Delta	4E	78	26	198	2,089	65	497	3,194	78	695	5,283	6	14	264
Norton Sound	4E	5	5	21	482	0	0	0	5	21	482	0	0	0
<b>Subtotal, Area 4E</b>		<b>91</b>	<b>35</b>	<b>220</b>	<b>2,571</b>	<b>72</b>	<b>531</b>	<b>3,597</b>	<b>91</b>	<b>750</b>	<b>6,168</b>	<b>9</b>	<b>14</b>	<b>264</b>
<b>Total, Alaska<sup>c</sup></b>		<b>4,705</b>	<b>3,821</b>	<b>27,385</b>	<b>535,521</b>	<b>1,977</b>	<b>10,777</b>	<b>162,136</b>	<b>4,705</b>	<b>38,162</b>	<b>697,656</b>	<b>2,070</b>	<b>8,235</b>	<b>135,224</b>

Source ADF&amp;G Division of Subsistence SHARC survey, 2011.

a. “Setline” = longline or skate. “Hand-operated gear” = rod and reel, or handline.

b. Weights given are “net weight.” Pounds net (dressed, head off) weight = 75% of round (whole) weight.

c. Because fishers may fish in more than one area, subtotals for regulatory areas and the state total might exceed the sum of the subarea values. Includes subsistence and sport fishing.

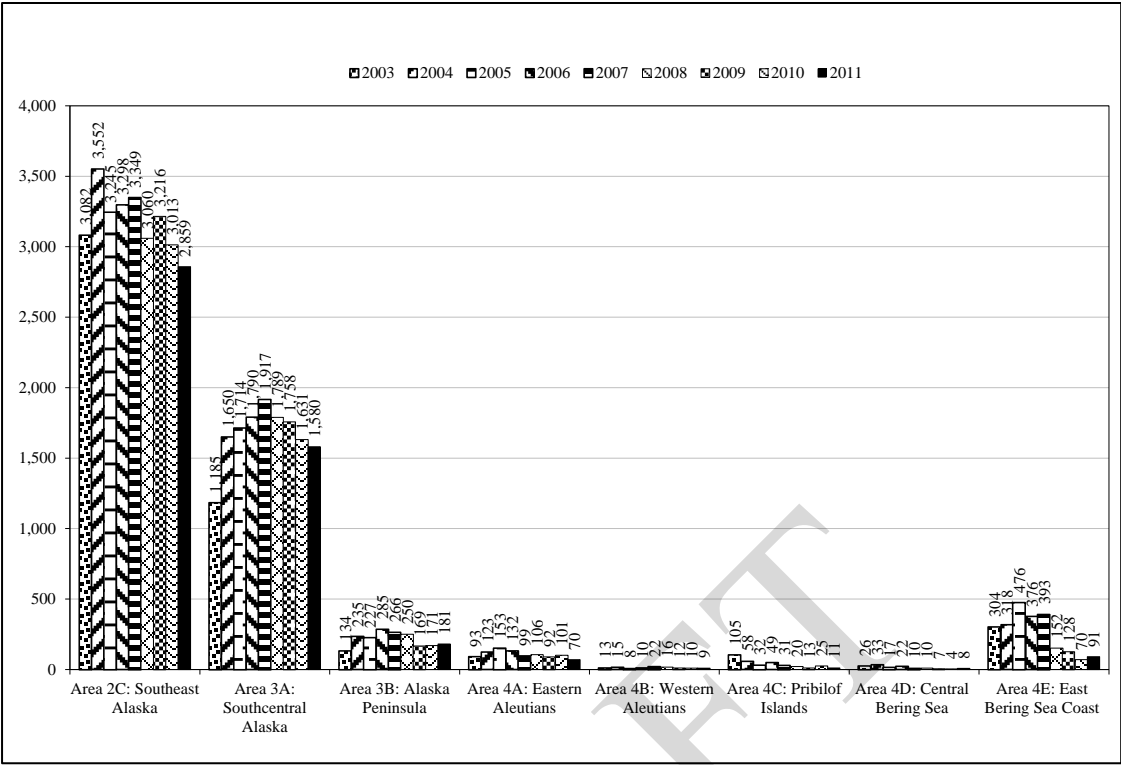


Figure 9.—Estimated number of Alaska subsistence halibut fishers, 2003–2012 by regulatory area fished.

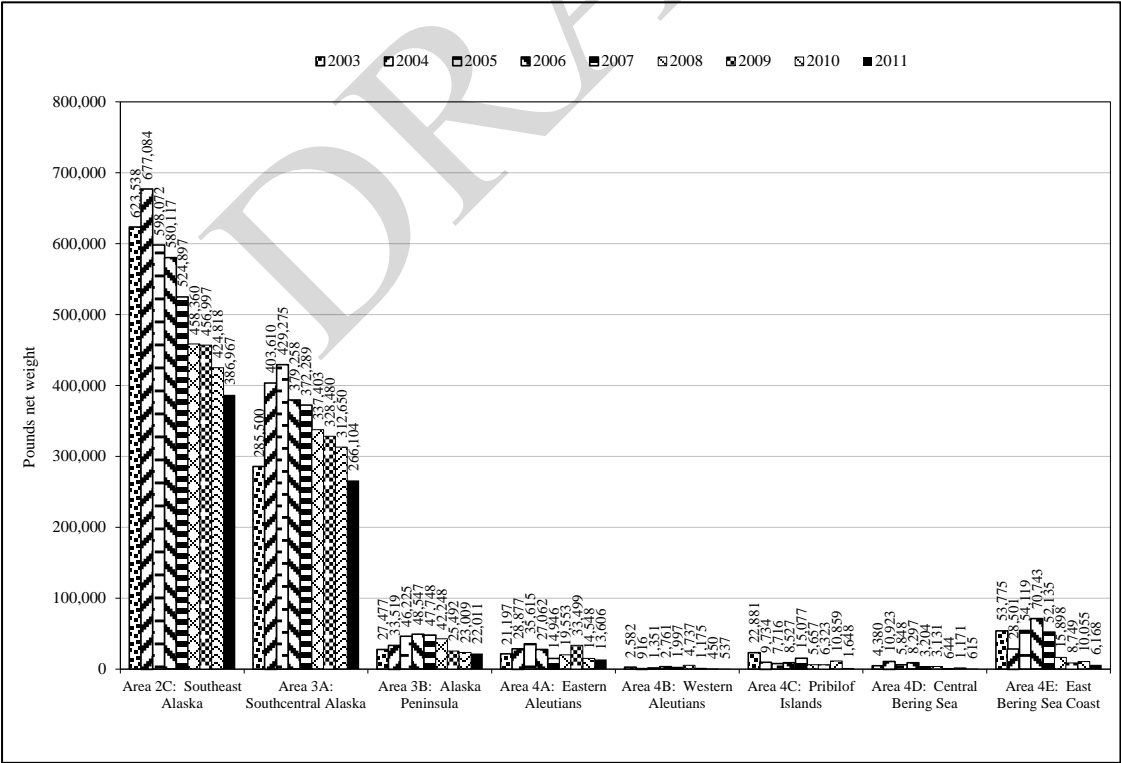


Figure 1.—Estimated subsistence halibut harvests, pounds net weight, by regulatory area fished, 2003–2012.

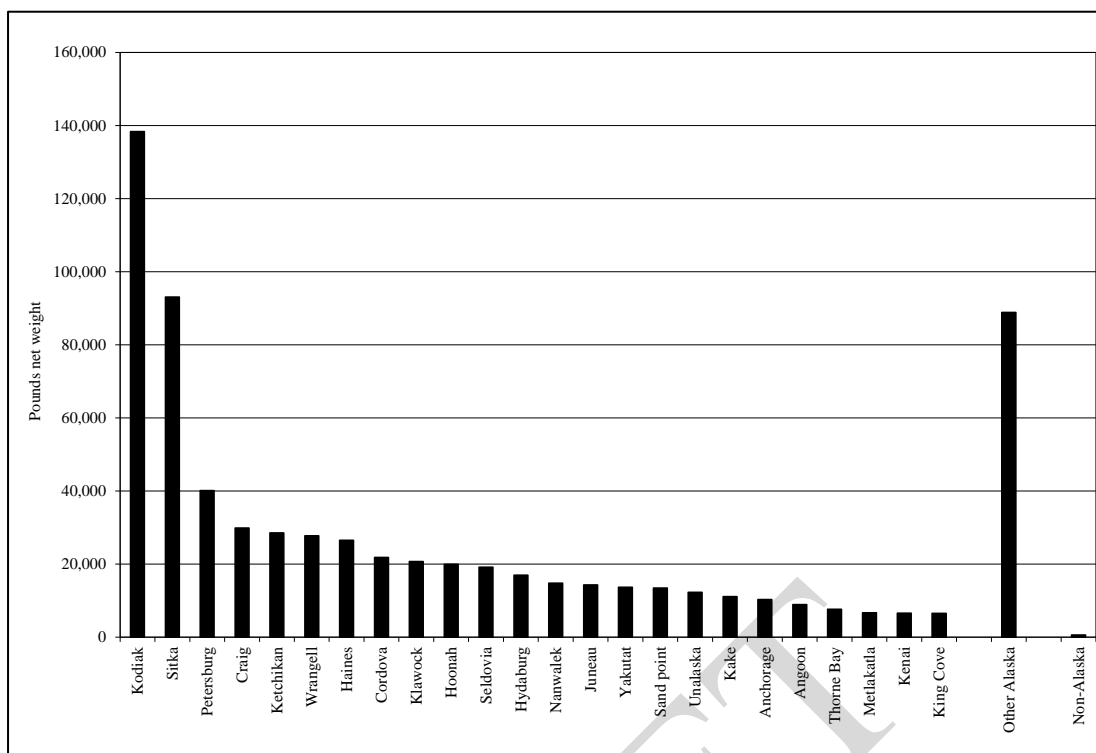


Figure 2.—Alaska subsistence halibut harvests by place of residence, 2012.

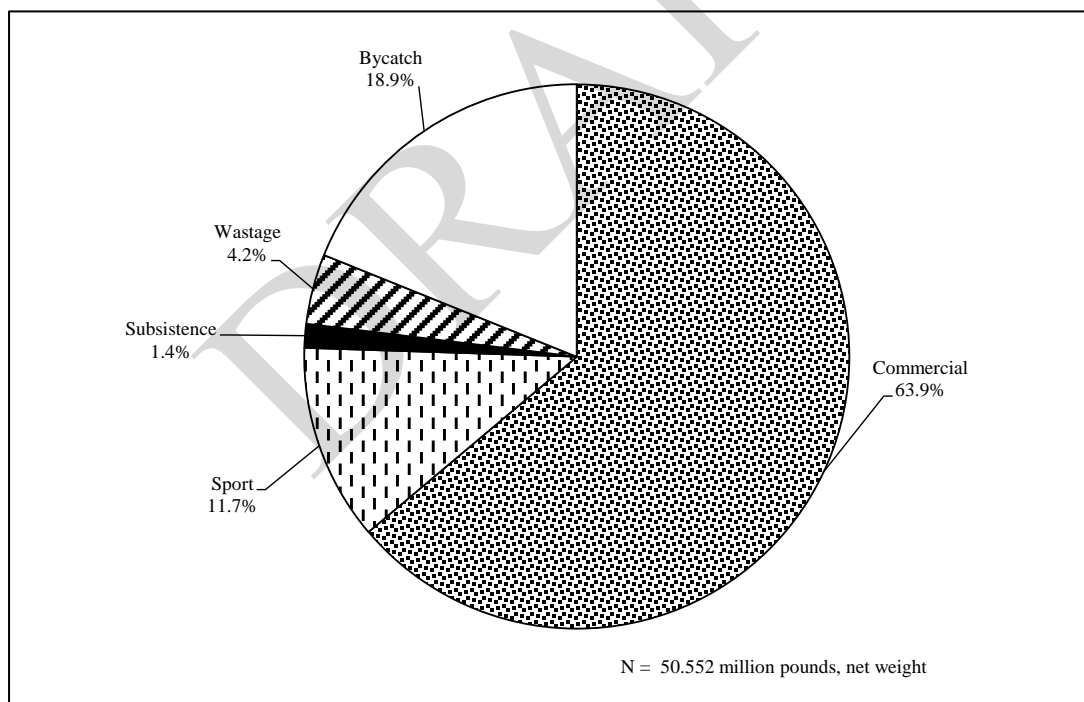


Figure 3.—Halibut removals, Alaska, 2012.

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**Bering Sea Pot Cod Cooperative**

218 Center St  
Kodiak, AK 99615

November 27, 2013

Mr. Eric A. Olson  
Chairman  
North Pacific Fishery Management Council  
605 W. 4th Ave., Suite 306  
Anchorage, Alaska 99501-2252

Dear Mr. Chairman:

**Re: B-3; ADF&G Report**

For the record, the Bering Sea Pot Cod Cooperative would like to express it's concerns regarding the recent action taken by the Alaska Board of Fisheries to implement a new State waters Pacific Cod pot fishery for vessels 58' LOA and less in the Bering Sea Management Area O.

Specifically, we are concerned about the impacts the new State waters Pacific cod fishery may have on Stellar sea lions and the existing Federal Pacific cod fisheries. Our members also question the assumed biomass in State waters and whether the new fishery is even necessary. It seems that if large concentrations of Pacific cod existed in State waters, the existing fisheries (parallel season) would have more fully utilized this resource. Finally, the new fishery has the potential to stimulate significant effort with the possibility of over-capitalization and localized depletion of the resource.

We appreciate the opportunity to express our concerns.

Sincerely,



Craig Lowenberg  
Bering Sea Pot Cod Cooperative

Cc: Chris Oliver, Executive Director  
North Pacific Fishery Management Council

## Scallop Plan Team Report

December 3, 2013

Meeting conducted by teleconference  
Anchorage, Alaska.

*Plan Team members present:* Diana Stram (NPFMC) co-chair, Gregg Rosenkranz (ADF&G Kodiak)-co-chair, Scott Miller (NMFS Juneau), Peggy Murphy (NMFS Juneau), Rich Gustafson (ADF&G), Jie Zheng (ADF&G), Ryan Burt (ADF&G), Quinn Smith (ADF&G),

*Plan Team members absent:* Brad Harris (APU)

*Public and agency personnel participating:* Jim Stone (Alaska Scallop Association), Karla Bush (ADF&G), Mark Stichert (ADF&G), Scott Kelley (ADF&G), Bruce Weyhrauch, Heather Fitch (ADF&G), Melissa Good (ADF&G), Kurt Iverson (CFEC), Ben Brown (CFEC), Craig Farrington (CFEC), Tom Meyer (NOAA GC), Jan Rumble (ADF&G), Ken Goldman (ADF&G), Elisa Russ (ADF&G), Chris Russ (ADF&G), Rich Gustafson (ADF&G), Chris Siddon (ADF&G), Wayne Donaldson (ADF&G), Marsha Spafard (ADF&G), Trent Hartill (ADF&G), Tom Minio (F/V Provider), Josh Adkins (F/V Provider), Bill Harrington (F/V Kilkenney), Brandan Harrington (F/V Kilkenney)

### Overview of discussion

The Scallop Plan Team met by teleconference Tuesday December 3<sup>rd</sup>, 2013 to review and comment on the ADF&G proposed state management plan for scallops in state waters. Diana Stram (NPFMC) chaired the meeting. Call-in locations were Anchorage, Juneau, Douglas, Kodiak, Homer, and Dutch Harbor. Proposal 369 (attached), submitted by ADF&G to the Board of Fisheries, was provided to participants in advance of the meeting.

The Team received an overview of the State's proposed state waters management plan from Wayne Donaldson. This proposal focuses only on areas where there is active fishing in state waters; therefore, it the Yakutat, Prince William Sound, Kodiak, and Dutch Harbor registration areas. He noted that this plan represents a starting point for the development of a state waters fishery management plan, and is focused on what the department would need to manage scallop fishing in state waters in the absence of a vessel based limited entry system. This plan does not supersede any existing regulations; rather, it works in conjunction with them. The BOF will review this proposal at their January 2014 meeting in Kodiak. At that time the BOF could develop a new plan, pass the proposed plan, modify the proposed plan or take no action.

The plan proposes a number of management measures including pre-registration of vessels, a pre-registration period, a CFEC interim-use permit, provisions for management inside and outside state waters, a 12 hour notice for change in registration area, fish tickets by registration area, daily reporting, activated VMS, and trip limits. The plan is designed to respond to the potential for increased fishing effort in state waters. Previously state and federal waters have been managed as a single management unit given the characteristics of the scallop beds and the close association of the state vessel based limited entry system and the Federal license limitation program. Beginning in 2014 however all state waters will be open access to all vessels barring any action to limit vessel size by the BOF or other limited entry action by the legislature.

The proposed plan requires preseason registration requirements to ascertain the anticipated effort in state waters annually. This allows for the establishment of appropriate management actions dependent on effort as well as pre-season planning for observer training and deployment. VMS would be required to enforce boundary lines. Sections (c) and (d) of the proposal lay out the requirements for a valid CFEC interim-

use permit (section (d)) and preseason registration requirements by area (section (c)). Once the preseason registration deadline has passed (April 1) the department will evaluate the number of expected participants by area in order to structure area-specific management measures. Proposed management measures are scaled to three classes of management actions dependent on expected effort:

Scenario 1: Effort is expected to be similar to past effort in an area, then the area will be managed with a single GHL, vessel registration and crab bycatch limits (where applicable) in state and federal waters combined (Status Quo).

Scenario 2: Effort in state waters is expected to substantially increase over previous years to a point where the area would then need different management in state versus federal waters. This would necessitate that registration, GHLS, and crab bycatch limits are specified separately in state and federal waters within each area.

Scenario 3: Effort in state waters is expected to be very high compared with previous years. Under this circumstance the state may not have the appropriate tools to manage such a fishery in state waters and would likely close state waters to scallop fishing in that area.

The team members, ADF&G staff and members of the industry discussed several components of the plan and potential issues with plan implementation. These concerns were centered around the following: registration (CFEC permits and preseason-registration), notification requirements for moving between state and federal waters, establishment of GHLS and crab bycatch limits between state and federal waters, trip limits and potential for overcapitalization and localized depletion. A summary of discussion by issue is listed below.

#### *Registration:*

CFEC interim-use permit is necessary prior to ADF&G preseason registration. Interim-use permits will be issued in two classes for state and federal waters. Within those categories the permits will be broken out by  $>$  and  $\leq 80'$  vessel length. Fees for permits are as follows, Federal waters \$3,000 ( $> 80'$ ), \$525 ( $\leq 80'$ ); State waters \$450 ( $> 80'$ ), \$75 ( $\leq 80'$ ). CFEC staff noted that while two permits are now necessary there is no longer a need to renew the previous CFEC vessel limited entry permit as the program will have expired. Registration would then be required for each registration area in which a vessel intends to fish. The registration deadline would be April 1. This would allow sufficient time before the fishery opens on July 1 for ADF&G to assess management needs and observer training requirements. Team members noted that no documentation is required with the interim-use permit on the vessel ownership, size or capacity. ADF&G staff indicated that this information would likely be required for pre-registration.

#### *Notification for fishing in state versus federal waters:*

The team discussed the 12 hour notification requirement in the proposed plan (section (f)). Team members and industry commented that both the timing and the fish ticket requirements could be problematic. The timing requirement is to allow the state sufficient time to evaluate relative catch levels for managing the fishery. However, industry noted that without the ability to predict how their catch rates on one side of the bed will be this could be highly inefficient if trip limits are also used as a management measure. If they finished fishing in 3 hours they would need to wait an additional 9 hours before moving

to the other side of the state/federal line to continue fishing. Team members expressed concern for the potential for vessels to have to stand down on the grounds during waiting periods. This could potentially expose vessels and crew to severe weather and could raise vessel safety issues. Team members also expressed concern that waiting periods combined with trip limits could cause some operators to abort trips due to economic issues.

Owners of non-freezing vessels noted that the fish ticket requirement (a fish ticket must be filled out prior to switching from state/federal) is problematic on smaller vessels as the vessel does not know their exact weight caught until the scallops are offloaded. Thus any vessel that doesn't process (i.e. freeze) at sea will be hampered by this restriction. Discussion centered around the possibility of redefining this to be based upon reported weight instead of fish ticket weight as a proxy for official catch record for management purposes. Catch could be delineated on board from each area for fish ticket processing and exact catch weight determined later upon offload.

*GHLs and crab bycatch limits in state versus federal waters:*

Management of separate GHLs and crab bycatch limits in state versus federal waters was noted to be problematic. The team expressed concern regarding the potential for differential harvest and localized depletion on scallop beds which cross the state-federal boundary line. ADF&G staff noted that observer data, harvest data, and Westward region bottom trawl survey data (used to set crab bycatch limits) would be evaluated to estimate the relative proportion of scallop harvest and crab bycatch in state and federal waters and these evaluations would be used to inform the GHL-setting process should separate management in some areas be necessary. There is considerable uncertainty with establishing boundaries for harvest and crab bycatch in this manner, however. Central region staff noted that due to their surveys they have the data to provide separate estimates for harvest (GHL's) and crab bycatch in both state and federal waters if necessary. It was also noted that the state's procedures for closure of miscellaneous shellfish registration areas (5 ACC 38.035) are included in the proposed plan by reference. These procedures detail the factors fishery managers consider in closing an area or part of an area to a fishery to avoid jeopardizing the health of the species.

*Trip limits:*

Members of the industry commented that the proposed method of establishing trip limits based on weight/number of vessels is inequitable. Other measures of calculating trip limits such as maximum allowable fishing time in a day should be considered as well. The team expressed concern regarding the potential for the trip limits as proposed to exert a negative impact on existing operators. For example, under open access a small trip limit could be profitable for small vessels newly entering the fishery, while larger existing vessels may not be able to operate cost-effectively under small, weight based, trip limits. This could displace the larger vessels presently operating in the fishery, all of which are Alaska home ported at present.

*Overcapacity and localized depletion:*

The team discussed additional management measures that may be considered by the BOF in January such as the vessel size limitation (80') that was proposed previously. Members of the public and the Team

noted that an increase in entry-level participants could represent a conservation concern for the resource and overcapitalization of the fishery. Industry participants further noted concerns that any increase in state waters effort would exert a differential impact on state waters habitat. Even absent additional participants the lack of a vessel based license limitation program in state waters allows for increased participation from some federally licensed vessels that were not previously able to fish inside 3 miles.

### **Scallop Plan Team recommendations:**

The SPT has the following recommendations for the Council to consider in consultation with the BOF as they move forward in development of a state waters fishery management plan in January.

- 1- The SPT strongly recommends that any plan should maintain the continuation of 100% observer coverage requirements and mandatory VMS requirements to ensure adequate data reporting and enforcement of the fishery.
- 2- The SPT recommends that further consideration be given to the notification time frame and fish ticket provisions proposed under provision (f) noting that the current proposal could be inefficient for all operators as well as inequitable to catcher vessels that do not process at sea.
- 3- The SPT recommends that further consideration be given to the conservation concerns and potential for localized depletion when setting two different GHs and crab bycatch limits across the same bed.
- 4- The SPT reiterates concerns that were raised in the original analysis establishing the federal LLP that indicate “a total of about 6 or 7 vessels could participate full time in the Alaska statewide scallop fishery at the breakeven level. More vessels could participate at a breakeven level if ex-vessel prices for scallop, or current annual harvest levels increased.” (NPFMC, 1999, EA/RIR/IRFA for Amendment 4 to the Scallop FMP)<sup>1</sup>. Currently harvests are significantly less but ex-vessel prices are considerably higher than was estimated for that break-even analysis in 1999 with the current number of vessels participating ranging from 3-5 since 2003/04.
- 5- The SPT further notes that many permit holders (both LLP and State vessel based permits) have not participated in recent years due most likely to the economics of the fishery<sup>2</sup>. Any increase in fishery participants has the potential to economically disenfranchise current permit holders and historical fishery participants.

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<sup>1</sup> Analysis at that time indicated that “it was estimated that about nine vessels would be able to operate full-time at the break even level, assuming total landings of 1.3million pounds at \$6.02 per pound” and 6 vessels if scallop biomass declined from that level and/or 7 vessels if crab bycatch limits are increased (due to increased crab biomass) and thus not constraining. (NPFMC,1999). Fishery total revenue, under the breakeven analysis of 1.3 million pounds at \$6.02 per pound, was estimated to be approximately \$7.8 million. The 2012/13 harvest of approximately 417,000 pounds, with a value of \$10.63 per pound, generated approximately \$4.4 million in fishery total revenue. Thus, fishery total revenue has declined by \$3.39 million, or approximately by 43 percent. Thus, it is highly likely that considerably fewer vessels can “breakeven” under present conditions than indicated in the original analysis. While useful in consideration, it should be noted that this analysis (NPFMC 1999) is fairly dated (based upon fishing activities in 1993) and cost data collected at the time were largely provided in public testimony to the Council. Moreover, cost structures in the fishery may very likely have changed over the last 20 years.

<sup>2</sup> Note that other factors are involved in the current levels of participation including consolidation of permits under the voluntary cooperative, recent permit sales and resulting potential for re-entry into the fishery by those permits.

**Proposal 369** – Implement a management plan for an open-access weathervane scallop fishery in waters of Alaska.

**CITE THE REGULATION THAT WILL BE CHANGED IF THIS ACR IS HEARD. If possible, enter the series of letters and numbers that identify the regulation to be changed. If it will be a new section, enter “5 AAC NEW”. 5 AAC 38.0XX. State-Waters Weathervane Scallop Management Plan.**

**WHAT IS THE PROBLEM YOU WOULD LIKE THE BOARD TO ADDRESS? STATE IN DETAIL THE NATURE OF THE CURRENT PROBLEM. Address only one issue. State the problem clearly and concisely. The board will reject multiple or confusing issues.** The Commercial Fisheries Entry Commission (CFEC) limits participation in the weathervane scallop fishery in waters of Alaska under the vessel-based permit system AS 16.43.450–AS 16.43.520. The vessel-based permit system is scheduled to sunset December 30, 2013. National Marine Fisheries Service has a license limitation program (LLP) for weathervane scallop that limits participation in federal waters.

Beginning December 31, 2013, weathervane scallop fisheries in waters of Alaska will revert to an open-access fishery; federal waters will remain under the LLP program. This ACR requests the Alaska Board of Fisheries (board) to implement a management plan for an open-access weathervane scallop fishery in waters of Alaska.

**WHAT SOLUTION DO YOU PREFER? Or, if the board adopted your solution, what would the new or amended regulation say?**

5 AAC 38.0XX. State-Waters Weathervane Scallop Management Plan. (a) In addition to the other requirements of 5 AAC 38 that apply to weathervane scallop, including the applicable provisions of 5 AAC 38.076, the provisions of the management plan in this section apply to the commercial taking of weathervane scallop in the state waters of Alaska in Scallop Registration Area D (Yakutat), Scallop Registration Area E (Prince William Sound), Scallop Registration Area K (Kodiak), and Scallop Registration Area O (Dutch Harbor).

(b) The weathervane scallop vessel registration year is April 1 through March 31.

(c) To participate in a state-waters weathervane scallop commercial fishery specified in (a) of this section, a vessel must be registered under (d) of this section by the preseason registration deadline specified in this subsection. The preseason registration deadline for the scallop vessel registration year is 5:00 p.m. April 1. The preseason registration applies only under this section and does not satisfy other registration requirements of 5 AAC 38.076.

(d) To preseason register a vessel, the vessel owner, or the vessel owner's authorized agent, must possess a valid CFEC interim-use permit for statewide scallop that includes the vessel's ADF&G license number. The vessel owner, or the vessel owner's authorized agent, shall submit a preseason registration form in person, or by mail, electronic mail, or facsimile transmission, to the designated department office in the area responsible for management of the fishery indicating the registration area or areas that the vessel is being preseason registering for by the deadline specified in (c) of this section. The form must include the vessel operator's

(1) CFEC interim-use permit number; and

(2) intent to participate in the commercial weathervane scallop fishery in the registration area in either the state waters only or the state waters and the federal waters of the exclusive economic zone.

(e) Based on the department's assessment of vessel effort, manageability, and available harvest in state waters, the commissioner may manage weathervane scallop in the state waters separately from weathervane scallop in the federal waters of the exclusive economic zone.

(f) If the commissioner determines that it is necessary for management and conservation purposes, the commissioner may require a vessel operator to register as provided by 5 AAC 38.076 for either the state waters of Alaska or the federal waters of the exclusive economic zone. The operator of a participating vessel may change registration only by notifying the designated department office in the area responsible for management of the fishery for which the vessel is currently registered. The vessel operator shall notify the department at least 12 hours before a change in registration under this subsection. Before changing registration and leaving the applicable waters, the vessel operator shall ensure that all harvested scallops are shucked and the harvest weight is reported to the department on a fish ticket.

(g) A registered vessel operator must report each day to the designated department office in the area responsible for management of the fishery any information that the commissioner determines is necessary for the management and conservation of the fishery.

(h) A vessel participating in the scallop fishery must have on board an activated vessel monitoring system (VMS) approved by the National Marine Fisheries Service.

(i) If the commissioner determines that a trip limit will contribute to conservation or promote an orderly fishery, the commissioner may close, by emergency order, the commercial weathervane fishery in a registration area, or portion of a registration area, and reopen the fishery during which a trip limit is in effect based on the guideline harvest level or remaining guideline harvest level divided by the number of vessels that are registered preseason under (d) of this section.

(j) For the purposes of this section,

(1) the boundary between the state waters of Alaska and the adjacent federal waters of the exclusive economic zone in

(A) Scallop Registration Area D is the territorial sea boundary of Alaska as shown on *NOAA Chart #16016* (22nd Edition, August 2012), adopted by reference;

(B) Scallop Registration Area E is the territorial sea boundary of Alaska shown on *NOAA Chart #16723* (15th Edition, January 29, 2000), adopted by reference;

(C) Scallop Registration Area K is the territorial sea boundary of Alaska as shown on *NOAA Chart #16580* (14th Edition, January 2008), as revised as of November 2011 by the chartlet for Uyak Bay on Kodiak Island, adopted by reference;

(D) Scallop Registration O is the territorial sea boundary of Alaska as shown on *NOAA Chart #16011* (38th Edition, August 2012), adopted by reference;

(2) the designated department office in the area responsible for management of the fishery in

(A) Registration Area D is the department's office in Douglas or Yakutat;

- (B) Registration Area E is the department's office in Cordova;
- (C) Registration Area K is the department's office in Kodiak;
- (D) Registration Area O is the department's office in Dutch Harbor.

**STATE IN DETAIL HOW THIS ACR MEETS THE CRITERIA STATED ABOVE. If one or more of the three criteria set forth above is not applicable, state that it is not.**

- a) **for a fishery conservation purpose or reason:** Yes. Scallop beds are currently managed as a unit in both state and federal waters because effort is stable due to the vessel-based limited entry program in state waters and the LLP program in federal waters. Several weathervane scallop beds straddle the boundary separating waters of Alaska (0–3 nm) and federal waters (3–200 nm). With sunset of the state’s vessel-based program, the department may need to manage state-waters scallop separately from federal-waters scallop if effort increases in state-waters to ensure scallop beds are not overharvested. The management plan was developed by the department to provide the board and public an opportunity to deliberate on a weathervane scallop management plan for state waters.
- b) **to correct an error in regulation:** N/A.
- c) **to correct an effect on a fishery that was unforeseen when a regulation was adopted:** N/A.

**WHAT WILL HAPPEN IF THIS PROBLEM IS NOT SOLVED PRIOR TO THE REGULAR CYCLE?** The next miscellaneous shellfish board meeting occurs in 2014/15 cycle; however, a management plan is needed for the 2014/15 scallop season.

**STATE WHY YOUR ACR IS NOT PREDOMINANTLY ALLOCATIVE.** This agenda change requests the board to implement a management plan to allow the department to manage weathervane scallops in state waters under open access.

**IF THIS REQUEST IS ALLOCATIVE, STATE THE NEW INFORMATION THAT COMPELS THE BOARD TO CONSIDER AN ALLOCATIVE PROPOSAL OUTSIDE OF THE REGULAR CYCLE.** N/A.

**STATE YOUR INVOLVEMENT IN THE FISHERY THAT IS THE SUBJECT OF THIS ACR (e.g., commercial fisherman, subsistence user, sport angler, etc.).** The Alaska Department of Fish and Game manages weathervane scallop fisheries, subject to the regulations established by the board.

**STATE WHETHER THIS ACR HAS BEEN CONSIDERED BEFORE, EITHER AS A PROPOSAL OR AS AN ACR, AND IF SO, DURING WHICH BOARD OF FISHERIES MEETING.** Not previously considered.

**SUBMITTED BY:** Alaska Department of Fish and Game.

# **Subsistence Harvests of Pacific Halibut in Alaska, 2012**



**Division of Subsistence  
Alaska Department of Fish and Game**

**Presentation to the  
North Pacific Fishery Management Council**

**Anchorage, AK  
December 2013**

**Project funded through a grant from the  
National Marine Fisheries Service:  
No. NA11NMF4370059**

**For the full study findings, see:**

Fall, James A. and David Koster. 2014. Subsistence Harvests of Pacific Halibut in Alaska, 2012. Alaska Department of Fish and Game, Division of Subsistence Technical Paper No. 388. Juneau.

# Project Background

- New subsistence regulations in effect May 2003
- 118 communities and 123 tribes eligible, plus residents of designated rural areas
- Registration requirement (SHARC)
- Regulations have provision for collecting harvest data
- This report covers the 10<sup>th</sup> year of the harvest assessment program (harvests in 2012)
- Due to funding constraints, the project will not continue for 2013 harvests

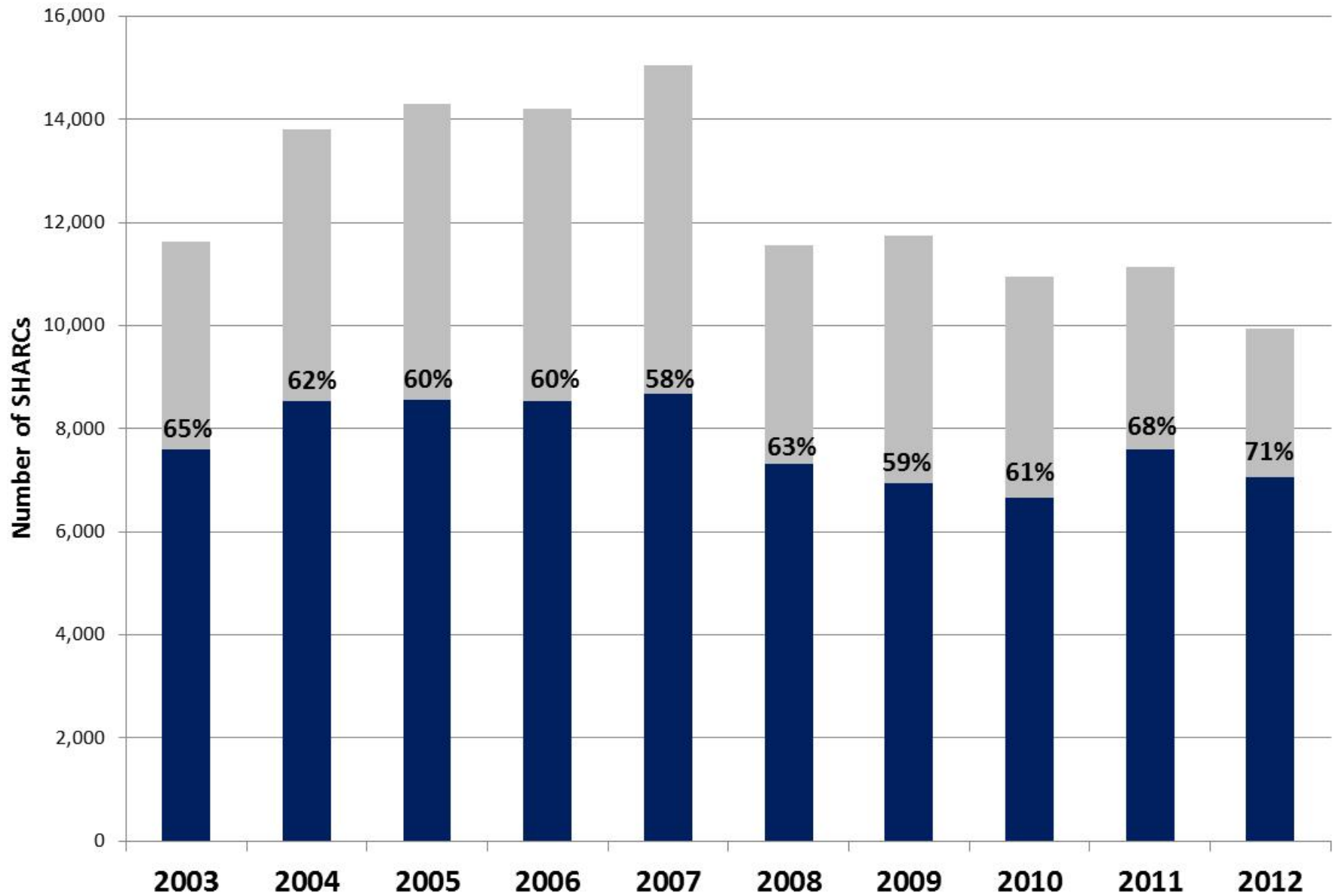
# Methods

- Mailed household survey is primary data collection method; response voluntary
- Mailed to all persons holding SHARCs during 2012: 9,944
- Three rounds of mailings
- Supplemented by household contacts and interviews in 5 Southeast Alaska communities (Area 2C)

# **Sample Achievement for 2012**

- **7,054 surveys returned**, of 9,944 valid SHARCs
- **Sampling fraction of 71%**
- **High rates of return** achieved in most larger communities with the most SHARCs issued

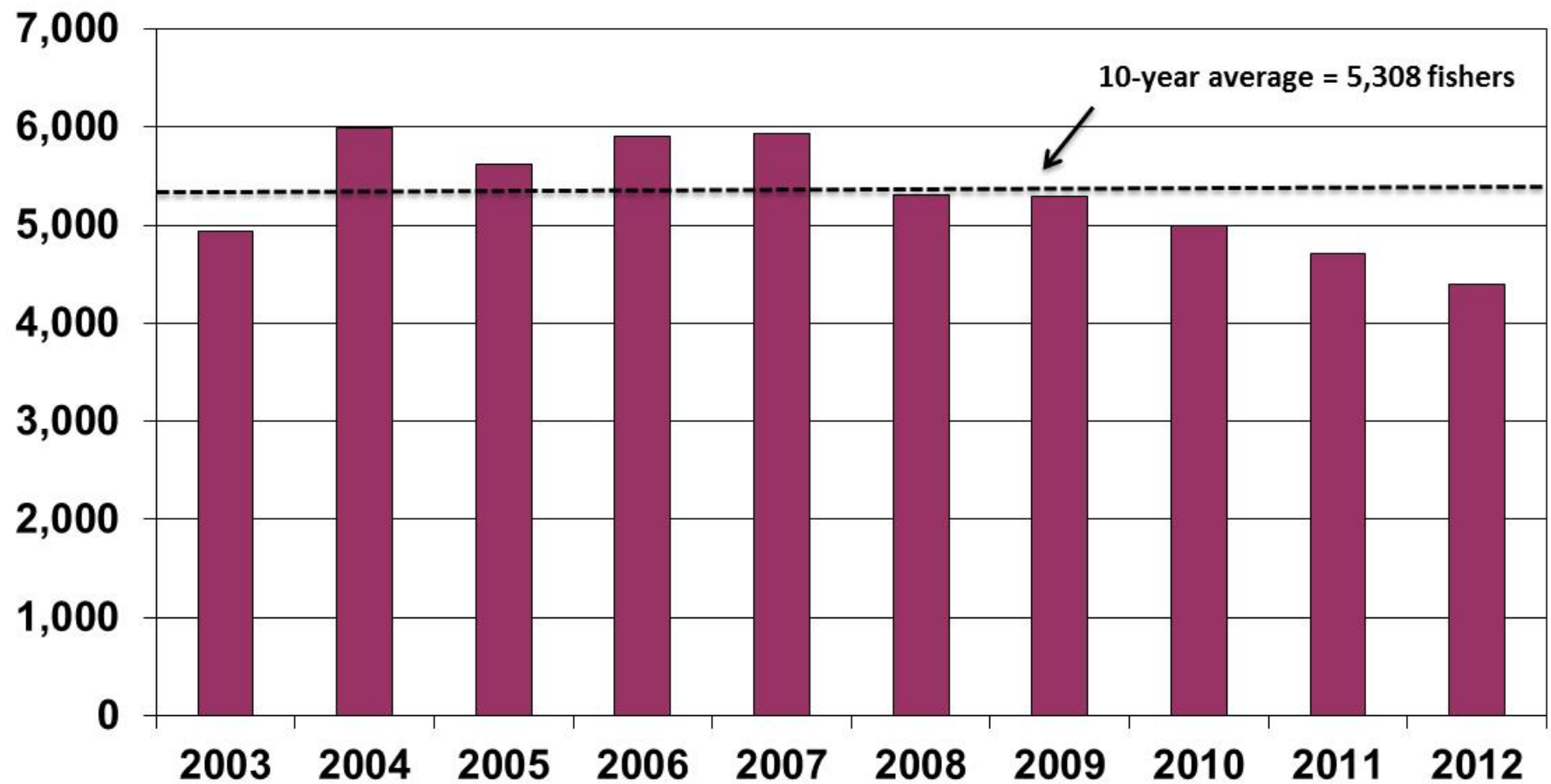
## SHARC Survey Achievement, 2003 - 2012



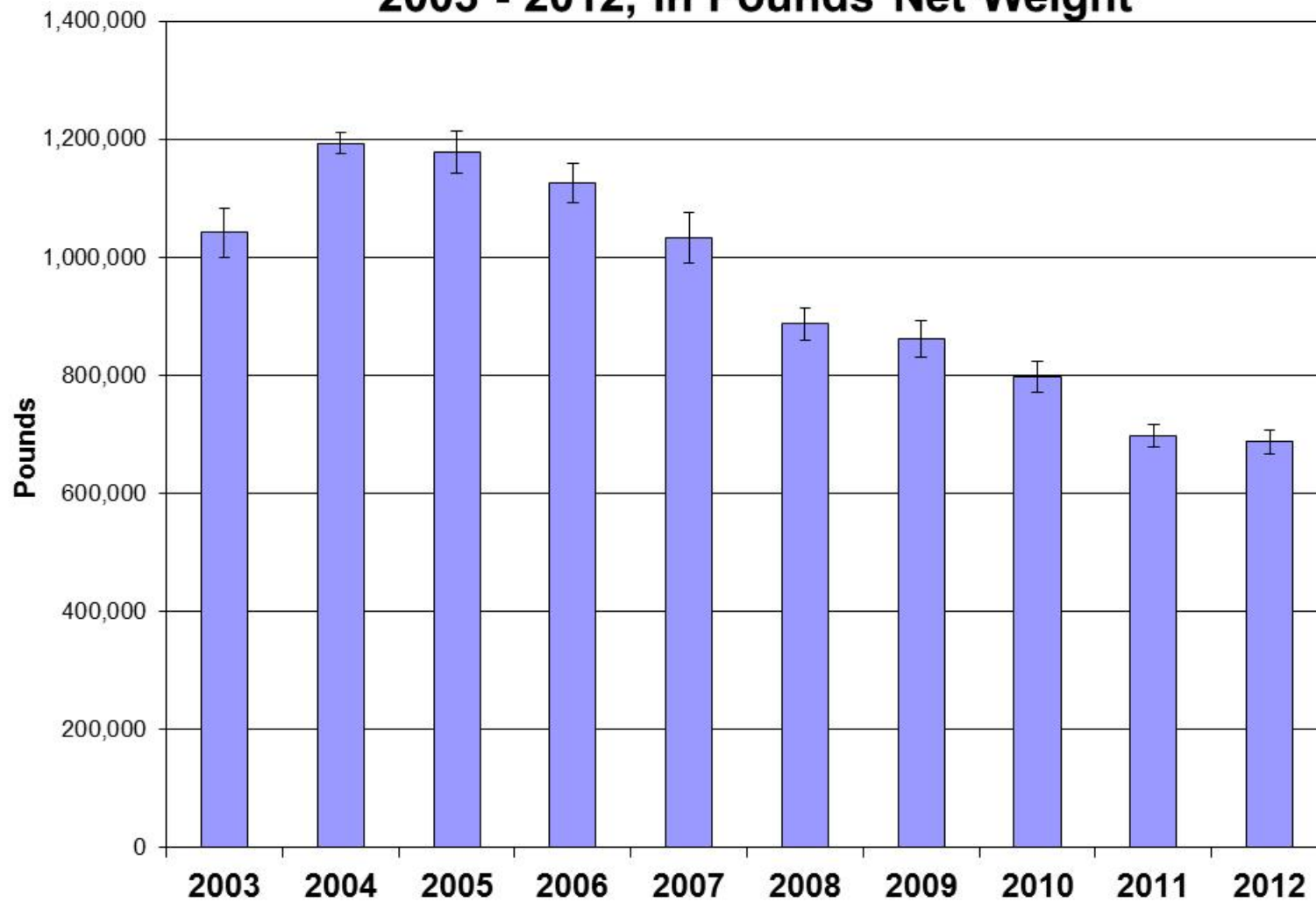
# Study Findings: Halibut 2012

- Estimated number of **subsistence fishers** = **4,394**
- Estimated subsistence harvest = **37,093 halibut**
- Estimated subsistence harvest = **686,991 lbs** net weight (= 75% of round weight) (18.5 lbs/fish)
- **58% of harvest occurred in Area 2C** (SE Alaska) & 37% in Area 3A (SC Alaska)
- 78% of harvest taken with setline gear; 22% with hand-operated gear

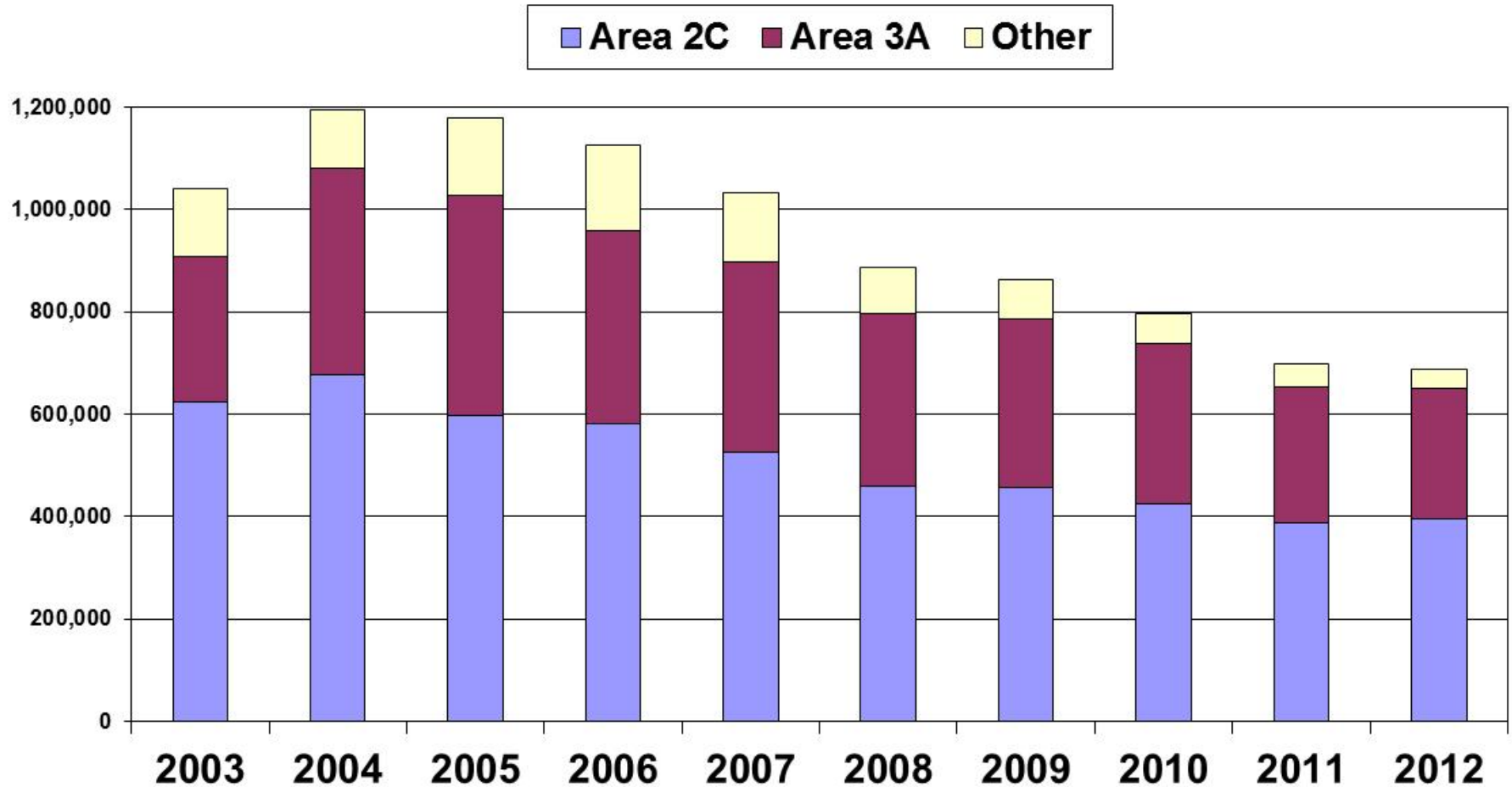
## Estimated Number of Individuals Subsistence Fishing for Halibut in Alaska, 2003 - 2012



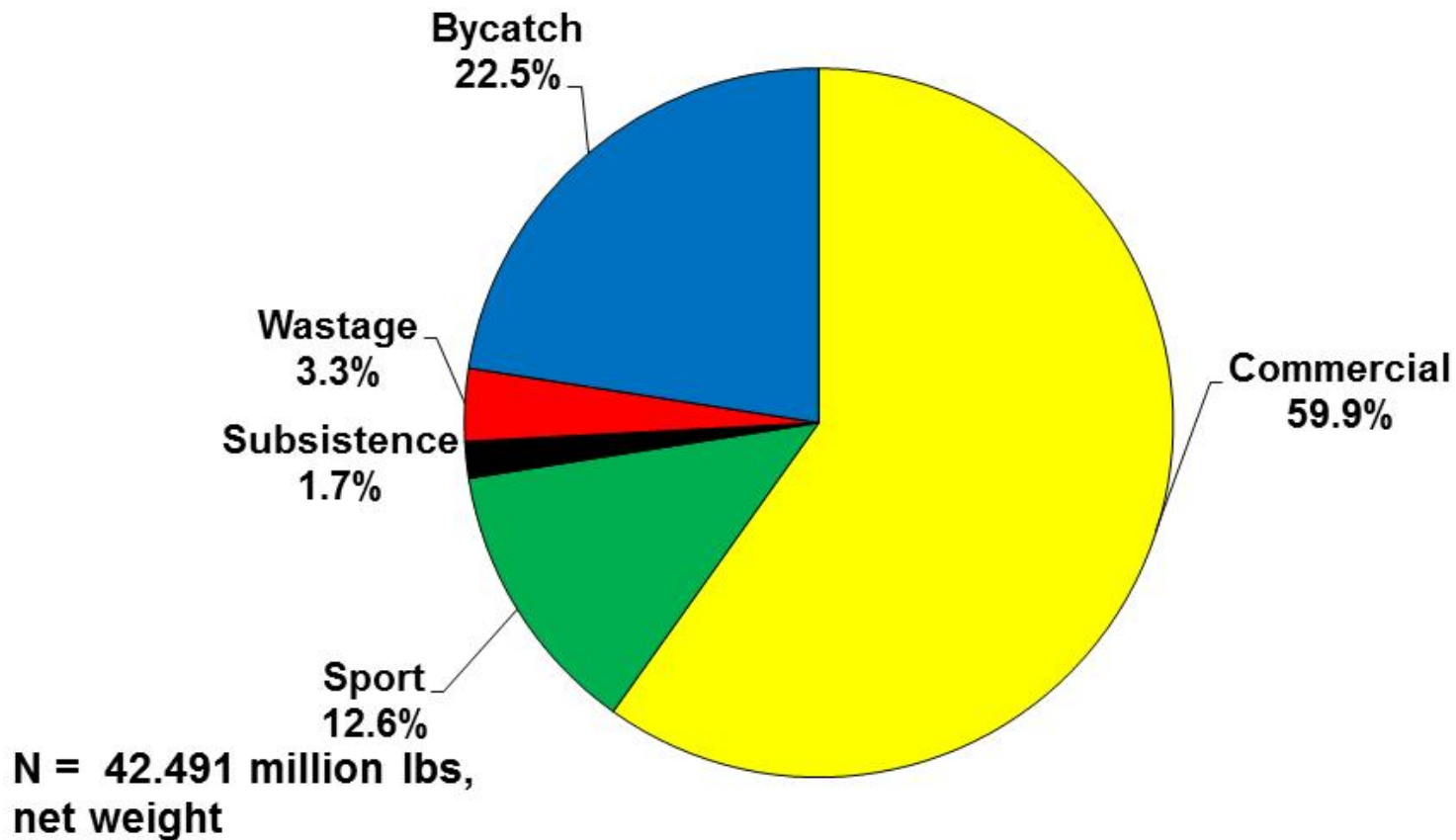
## Estimated Subsistence Harvests of Halibut in Alaska, 2003 - 2012, in Pounds Net Weight



## Estimated Subsistence Harvests of Halibut in Alaska, 2003 - 2012 (lbs net weight), by Area



## Halibut Removals, Alaska, 2012

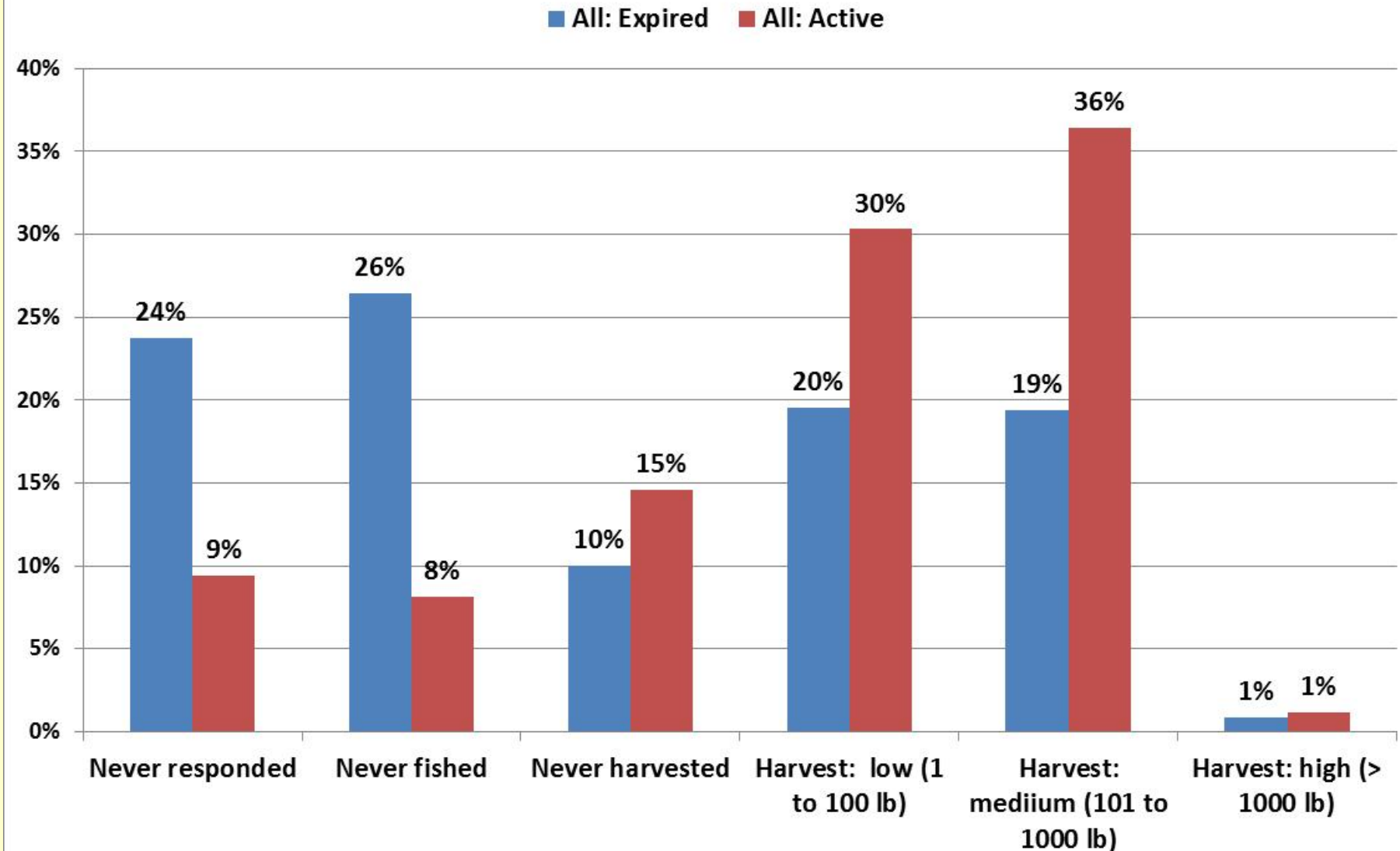


- Subsistence harvests by area ranged from 8.6% in Area 2C to 0.2% in Area 3B

# Analysis of SHARC renewal patterns

- Rural SHARCs: renew every 2 years
- Tribal SHARCs: renew every 4 years
- 21,835 individual SHARC holders, 2003 – 2012
- **54% did not renew, including 42% of those known to have fished**
- **Non-renewals more likely than active SHARCs to have not responded to the survey, not fished, and have lower harvests**

## Expired SHARCs and Active SHARCs Compared by Survey Response Type (based on Figure 36)



# Conclusions: Harvest Survey, Year 10

- Overall, Year 10 of the harvest survey was a success: good response rates and overall reliable harvest estimates
- Can discern some general patterns in the fishery since the new regulations came into effect
- Reasons for overall decline in harvests likely complex and require further investigation
- Concerns about nonrenewal of SHARCs, especially in certain regulatory areas

# Recommendations

- Conduct formal analysis of survey responses (77,363 over 10 years) for patterns and trends
- Conduct ethnographic research in selected communities to investigate fishing patterns, effects of regulatory changes, SHARC renewal patterns
- Consider in-season harvest monitoring in selected communities
- Continue and expand outreach to encourage obtaining and renewing SHARCs
- Based on results, resume harvest monitoring in the future

# For More Information

- Division of Subsistence Website:  
[www.subsistence.adfg.state.ak.us](http://www.subsistence.adfg.state.ak.us) and go to publications for draft final report
- Or: call us at 907-465-4147, or 465-3617, or 267-2353
- Or write: ADF&G, Division of Subsistence, 333 Raspberry Road, Anchorage, AK, 99518
- Or contact NMFS at: 1-800-304-4846 (option 2) or  
[www.fakr.noaa.gov/ram/subsistence/halibut.htm](http://www.fakr.noaa.gov/ram/subsistence/halibut.htm)



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:** REP 13-015

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**Agenda Date:** 12/9/2013

**Agenda Number:** B-4

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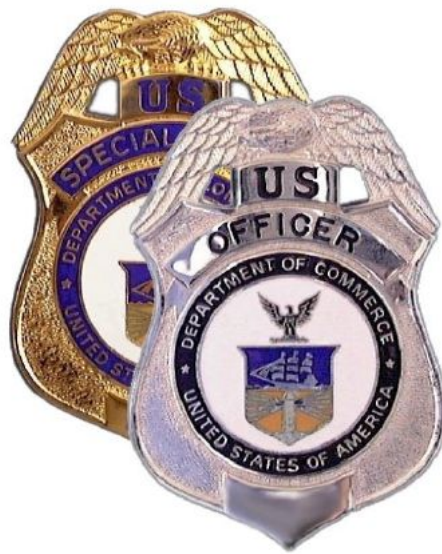
**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**  
NOAA Enforcement

National Marine Fisheries Service  
Office for Law Enforcement

ALASKA ENFORCEMENT DIVISION

**SEMI-ANNUAL REPORT  
TO  
NORTH PACIFIC FISHERIES MANAGEMENT COUNCIL**



FY2013 Third and Fourth Quarters  
April 1, 2013, to September 30, 2013

To report fisheries violations,  
call our National Hotline at 1-800-853-1964.

[http://www.nmfs.noaa.gov/ole/ak\\_alaska.html](http://www.nmfs.noaa.gov/ole/ak_alaska.html)

## **I. MAJOR CASES**

### **ADMINISTRATIVE HEARING**

An Administrative Law Judge ruled that the owner/operator of Alaska Yacht Charters, Geoffrey Wilson, violated the Endangered Species Act (ESA) and Marine Mammal Protection Act (MMPA) by approaching humpback whales within 100 yards. Witnesses stated that the CV ALASKA STORY pursued a pod of humpbacks and drove the vessel into the middle of the pod. The ALJ imposed a civil penalty of \$5,000 on Mr. Wilson and Alaska Yacht Charters.

An investigation from the Kodiak Field Office resulted in the issuance of two Notice of Violation Assessments (NOVAs) by General Council—Enforcement Section (GCES) Alaska to American Seafoods Company for flow scale tampering. GCES issued one NOVA in the amount of \$848,000 for the FV OCEAN ROVER and another for \$1,337,000 for the FV NORTHERN EAGLE; these are the second and third NOVAs issued to American Seafoods.

## **II. COMMUNITY OUTREACH AND EDUCATION**

### **Quarter 3 Highlights April 1, 2012 to June 30, 2012**

#### **Anchorage Field Office**

Enforcement Officers staffed a booth at the Great Alaska Aviation Gathering May 4-5 at the FedEx Terminal in Anchorage. Most attendees were pilots from all over the country. Officers provided information on collecting and registering marine mammal parts, halibut sport fishing, recruiting and the OLE mission.

In Seward Enforcement Officers presented information on regulations, viewing guidelines, MMPA/ESA issues for concern to National Park Service boat rangers and whale watching tour guides.

#### **Homer Field Office**

Enforcement Officers assisted approximately 70 individual fishers with questions relating to permits, regulations, and reporting violations.

Enforcement Officers received reports of illegal sport/charter activities from approximately 10 individuals, including Lacey Act violations.

#### **Juneau Divisional Office**

An Enforcement Officer met with members of the Juneau Yacht Club to discuss MMPA/ESA viewing and approach regulations, as well as sport halibut fishing regulations; approximately 75 participants.

### **Ketchikan Field Office**

A Special Agent gave a MMPA/ESA hard parts hands-on presentation to approximately 50 Head Start students and six teachers that included a talk on OLE's mission and activities.

### **Kodiak Field Office**

An Enforcement Officer and Observer Program personnel attended an Open House on the Japanese Research Vessel OSHORO MARU during its visit to Dutch Harbor; approximately 150 participants.

### **Petersburg Field Office**

An Enforcement Officer and Special Agent attended the Dixon Entrance Law Enforcement meetings in Prince Rupert, Canada, which was also attended by the Department of Fisheries and Oceans as well as the U.S. Coast Guard, U.S. Forest Service, Alaska State Troopers, Drug Enforcement Agency, and others.

An Enforcement Officer and Special Agent attended two Observer Program meetings with local fisherman in Petersburg; approximately 45 participants.

An Enforcement Officer attended a Borough Assembly meeting and the Petersburg Harbor Board meeting to discuss the local sea lion problem that arose from waste being dumped into the harbor; since then, the Borough has passed an ordinance prohibiting the dumping of fish waste in the harbor.

### **Sitka Field Office**

An Enforcement Officer gave OLE presentations on MMPA/ESA and Charter Halibut Regulations to various groups, including the Sitka Port Security, Sitka Charter Operators, and the Sitka Boat Owners Association reaching approximately 75 individuals.

### **Quarter Four Highlights**

**July 1, 2013, to September 30, 2013**

### **Southcentral—Anchorage, Homer**

Four Enforcement Officers staffed the OLE booth during the Alaska State Fair in Palmer. Questions from personnel were mainly about OLE, marine mammals, and halibut Fishing. Trends identified by personnel include attendance by statewide, national, and international participants, most questions are general curiosity regarding NOAA, OLE, and our mission. There has been an increase in questions regarding marine mammal native arts and collecting hard parts.

An Enforcement Officer organized and conducted joint education and outreach activities directed at the general public, charter operators, sport fishers, and commercial fishermen during dockside and vessel patrols with the USCG Anchorage Sector in Homer, Seldovia, Ninilchik Charter Association, Anchor Point, Nanwalek, and Port Graham. Charter Halibut Permit regulations were discussed along with MMPA/ESA and other regulatory issues relative to the area. Approximately 35 participants were contacted.

An Enforcement Officer conducted several meetings throughout the quarter with Alaska Wildlife Troopers (AWT), Homer Police Department (PD), Kenai PD, Soldotna PD, USCGC HICKORY, USCGC ROANOKE, USCG Marine Safety Detachment, and Homer Harbor officers regarding local enforcement issues or concerns; 30 participants.

An Enforcement Officer conducted several meetings throughout the quarter with NOAA Protected Resources Division, Seward Sea Life Center, and Marine Mammal Stranding Network to address reports of marine mammal or protected resource issues; 20 participants.

**Southeast—Juneau, Ketchikan, Petersburg, Sitka**

A Special Agent represented AKD at meeting in Ketchikan that included Alaska Wildlife Troopers, USCG, and Annette Island Reserve representatives to discuss enforcement-related issues and how each agency addresses safety inspections, authority to board vessels, and enforce fisheries laws; 15 participants.

Two Enforcement Officers attended the Southeast Alaska State Fair in Haines where they answered questions related to federal fisheries and marine mammal protection laws; 506 participants.

An Enforcement Officer in Petersburg met with the new Commanding Officer of the USCGC ANACAPPA to provide him with information regarding local fisheries, openings and closures, seasonal fleet locations, and issues facing fishermen.

An Enforcement Officer in Petersburg attended a City Council meeting that included local fishermen and IPHC staff to address the change in catch limits; 30 participants.

During a TDY in Dutch Harbor, the Petersburg Enforcement Officer collaborated with WestWard Seafoods personnel to educate plant personnel on measuring halibut in accordance with IPHC regulations.

### **III. OBSERVER PROGRAM ACTIVITIES**

The OLE contract position for Observer Program related outreach, training, and liaison has been renewed for the 2014 fiscal year. That position conducted the following activities during April – September, 2013:

#### Liaison with Observers, Observer Program Office, Staff, and Industry

- Participated in 33 meetings including Restructure Implementation conference calls, Amendment 91 workgroup meeting, and the Fisheries Monitoring and Analysis (FMA) staff meetings.
- Provided liaison support to 28 observers.
- Provided liaison support to 40 FMA staff members, observer providers and industry, by answering compliance reporting questions and creating and distributing outreach material.
- Provided liaison support to FMA staff and observers to document and report potential violations.
- Distributed 103 outreach letters and posters to industry members that were selected for observer coverage in the restructured observer program.

#### Training Assistance and Program Development

- Collaborated with FMA staff to prepare 2013 OLE Observer training materials.
- Provided compliance monitoring training to 28 new and returning observers.
- Updated FMA enforcement reference documents and procedural guides.
- Attended the OAC and AP meetings at the June NPFMC meeting in Juneau.
- Coordinated FMA staff briefing on compliance monitoring as well as the combined victim support training with OLE field staff provided by Mo Lewis with King County Sexual Assault Resource Center.

#### Investigative Assistance

- Completed 111 LEADS entries.
- Assisted FMA staff and observers to identify and report potential violations during debriefing.
- Evaluated observer complaints for potential enforcement actions.
- Maintained violation trend spreadsheets.
- Continued to track Amendment 91 violation trend data.
- Responded to 36 requests for observer related data.

### **OLE has identified the following trends related to observers and observer duties:**

Failure to maintain a vessel wheel watch (vessel lookout)

- Vessel lookout violations spiked during April – June and decreased during July – Sept.
- Preceding July, OLE took immediate enforcement actions and collaborated with the industry, observer program and USCG to address this observer safety (USCG Rule 5) violation.
- July – Sept, 2013, OLE received new 1 complaint (from a full coverage vessel).
- The Summary Settlement penalty for failure to maintain safe conditions for an observer

is \$1000 per instance.

Failure to provide observer reasonable assistance to collect fishing effort and catch information

- January – November 25, OLE received 56 reasonable assistance complaints as compared to 23 for all of 2012.
- OLE has increased enforcement and outreach efforts.
- The summary settlement penalty for failure to provide reasonable assistance starts at \$1000 or 2000 per instance (depending on offense) for first time violators.

Failure to record trips into the Observer Declare and Deployment System (ODDS) for trip selected vessels

- January - November 25, OLE has responded to 80 reports of failure to log a trip into the ODDS.
- The Summary Settlement penalty for failure to log a trip into ODDS starts at \$1000 per instance for first time violators.

Failure to retain IFQ species or mishandling small halibut on IFQ vessels

- During January – November 25, OLE received 22 reports of vessel operators failing to retain IFQ species or mishandling halibut onboard vessels fishing halibut or sablefish IFQ.
- The Summary Settlement penalty for IFQ retention violations starts at \$200/fish plus forfeiture of any illegally retained fish.
- The Summary Settlement penalty for prohibited species mishandling is a written warning for a first offense and \$1250 – 1500 per instance for repeat offenses.

Amendment 91 Bering Sea salmon monitoring:

- Approximately 4% of all AFA CV deliveries include uncontained deckloads presenting a census challenge and opportunity for presorting.
- Discards of unsorted pollock (also IRIU) also result in some salmon discard.
- OLE continues to collaborate with the Observer Program, Sustainable Fisheries, and industry to work toward solutions to monitoring challenges.
- The Summary Settlement penalty for sorting salmon prior to the observer opportunity to sample starts at \$2500 per fish for first time violators.
- The Summary Settlement penalty for failure to retain IRIU pollock starts at \$3500 for first time violators.



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:** REP 13-010

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**Agenda Date:** 12/9/2013

**Agenda Number:** B-5

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**  
USCG Report



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:** REP 13-012

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**Agenda Date:** 12/9/2013

**Agenda Number:** B-6

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**  
IPHC Report



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:** REP 13-013

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**Agenda Date:** 12/9/2013

**Agenda Number:** B-7

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**  
USFWS Report



IN REPLY REFER TO:

## United States Department of the Interior

### FISH AND WILDLIFE SERVICE

1011 E. Tudor Road  
Anchorage, Alaska 99503-6199



FWS/AFES

Agenda Item B-6: U.S. Fish and Wildlife Service Report  
December 6, 2013

#### **Endangered Species Act Issues:**

##### *Kittlitz's Murrelet:*

On October 3, 2013, the U.S. Fish and Wildlife Service (Service) published its finding (Federal Register Vol. 78, No. 192) that listing the Kittlitz's murrelet as threatened or endangered under the Endangered Species Act is not warranted. Therefore, the Kittlitz's murrelet was removed from the candidate species list.

For further information, contact Ellen Lance, Endangered Species Branch Chief at (907) 271-1467 or [Ellen.Lance@fws.gov](mailto:Ellen.Lance@fws.gov).

#### **Marine Mammals:**

##### *Pacific Walrus:*

The U.S. Fish and Wildlife Service, Marine Mammals Management office has partnered with Dr. Lori Polasek of the Alaska Sea Life Center to expand her remote camera disturbance data collection project to the walrus haulout on Hagemeister Island. The overall project is designed to study disturbance impact and recovery on both historic (males) and emerging (primarily females and calves) walrus haulouts. The Hagemeister Island portion of the project will focus on using still images to better document haulout use and the potential for anthropogenic disturbance events related to marine vessel traffic.

Disturbance monitoring has been conducted at Round Island, Cape Peirce, Cape Newenham, and Cape Seniavin in previous years. There is a substantial amount of marine vessel traffic transiting Hagemeister Strait and managers have no information on frequency, severity, or cause of disturbance events at the Hagemeister haulout. The Service has recently issued guidelines to reduce the potential for disturbance of hauled out walrus from marine vessel traffic in Bristol Bay. Results from this investigation will help managers and mariners evaluate the effectiveness of these guidelines.

To record disturbance events, three time-lapse cameras and one acoustic monitor were deployed on the southwest coast of Hagemeister Island during 2013. On May 7, the

equipment was secured to posts at two locations. At the primary location (58°34'49.30"N 161°04'28.14"W) near the center of the beach: one camera was pointed at the beach where walrus were likely to haul out, a second camera was pointed at the water immediately in front of the beach to capture any disturbance sources, and the acoustic monitor was mounted. To achieve more complete coverage of the beach, a third camera was mounted at a second location (58°34'45.16"N 161°04'27.24"W) near the end of the beach. Cameras took images once per minute from 7am to 9pm, while the acoustic monitor continuously recorded ambient sound at the site during the same time period. Based on the projected battery life and data acquisition rates, it is estimated that the equipment monitored the haulout for 71 days. This equipment was recovered in late October. Image analysis is ongoing.

Partial funding for the Hagemeister project was provided by Alaska Seafood Cooperative, Glacier Fish Company, American Sea Foods, and the Pacific Walrus Conservation Fund.

For further information, contact Jonathon Snyder, Wildlife Biologist at (907) 786-3819 or [Jonathon\\_Snyder@fws.gov](mailto:Jonathon_Snyder@fws.gov).



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

605 W. 4th Ave. Suite 306  
Anchorage, AK 99501  
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## Action Memo Text

**File Number:** REP 13-014

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**Agenda Date:** 12/9/2013

**Agenda Number:** B-8

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Chris Oliver, Executive Director  
Eric Olson, Chairman

**SUBJECT:**

Protected Species Report (including SSL EIS and BiOp update)

**ESTIMATED TIME:**

6 hours (all B Reports)

**ACTION REQUIRED:**

Receive report on Protected Resources issues and take action as necessary.

**BACKGROUND:**

Steller sea lion Eastern DPS

On October 23, 2013 the National Marine Fisheries Service announced a final rule to remove the Eastern DPS of Steller sea lion from the U.S. Endangered Species List. The Final Rule is available on NOAA's site: [http://alaskafisheries.noaa.gov/frules/ssl\\_asfiled102313.pdf](http://alaskafisheries.noaa.gov/frules/ssl_asfiled102313.pdf). This is the first species that NOAA has delisted due to recovery since the eastern North Pacific gray whale was removed from the list in 1994. NOAA concluded that delisting of the EDPS is warranted because the stock has met the recovery criteria outlined in the 2008 Recovery Plan and no longer meets the definition of a threatened or endangered species under the Act. The best available scientific information indicates that the EDPS has increased from an estimated 18,040 animals in 1979 to 70,174 in 2010 and has experienced sustained significant population growth. The Eastern DPS of SSL will continue to be protected under the provisions of the Marine Mammal Protection Act.

NOAA fisheries is working with affected states and other partners to develop a post-delisting monitoring plan for the EDPS. The plan is available on NOAA's site:

<http://alaskafisheries.noaa.gov/protectedresources/stellers/edps/statusreview071813.pdf>. This monitoring plan will be in effect for 10 years, twice the five-year requirement under the ESA. This plan is intended to ensure that the recovery of the EDPS is maintained. The delisting of the EDPS will take effect 30 days after the publication of the final rule in the Federal Register.

Steller sea lion Western DPS

On October 16, 2013 the Ninth Circuit Court of Appeals denied a motion to reconsider their ruling upholding the 2010 SSL BiOp, ruling that the Agency's use of subregional data did not violate the Endangered Species Act and that the Agency utilized appropriate standards to find that continuing previous fishing levels in those sub-regions would adversely modify the critical habitat and jeopardize the continued existence of the entire population.

Following the October 2013 Council meeting, the Council sent a letter (Item B-8(a)) to Dr. James Balsiger (NOAA AKR Administrator) outlining the Council's selection of Alternative 5 (PPA) as the Preferred Alternative, and reiterating the Council's desire to see a draft Biological Opinion before publication of the final BiOp to allow the Council to remain involved in development of any Reasonable and Prudent Alternative, should one prove necessary.

Either during B reports or at a later point in this meeting NMFS will present an update on the progress made

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**Agenda Date:** 12/9/2013

**Agenda Number:** B-8

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on the EIS and BiOp, and outline options for moving forward including what would be necessary to prepare a draft BiOp and include Council participation in development of a RPA.

#### Kittlitz's Murrelet

On October 3, 2013 the U.S. Fish and Wildlife Service (USFWS) published a 12-Month Finding on a petition to list Kittlitz's murrelet (*Brachyramphus brevirostris*) as an endangered or threatened species (FR 78 No. 192 61764). The Agency concluded that the best available scientific and commercial information indicated that listing the Kittlitz's murrelet is not warranted at this time. The Agency continues to solicit information regarding threats to the Kittlitz's murrelet or its habitat.

#### Bowhead whales

A poster presented at the January, 2013 Alaska Marine Science Symposium presented information about the presence of scars on bowhead whales that indicate ship strikes, orca predation, and line entanglement. That analysis showed that bowhead whales ~17 m in length had a 50% probability of showing entanglement scars. Most of the variation in occurrence of line entanglement was explained by sex and size of the whale. Of 11 whales reported with line attached, at least three included line that was confirmed to be from commercial pot gear (see Item B-8(b)).

Recent sightings of whales with entanglement scars include younger, smaller whales (pers. comm, C. George, North Slope Borough Dept. Wildlife Management), a shift from previous results. This suggests that younger whales might be encountering commercial pot gear or other lines more frequently than in the past. Scientists from the North Slope Borough will continue to document entanglement scars to further elucidate entanglement trends.

#### Pinto Abalone

On November 18, 2013 the National Marine Fisheries Service published a 90-day finding regarding petitions from the Natural Resources Defense Council and the Center for Biological Diversity to list the Pinto Abalone (*Haliotis kamtschatkana*) as threatened or endangered throughout its range under the Endangered Species Act, and to designate critical habitat for the species. The Agency found that the petitions and information available present substantial scientific or commercial information indicating that the petitioned action may be warranted. The agency has initiated a status review of the species to determine if the petitioned action is warranted. NMFS is soliciting scientific and commercial information pertaining to the Pinto Abalone. Information and comments on the action must be received by January 17, 2014.

The Pinto Abalone inhabits shallow areas of coastal waters from Southeast Alaska to Pt. Conception, California. They are frequently found in kelp beds and on rocky bottoms from the low tide line to 30-40 feet depth. The abundance of Pinto Abalone declined sharply in Alaska from 1982-1995, and they continue to disappear in large areas of its range. Pinto Abalone are vulnerable to overharvest because of their patchy distribution, short larval period, slow growth, and low recruitment. Pinto Abalone are preferred prey for sea otters, and expansion of otters in Southeast Alaska is considered by the State of Alaska to be a threat to abalone.

# North Pacific Fishery Management Council

Eric A. Olson, Chairman  
Chris Oliver, Executive Director



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Visit our website: <http://www.alaskafisheries.noaa.gov/npfmc>

November 4, 2013

Dr. James Balsiger  
Administrator, Alaska Region  
National Marine Fisheries Service  
National Oceanic and Atmospheric Administration  
PO Box 21668  
Juneau, AK 99802

Dear Dr. Balsiger,

During the recent meeting of the North Pacific Fishery Management Council, the Council reviewed the Agency's analysis of the preliminary preferred alternative in the draft Steller Sea Lion Protection Measures EIS (EIS), and a summary of the draft Comment Analysis Report (CAR). After review of this information, recommendation from the Advisory Panel, and public comments, the Council approved a motion to recommend Alternative 5, the preliminary preferred alternative, as its Preferred Alternative for analysis in the Final EIS. Based on the best available scientific information, including the scientific findings of the independent scientific reviews conducted by the CIE on behalf of NMFS and the Independent Scientific Review Panel convened by the States of Alaska and Washington, the Council believes that its Preferred Alternative will not result in jeopardy and adverse modification to the SSL and their critical habitat.

The Council also strongly recommends that NMFS provide a draft Biological Opinion (BiOp) that analyzes the Preferred Alternative, and that the draft BiOp be provided to the Council and its SSC for review and comment within the context of the existing schedule. In this analysis, the Council expects to see clear and specific responses to findings and conclusions made by the CIE and the independent scientific review convened by the States of Washington and Alaska regarding the 2010 Biological Opinion, as well as specific metrics and analyses regarding the effects of fishing on SSLs and their habitat in light of those findings and conclusions. This information is crucial for developing any reasonable and prudent alternatives to the Preferred Alternative, if needed. Receiving this information prior to final Agency action is essential for the Council and the public to make informed comments and recommendations.

In selecting the Preferred Alternative and recommending completion of a Draft BiOp, the Council notes the following:

1. In its letter of August 21, 2013 NMFS responded to the Council's request for additional information regarding the effects of fishing SSLs and the metrics that would be used to evaluate the effects of the alternatives on SSL and their critical habitat, stating that there would be no new information provided to the Council at this meeting. NMFS cited several documents that might inform the Council's deliberations regarding selection of a preferred alternative. The Council has

Dr. James Balsiger  
November 4, 2013  
Page 2 of 2

reviewed these documents and information sources and has taken them into consideration when making these recommendations.

2. The Council on numerous occasions has requested that NMFS provide the analyses and specific metrics and performance criteria that will be used to determine the effects of fishing on SSL and their critical habitat. The Council has repeatedly stated that it is necessary for these to be incorporated into the EIS at its various stages of development in order to inform the public and the Council about the relative effects of the alternatives on SSLs. The Council has specifically requested this information be made available to assist in choosing a Preferred Alternative. To date, NMFS has been able to make this information available.
3. In selecting the PPA and requesting completion of a draft BiOp, the Council notes that the existing schedule for completion of the EIS and rulemaking provides ample time to prepare the draft Biological Opinion, develop RPAs if necessary in a coordinated manner with the Council, and provide the opportunity for a meaningful public process. The Council believes that this is an important step as it will be the first opportunity for the public and the Council to review and comment on the analyses that will be used to assess the effects of fishing on SSL and their critical habitat, and to review and comment on the performance criteria and metrics that will be used to evaluate the effects of alternatives on SSLs.

On behalf of the Council, I respectfully submit these comments. We remain committed to working closely with NMFS Alaska Region as the EIS and BiOp are completed, and look forward to reviewing the draft Biological Opinion.

Sincerely,

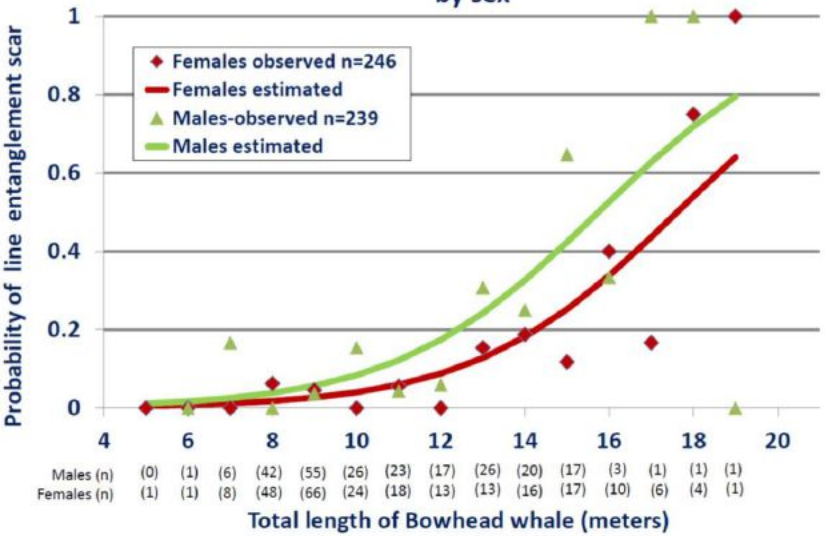


Chris Oliver  
Executive Director

Cc: Dr. Douglas DeMaster  
Mr. Samuel Rauch  
Mr. Jon Kurland

# LINE ENTANGLEMENTS

Bowhead length vs. probability of line entanglement scars  
by sex





ITEM B-8 supplemental  
DECEMBER 2013

**UNITED STATES DEPARTMENT OF COMMERCE**  
**National Oceanic and Atmospheric Administration**  
*National Marine Fisheries Service*  
P.O. Box 21668  
Juneau, Alaska 99802-1668

November 27, 2013

Eric A. Olson, Chairman  
North Pacific Fishery Management Council  
605 W. 4th Avenue, Suite 306  
Anchorage, Alaska 99501-2252

Dear Mr. Olson:

The National Marine Fisheries Service (NMFS) is developing an Endangered Species Act biological opinion based on the preferred alternative the Council selected in October for the Environmental Impact Statement on Steller Sea Lion Protection Measures for Groundfish Fisheries in the Bering Sea and Aleutian Islands Management Area (EIS). As we have noted in the past, the court-ordered schedule for the EIS does not provide sufficient time for NMFS to obtain Council feedback on a draft biological opinion. The current schedule also does not provide enough time for us to engage the Council in the development of fishery management measures to implement a Reasonable and Prudent Alternative (RPA) in the event the biological opinion concludes that we cannot insure the proposed action is not likely to jeopardize the continued existence of the western distinct population segment of Steller sea lions or adversely modify critical habitat.

If RPA measures are needed, the Council is the entity best suited to aid NMFS in the development of such measures in a manner that involves the public, accounts for different points of view, and reconciles potential tradeoffs between sectors of the fishing industry and between affected communities. However, we can only provide that opportunity if the existing schedule is modified. Therefore, we request that the Council consider the following two options and tell us how the Council would like to proceed:

Option 1: Proceed with the current schedule. Under this option we will complete the final EIS by the March 2, 2014, deadline accompanied by a final biological opinion. If we cannot insure the proposed action is not likely to jeopardize the continued existence of the western distinct population segment of Steller sea lions or adversely modify critical habitat, NMFS will develop an RPA and associated fishery management measures without the benefit of Council and stakeholder input and we will proceed with rulemaking to implement those measures by January 2015.

Option 2: Seek a five month extension from the Court. Under this option, if the Court grants the extension, and if we cannot insure the proposed action is not likely to jeopardize the continued existence of the western distinct population segment of Steller sea lions or adversely modify critical habitat, we will release a draft biological opinion to the Council by approximately February 28, 2014. NMFS will provide performance standards for an RPA and will work with the Council to develop associated fishery management measures based on stakeholder input.



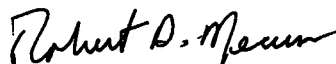
The Council will be able to consider this issue during its April and June meetings, and we will finalize the EIS and biological opinion by approximately August 1, 2014. We will then proceed with rulemaking to implement those measures by January 2016, or potentially somewhat earlier if mid-year implementation is practicable.

Under either option, if NMFS determines by approximately February 28, 2014, that RPA measures are not needed based on the biological opinion (i.e., if NMFS can insure the proposed action is not likely to jeopardize the continued existence of the western distinct population segment of Steller sea lions or adversely modify critical habitat), we will finalize the EIS in accordance with the current court-ordered schedule. In other words, our intent is that even if the Court grants a time extension under Option 2, we would not take additional time unless needed for the development of RPA measures through the Council process.

NMFS will only seek a time extension if we have the Council's support. Due to the time required to coordinate with the Department of Justice and other parties and seek the Court's approval, we ask the Council to respond at the December meeting – we cannot wait until the February meeting.

NOAA's Acting Assistant Administrator for Fisheries, Sam Rauch, and plans to attend a portion of the upcoming Council meeting and would be happy to discuss this matter with the Council on December 13, 2013. We look forward to that conversation with the Council.

Sincerely,

  
for James W. Balsiger, Ph.D.  
Administrator, Alaska Region



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November 25, 2013

Via email and U.S. mail

Dr. James Balsiger, Regional Administrator  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service, Alaska Region  
P.O. Box 21668  
Juneau, Alaska 99802-1668

RECEIVED  
NOV 28 2013

Re: Steller sea lion consultation under Section 7 of the ESA

Dear Dr. Balsiger:

I write on behalf of the Alaska Seafood Cooperative and its members (collectively "AKSC") to request that they be recognized and treated as applicants in the formal consultation recently initiated by NMFS under Section 7 of the Endangered Species Act ("ESA") on the effects of proposed changes to Steller sea lion protection measures for the Groundfish Fisheries in the Bering Sea and Aleutian Islands Management Area ("BSAI").<sup>1</sup> AKSC specifically asks to be provided with a copy of any draft Biological Opinion that is prepared as a result of this consultation.

AKSC requires formal approval and authorization from NMFS in order to fish for groundfish and otherwise operate in the federal fishery in the BSAI. Accordingly, it is an applicant under the ESA.<sup>2</sup> As an applicant, AKSC has specific and exclusive rights during formal consultation – rights to which the general public is not entitled. These include, but are not limited to: the opportunity to review the draft biological opinion, participate in consultation discussions, and contribute expertise to the consultation. NMFS is specifically required to do the following:

Review all relevant information provided by the Federal agency or otherwise available. . . . [and d]iscuss with the Federal agency **and any applicant** the Service's review and evaluation conducted under [50 C.F.R. § 402.14(g)(1)-(3)], the basis for any finding in the biological opinion, and the availability of reasonable and prudent alternatives (if a jeopardy opinion is to be issued) that the agency **and the applicant** can take to avoid violation of section 7(a)(2). The Service will utilize the expertise of the Federal agency **and any applicant** in identifying these alternatives. If requested, the Service shall

<sup>1</sup> Letter from James W. Balsiger to Cora Campbell, Sept. 12, 2013.

<sup>2</sup> 50 C.F.R. § 402.02 (defining an "applicant" as "any person, as defined in section 3(13) of the Act [(broadly defining the term "person")], who requires formal approval or authorization from a Federal agency as a prerequisite to conducting the action.").

make available to the Federal agency the draft biological opinion for the purpose of analyzing the reasonable and prudent alternatives. . . . **The applicant may request a copy of the draft opinion from the Federal agency.** All comments on the draft biological opinion must be submitted to the Service through the Federal agency, although the applicant may send a copy of its comments directly to the Service . . . .<sup>3</sup>

However, our understanding is that NMFS has not been consistent in fulfilling its legal obligations to applicants during consultation. NMFS, for example, has attempted to deny other applicants participating in federal fisheries the right to review draft biological opinions under 50 C.F.R. § 402.14(g). In 2002, the U.S. District Court for the District of Columbia explicitly rejected NMFS' arguments on this issue and required NMFS to afford the plaintiff-applicant its participatory rights. *Hawaii Longline Ass'n v. Nat'l Marine Fisheries Serv.*, No. 01-765, 2002 WL 732363 (D.D.C. April 25, 2002) ("*HLA I*").<sup>4</sup>

In *HLA I*, plaintiff-applicant HLA argued that NMFS "violated the ESA's implementing regulations by shutting HLA out of the consultation and biological opinion process." Explaining that "[t]he consultation regulations require that NMFS review all relevant information submitted by the applicant and discuss its analysis and grounds for the biological opinion with the applicant[.]" the court held that release of the draft biological opinion to applicants before completion of a final biological opinion "was intended to be automatic."<sup>5</sup> The court noted that, in NMFS' responses to comments on the proposed rule governing applicant rights during

<sup>3</sup> 50 C.F.R. § 402.14(g)(1)-(5) (emphasis supplied); NMFS & USFWS, *Endangered Species Consultation Handbook*, 1-14, 2-13 (1998) ("ESA Handbook").

<sup>4</sup> The district court adopted Magistrate Facciola's *HLA* opinion its Memorandum Opinion, No. 01-00765 at 5 (D.D.C. filed Sept. 24, 2002) ("the Court agrees with Magistrate Judge Facciola, that Plaintiff's procedural rights were violated when it was not treated as an applicant under the governing regulations and not provided with a copy of the draft 2001 BiOp.") and 281 F.Supp.2d 1, 13 (D.D.C. 2003).

Other courts considering the Services' obligations under 50 C.F.R. § 402.14(g)(5) have consistently determined that they must release draft biological opinions to applicants. *See, e.g., Good v. United States*, 39 Fed. Cl. 81, 92-93 (Fed. Cl. 1997) ("[Service] regulations exhibit a clear preference for receiving applicant input during the development of RPAs, 50 C.F.R. § 402.11(a)-(b), and provide the applicant with the right to review a draft of the biological opinion so that he may comment upon both the jeopardy determination and the proposed RPAs before they are finalized, 50 C.F.R. § 402.14(g)(5)) (quoting Interagency Cooperation: Endangered Species Act of 1973, as Amended; Final Rule, 51 Fed. Reg. 19926, 19952 (June 3, 1986) ("Paragraph (g) provides for . . . applicant review of the basis for any finding contained in draft biological opinions, including the availability of reasonable and prudent alternatives."); *Wash. Toxics Coalition v. U.S. Dep't of Int.*, 457 F.Supp.2d 1158, 1165-66 (W.D. Wash. 2006) (addressing rules streamlining pesticide consultations by making discussion with applicants discretionary, and contrasting those rules with the mandatory requirements of 50 C.F.R. § 402.14(g)(5), which are "not couched in optional language" and require the Service to discuss its review and evaluation with the action agency and applicants).

<sup>5</sup> *HLA I*, 2002 WL 732363 at \*4, 11-12 (citing 50 C.F.R. § 402.14(d), (g)). The *HLA* court also rejected NMFS' constrained interpretations of the term "applicant" and the meaning of applicants' rights under 50 C.F.R. § 402.14(g). The court explained that NMFS' "preamble to the regulations explicitly states that applicant status is to be 'broadly' conferred and reiterates the statutory command that any person seeking 'any other form of authorization or approval issued by a Federal agency . . . ' be deemed an applicant." *Id.* at \*7 (citing 51 Fed. Reg. 19926 (June 3, 1986)).

consultation, NMFS explained that “release of draft opinions to Federal agencies and any applicants (through the Federal agency) facilitates a more meaningful exchange of information. Review of draft opinions may result in the development and submission of additional data, and the preparation of more thorough biological opinions.”<sup>6</sup> The *HLA* court found “[e]ven more explicit language” in the ESA Handbook, “which confirms that ‘[t]he applicant is entitled to review draft biological opinions obtained through the action agency, and to provide comments through the action agency.’ . . . In spite of its present position, NMFS cannot wish these earlier interpretations away.”<sup>7</sup>

In a subsequent opinion in the same case, the *HLA* court admonished NMFS for “com[ing] close to misleading the Court when registering [its] objections” to the issue of whether a draft biological opinion must be released to an applicant.<sup>8</sup> The court found that NMFS’ objection to disclosure was “flatly belied by the text of the regulation which explicitly states, . . . ‘The Service believes that the applicant should participate in the review and should receive a copy of the draft [biological opinion] from the Federal agency. The final rule includes this provision.’”<sup>9</sup> The *HLA* court continued: “Defendants [(NMFS)] come perilously close to wasting the Court’s time with such a meritless objection; particularly when the comments to the regulation state in crystal clear terms that the agency changed the rule so that the draft [biological opinion] is to be disclosed to the applicants.”<sup>10</sup>

The legal consequences of a failure to share a draft biological opinion with AKSC are significant. They could derail the entire consultation process and send the NPFMC and NMFS back to the drawing board. In a recent case in which the U.S. District Court for the District of Oregon determined that NMFS did not afford applicants their participatory rights during an ESA consultation, the court explained that, as a result, “the biological opinion *must* be construed as arbitrary and capricious.” *Oregon Natural Desert Ass’n v. Tidwell*, 716 F.Supp.2d 982, 1001 (D. Or. 2010) (citing 50 C.F.R. ¶ 492.14(d)) (emphasis added); *see also HLA II* at 5 (finding that plaintiff-applicant’s “procedural rights were violated [by NMFS] when it was not treated as an applicant under the governing regulations and not provided a copy of the draft . . . biological opinion” and that “these violations merit vacating and remanding the . . . biological opinion to the agency.”).

During the development of the 2010 Biological Opinion on Steller sea lions, NMFS released the draft biological opinion to the public and the NPFMC. However, applicants have rights under the ESA not granted to members of the general public. “[A] substantial difference exists between being treated by the agency as an applicant and being treated by the agency as a member of the general public.” *HLA II* at 5, 9 n.7 (addressing 50 C.F.R. § 402.14(g)). Those rights must be observed in this consultation. This can be done while maintaining the schedule set by Judge Burgess. We ask NMFS to provide AKSC, as an applicant, with the opportunity for

<sup>6</sup> *Id.* at \*11 (citing 51 Fed. Reg. at 19952).

<sup>7</sup> *Id.* (quoting ESA Handbook at 2-13).

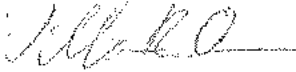
<sup>8</sup> *HLA v. NMFS* (“*HLA II*”), No. 01-00765, Memorandum Opinion, Dkt. 87 at 8, n.6 (D.D.C., Sept. 24, 2002).

<sup>9</sup> *Id.* (quoting Interagency Cooperation – ESA, as amended; Final Rule, 51 Fed. Reg. 19926, 19952 (June 3, 1986) (codified at 50 C.F.R. Pt. 402)).

<sup>10</sup> *Id.*

meaningful review of the draft biological opinion by AKSC and participation in the development of any reasonable and prudent alternatives, as required by the ESA.

Sincerely,

A handwritten signature in dark ink, appearing to read 'W. Orr', with a horizontal line extending to the right.

William Orr  
President, Alaska Seafood Cooperative

cc: Eric Olsen, Chair, North Pacific Fishery Management Council  
Samuel D. Rauch III, (Acting) Assistant Administrator for Fisheries



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**HAL 13-005

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**Agenda Date:** 12/9/2013

**Agenda Number:** C-1

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**  
Halibut Issues  
**ESTIMATED TIME:**  
6 hours

**ACTION REQUIRED:**

Recommend management measures for Area 2C and Area 3A for 2014

**BACKGROUND:**

The Council adopted a new approach to manage the charter halibut fisheries under the Guideline Harvest Level Program beginning in 2012. The Council recommended 1 fish  $\leq 45$  inches or  $\geq 68$  inches ("U45O68") for Area 2C in 2012, based on recommendations from its Charter Management Implementation Committee, Advisory Panel, and public, that relied on an ADF&G staff analysis of a range of proposed management measures. The recommended measure accounted for an increased GHL from 788,000 lb in 2011 to 931,000 lb in 2012. For Area 3A the Council recommended status quo (2 fish of any size) based on a decreased GHL from 3,651,000 lb in 2011 to 3,103,000 lb in 2012. The International Pacific Halibut Commission adopted the Council recommendations at its January 2012 Annual Meeting. NMFS published the IPHC regulations in the Federal Register on March 22, 2012 as annual management measures pursuant to 50 CFR 300.62.

The final 2012 halibut harvest estimate for Area 2C is 605,000 lb for the charter sector (**Item C-1(a)**). The average weight was 14.3 lb for the charter sector. Both metrics were up from 2011, likely due to relaxation of size limits from the 37-inch maximum size limit in 2011 to the U45O68 reverse slot limit in 2012. The final 2012 charter halibut harvest in Area 3A is 2,284,000 lb, with an average weight 13.2 lb.

The 2012 management measures were recommended for 2013 by the Council and adopted by the IPHC. The Area 2C GHL for 2013 dropped back to 788,000 lb. The preliminary 2013 charter halibut harvest projection for Area 2C is 723,000 lb. The average weight is 14.1 lb for the charter halibut sector. The Area 3A GHL for 2013 decreased to 2,734,000 lb. The projected charter halibut harvest in Area 3A is 2,271,000 lb, with an average weight 12.8 lb in 2013. This is the lowest estimated average weight for Area 3A since ADF&G began monitoring charter harvests in the early 1990s.

The committee met on October 25, 2013 to recommend a range of potential management measures for Area 2C and Area 3A in 2014 to frame the ADF&G analysis. For Area 2C, measures under consideration continue to be constrained by the 1-fish bag limit, which is implemented under NMFS regulations. The committee's list of recommended measures for analysis is under **Item C-1(b)**. Final committee recommendations from its December 9, 2013 meeting and the ADF&G analysis, which is the basis for those recommendations, will be distributed during the Council meeting. The analysis will provide the projected harvests for the proposed measures under either the GHL Program or Halibut Catch Sharing Plan (CSP), which is still pending Secretarial approval. The Council recommendations would encompass the full range of potential catch limits for Area 2C and Area 3A under consideration by the IPHC.

## Final 2012 Sport Halibut Harvest Estimates Alaska Department of Fish and Game

### 1. Area 2C Harvest:

Table 1.1. Area 2C sport halibut harvest estimates by sector and subarea, 2012.

Subarea	Charter			Non-Charter		
	Avg. Wt. (lb) <sup>a</sup>	No. Fish <sup>b</sup>	Yield (lb)	Avg. Wt. (lb) <sup>a</sup>	No. Fish <sup>b</sup>	Yield (lb)
Ketchikan	13.8	3,010	41,475	15.3	6,978	106,582
Prince of Wales Island	10.6	11,352	119,836	14.0	9,292	130,224
Petersburg/Wrangell	21.6	2,728	58,835	21.2	10,658	226,287
Sitka	13.3	16,300	216,000	16.7	6,005	100,031
Juneau/Haines/Skagway	13.7	3,724	50,946	12.3	11,350	139,606
Glacier Bay	22.2	5,322	118,277	26.4	10,413	274,717
Area 2C	14.3	42,436	605,369	17.9	54,696	977,447

<sup>a</sup>-Average net weight (headed and gutted), rounded to the nearest 0.1 lb.

<sup>b</sup>-Estimated number of fish harvested from the ADF&G Statewide Harvest Survey.

Table 1.2. Approximate 95% confidence intervals for yield estimates (million pounds).

Sector	Estimate	StdErr <sup>a</sup>	Confidence Interval
Charter	0.605	0.034	0.540-0.672
Noncharter	0.977	0.064	0.855-1.104
Overall	1.583	0.072	1.442-1.724

<sup>a</sup>-Standard errors; preliminary estimates.

Table 1.3. Comparison of November 2012 yield projections to final estimates (million pounds).

Sector	Projection	Final	Projection Error (%)
Charter	0.645	0.605	+6.5%
Noncharter	0.761	0.977	-22.2%
Overall	1.405	1.583	-11.2%

Table 1.4. History of Area 2C charter regulations.

Year	Charter Regulations
1995-2005	Two-fish bag limit (no size restrictions), no limit on crew retention.
2006	Two-fish bag limit (no size limit), state EO prohibiting crew harvest 5/26-12/31.
2007	Two-fish bag limit (1 under 32" eff. 6/1), no crew retention 5/1-12/31 (State EO and Federal Rule).
2008	Two-fish bag limit (1 under 32"), except one-fish bag limit Jun 1-10 (halted by injunction).
2009	One fish (no size limit), no harvest by skipper & crew, line limit (effective June 5).
2010	One fish (no size limit), no harvest by skipper & crew, line limit.
2011	One fish with maximum size limit of 37", no harvest by skipper and crew, line limit.
2012	U45"O68" reverse slot limit, no harvest by skipper and crew, line limit.

Table 1.5. Area 2C sport halibut harvest history by sector.

Year	Charter				Non-Charter			Total Sport Harvest		
	No. Fish	Avg. Wt. (lb)	Yield (M lb)	GHL (M lb)	No. Fish	Avg. Wt. (lb)	Yield (M lb)	No. Fish	Avg. Wt. (lb)	Yield (M lb)
1995	49,615	19.9	0.986	No GHL	39,707	19.3	0.765	89,322	19.6	1.751
1996	53,590	22.1	1.187		41,307	22.8	0.943	94,897	22.4	2.129
1997	51,181	20.2	1.034		53,205	21.4	1.139	104,386	20.8	2.172
1998	54,364	29.1	1.584		42,580	21.5	0.917	96,944	25.8	2.501
1999	52,735	17.8	0.939		44,301	20.4	0.904	97,036	19.0	1.843
2000	57,208	19.7	1.130		54,432	20.6	1.121	111,640	20.2	2.251
2001	66,435	18.1	1.202		43,519	16.6	0.721	109,954	17.5	1.923
2002	64,614	19.7	1.275		40,199	20.3	0.814	104,813	19.9	2.090
2003	73,784	19.1	1.412	1.432	45,697	18.5	0.846	119,481	18.9	2.258
2004	84,327	20.7	1.750	1.432	62,989	18.8	1.187	147,316	19.9	2.937
2005	102,206	19.1	1.952	1.432	60,364	14.0	0.845	162,570	17.2	2.798
2006	90,471	19.9	1.804	1.432	50,520	14.3	0.723	140,991	17.9	2.526
2007	109,835	17.5	1.918	1.432	68,498	16.5	1.131	178,333	17.1	3.049
2008	102,965	19.4	1.999	0.931	66,296	19.1	1.265	169,261	19.3	3.264
2009	53,602	23.3	1.249	0.788	65,549	17.3	1.133	119,151	20.0	2.383
2010	41,202	26.4	1.086	0.788	52,896	16.7	0.885	94,098	20.9	1.971
2011	36,545	9.4	0.344	0.788	42,202	16.2	0.685	78,747	13.1	1.029
2012	42,436	14.3	0.605	0.931	54,696	17.9	0.977	97,132	16.3	1.583

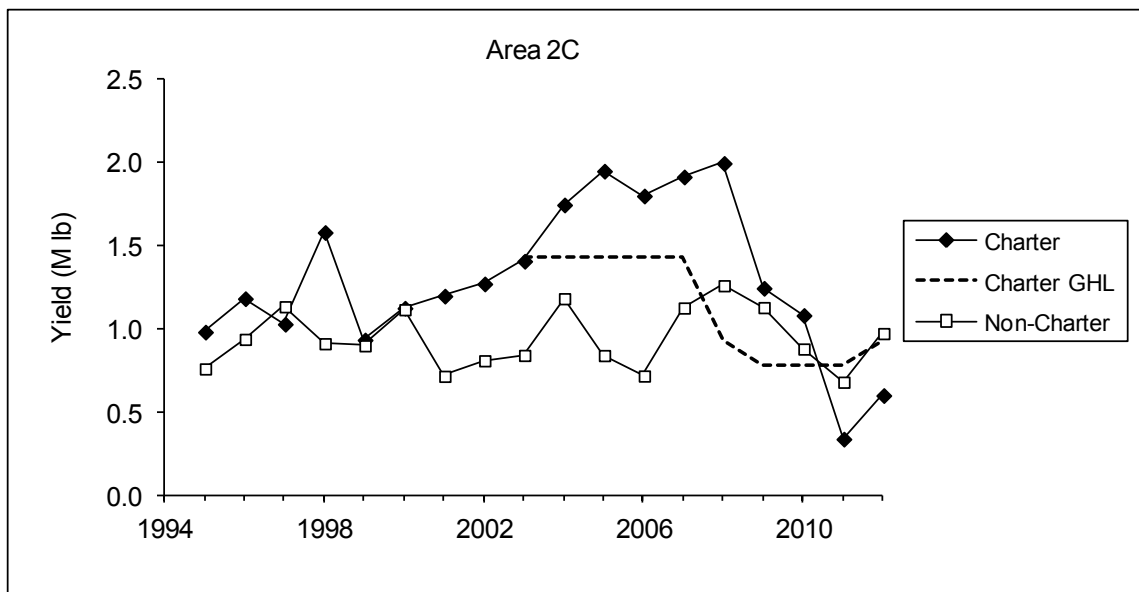


Figure 1.1. Charter and non-charter halibut yield (M lb) and charter Guideline Harvest Level (GHL) in Area 2C since 1995.

## 2. Area 3A Harvest:

Table 2.1. Area 3A sport halibut harvest estimates by sector and subarea, 2012.

Subarea	Charter			Non-Charter		
	Avg. Wt. (lb) <sup>a</sup>	No. Fish <sup>b</sup>	Yield (lb)	Avg. Wt. (lb) <sup>a</sup>	No. Fish <sup>b</sup>	Yield (lb)
Central Cook Inlet	11.8	44,171	521,706	10.8	29,556	318,725
Lower Cook Inlet	11.9	69,734	832,795	10.3	46,525	477,074
Kodiak	13.2	13,007	171,611	14.5	10,138	146,989
North Gulf Coast	12.7	32,727	414,199	11.0	10,787	118,390
Eastern PWS	21.2	5,067	107,491	16.8	7,613	127,786
Western PWS	19.6	4,009	78,763	16.6	8,134	134,970
Yakutat	32.0	4,007	128,389	29.0	606	17,559
Glacier Bay	34.1	860	29,307	--	--	--
Area 3A	13.2	173,582	2,284,261	11.8	113,359	1,341,494

<sup>a</sup>-Average net weight (headed and gutted), rounded to the nearest 0.1 lb.

<sup>b</sup>-Estimated number of fish harvested from the ADF&G Statewide Harvest Survey.

Table 2.2. Approximate 95% confidence intervals for yield estimates (million pounds).

Sector	Estimate	StdErr	Confidence Interval
Charter	2.284	0.087	2.117-2.457
Non-Charter	1.341	0.067	1.212-1.475
Overall	3.626	0.110	3.411-3.841

Table 2.3. Comparison of November 2012 yield projections to final estimates (million pounds).

Sector	Projection	Final	Projection Error (%)
Charter	2.375	2.284	+4.0%
Non-Charter	1.563	1.341	+16.5%
Overall	3.938	3.626	+8.6%

Table 2.4. History of Area 3A charter regulations.

Year	Charter Regulations
1995-2006	Two-fish bag limit (no size limit), no limit on crew retention
2007	Two-fish bag limit (no limit), state EO prohibiting crew harvest 5/1-12/31.
2008	Two-fish bag limit (no limit), state EO prohibiting crew harvest 5/24-9/1.
2009	Two-fish bag limit (no size limit), state EO prohibiting crew harvest 5/23-9/1.
2010-2012	Two-fish bag limit (no size limit), no limit on crew retention

Table 2.5. Area 3A sport halibut harvest history by sector.

Year	Charter				Non-Charter			Total Sport Harvest		
	No. Fish	Avg. Wt. (lb)	Yield (M lb)	GHL (M lb)	No. Fish	Avg. Wt. (lb)	Yield (M lb)	No. Fish	Avg. Wt. (lb)	Yield (M lb)
1995	137,843	20.6	2.845	No GHL	95,206	17.5	1.666	233,049	19.4	4.511
1996	142,957	19.7	2.822		108,812	17.6	1.918	251,769	18.8	4.740
1997	152,856	22.3	3.413		119,510	17.6	2.100	272,366	20.2	5.514
1998	143,368	20.8	2.985		105,876	16.2	1.717	249,244	18.9	4.702
1999	131,726	19.2	2.533		99,498	17.0	1.695	231,224	18.3	4.228
2000	159,609	19.7	3.140		128,427	16.9	2.165	288,036	18.4	5.305
2001	163,349	19.2	3.132		90,249	17.1	1.543	253,598	18.4	4.675
2002	149,608	18.2	2.724		93,240	15.9	1.478	242,848	17.3	4.202
2003	163,629	20.7	3.382	3.650	118,004	17.3	2.046	281,633	19.3	5.427
2004	197,208	18.6	3.668	3.650	134,960	14.4	1.937	332,168	16.9	5.606
2005	206,902	17.8	3.689	3.650	127,086	15.6	1.984	333,988	17.0	5.672
2006	204,115	17.9	3.664	3.650	114,887	14.6	1.674	319,002	16.7	5.337
2007	236,133	16.9	4.002	3.650	166,338	13.7	2.281	402,471	15.6	6.283
2008	198,108	17.0	3.378	3.650	145,286	13.4	1.942	343,394	15.5	5.320
2009	167,599	16.3	2.734	3.650	150,205	13.5	2.023	317,804	15.0	4.758
2010	177,460	15.2	2.698	3.650	124,088	12.8	1.587	301,548	14.2	4.285
2011	184,293	15.2	2.793	3.650	128,464	12.6	1.615	312,757	14.1	4.408
2012	173,582	13.2	2.284	3.103	113,359	11.8	1.341	286,941	12.6	3.626

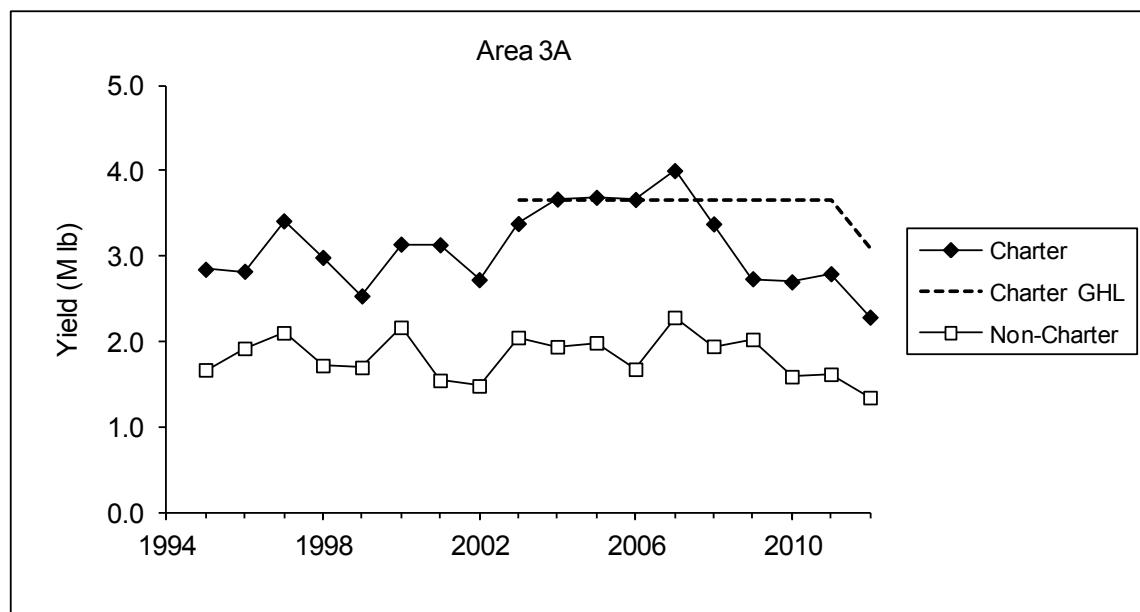


Figure 2.1. Charter and non-charter halibut yield (M lb) and charter Guideline Harvest Level (GHL) in Area 3A since 1995.

### 3. Comparison of Logbook and Statewide Harvest Survey Estimates

Table 3.1. Comparison of estimates of charter halibut harvest biomass (yield) based on numbers of fish from logbooks and estimated via the ADF&G Statewide Harvest Survey (SWHS), 2006-2012. Logbook numbers include harvest by clients, comps, and crew.

Area	Year	Logbook		Statewide Harvest Survey	
		Yield (M lb)	StdErr <sup>a</sup>	Yield (M lb)	StdErr
2C	2006	2.063	0.052	1.804	0.089
	2007	2.015	0.028	1.918	0.085
	2008	1.974	0.025	1.999	0.099
	2009	1.187	0.022	1.249	0.071
	2010	1.249	0.040	1.086	0.077
	2011	0.452	0.005	0.344	0.015
	2012	0.728	0.025	0.605	0.034
3A	2006	4.689	0.072	3.664	0.108
	2007	4.229	0.059	4.002	0.120
	2008	3.865	0.063	3.378	0.142
	2009	3.044	0.055	2.734	0.133
	2010	3.238	0.123	2.698	0.116
	2011	3.308	0.133	2.793	0.128
	2012	2.802	0.087	2.284	0.086

<sup>a</sup>-Standard errors for Area 2C are preliminary.

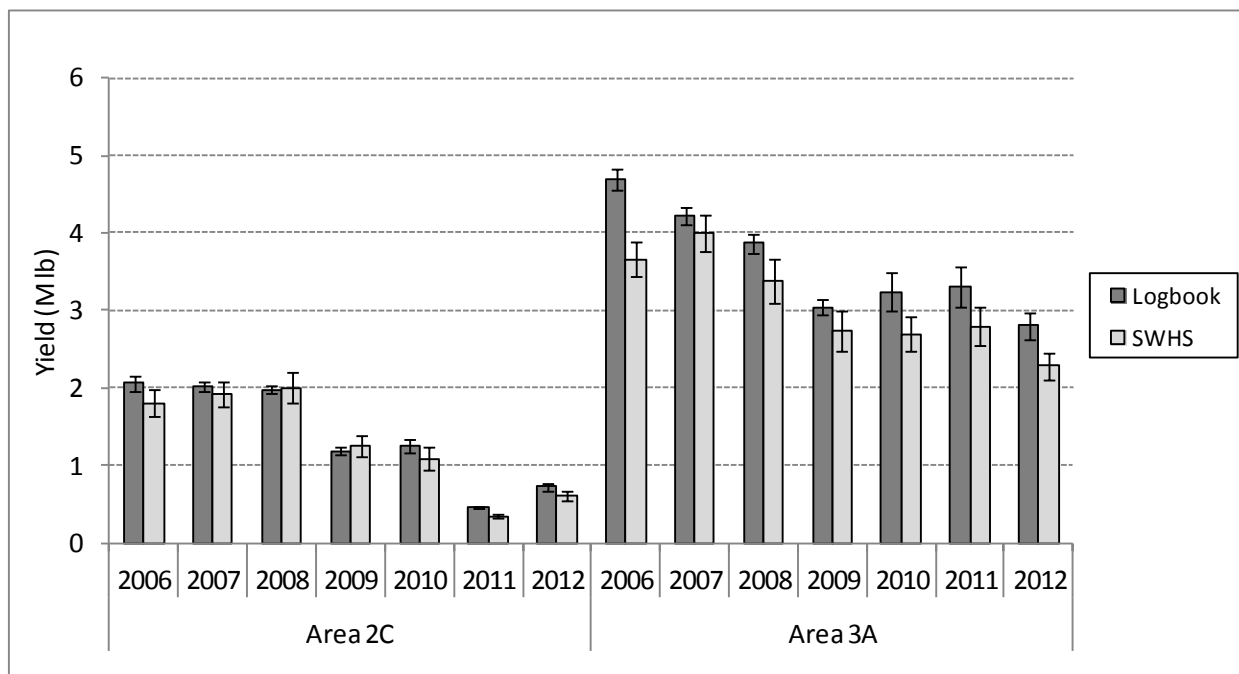


Figure 3.1. Comparison of logbook- and SWHS-based estimates of charter halibut yield in Areas 2C and 3A (with approx 95% confidence intervals).

## **Charter Management Implementation Committee Recommendations of Potential Management Measures for Analysis October 25, 2013**

Committee: Chair Ed Dersham, Seth Bone, Kent Huff, Stan Malcom, Andy Mezirow, Richard Yamada, Ken Dole, Daniel Donich, and Steve Zernia

The list of potential management measures follows for each area, with those recommended by the committee for analysis in **bold**. An analysis will be prepared for the committee's next meeting on December 9, 2013 and for Council consideration at its December 2013 meeting.

### **Area 2C List of potential management measures:**

1. 2-fish bag limit, no size limit
2. 2-fish bag limit, maximum size limit on second fish
3. 2-fish bag limit, maximum size limit on both fish
4. 2-fish bag limit, reverse slot limit on second fish (also called protected slot)
5. 2-fish bag limit, reverse slot limit on both fish.
6. Annual limit
- 7. Annual limit combined with maximum size limit** (1 fish/day bag limit with a maximum size limit and annual limit)
- 8. Annual limit combined with reverse slot limit** (on all fish)
9. Prohibit skipper/crew harvest (default under GHF and CSP)
10. Closure of selected days of the week
11. Shortened season
12. Limit to one trip per day
13. 1-fish bag limit, no size limit
- 14. 1-fish bag limit with maximum size limit**
- 15. 1-fish with reverse slot limit** (U45/O68) (Status Quo)

### **Area 3A List of potential management measures:**

- 1. 2-fish bag limit, no size limit** (Status Quo)
- 2. 2-fish bag limit, maximum size limit on second fish**
3. 2-fish bag limit, maximum size limit on both fish
4. 2-fish bag limit, reverse slot limit on second fish (also called protected slot)
5. 2-fish bag limit, reverse slot limit on both fish.
- 6. Annual limit** (2-fish bag limit)
7. Annual limit combined with maximum size limit
8. Annual limit combined with reverse slot limit
- 9. Prohibit skipper/crew harvest** (default under CSP)
10. Closure of selected days of the week
11. Shortened season
- 12. Vessel limit to one trip per day**
13. 1-fish bag limit, no size limit
14. 1-fish bag limit with maximum size limit



ITEM C-1 supplemental  
DECEMBER 2013  
**UNITED STATES DEPARTMENT OF COMMERCE**  
**NOAA / National Marine Fisheries Service**  
**Alaska Enforcement Division**  
P.O. Box 21767  
Juneau, AK 99802

DATE: December 3, 2013

TO: Chris Oliver, Executive Director  
North Pacific Fisheries Management Council

FROM: Matthew S. Brown, Acting Special Agent in Charge

RE: Enforcement Concerns on Annual Harvest Limit

The Charter Management Implementation Committee has recommended analysis of several potential management measures for charter halibut harvests in 2014. Two of the management measures recommended for analysis for Area 2C and one of the management measures recommend for analysis for Area 3A includes an annual limit on halibut harvested by charter vessel anglers in Alaska.

The Alaska Enforcement Division has concerns with its ability to effectively enforce an annual limit on charter harvested halibut in any area without an accurate annual accounting method implemented via regulation.

The method that has been offered to account for annual halibut harvests for charter vessel anglers is to require anglers to complete a harvest record that is located on the reverse side of a State of Alaska sport fishing license. Anglers not required to obtain a sport fishing license under Alaska law, e.g. Youths, PID card holders and senior citizens, would be required to complete a free harvest record card.

There are many ways that an angler that wants to exceed an annual halibut harvest limit could easily circumvent this cursory record keeping mechanism and successfully evade detection by enforcement personnel:

- An angler could inadvertently or intentionally fail to record their charter harvested halibut on their license or harvest record card until or unless they get checked by enforcement personnel from NOAA, the USCG or the Alaska Wildlife Troopers. If the angler isn't checked, they may never record harvests and no accounting is created.
- Many anglers obtain multiple fishing licenses throughout the year. The use of multiple fishing licenses (including duplicate licenses) by an individual angler doesn't allow for continuity of accounting for an annual limit throughout the

year. An angler could inadvertently or intentionally fail to record harvest records from previous fishing license(s) to a new fishing license(s) and there is no mechanism to audit or follow up on this practice during the current fishing year.

- Accounting for annual halibut limits for anglers that are not required to obtain a sport fishing license is even more problematic because the harvest record cards are not tracked or otherwise accounted for, and there is no continuity of accounting for anglers that use multiple harvest record cards throughout the year. ADF&G saltwater logbook data indicates that in 2012 there were approximately 11,790 charter vessel anglers that retained halibut from Area 2C and 3A but were not required to obtain a sport fishing license. In 2011 there were approximately 13,402. This is an estimate of the number of charter vessel anglers that would be required to use a harvest record card if an annual halibut limit were to be implemented. Given the uncontrolled nature of the harvest record card, anglers that want to exceed an annual limit on halibut would only have to complete a new harvest record card with each new fishing trip. This would effectively restart the accounting for an annual limit of halibut with each fishing trip and new harvest record card.
- If the CSP is implemented in 2014 with a provision for Guided Angler Fish “GAF”, GAF would not be counted towards a person’s annual halibut limit. This could further confuse the accounting for an annual halibut limit because GAF are not required to be recorded on the back of an angler’s license or harvest record card.

It has been suggested that NOAA OLE could audit annual harvest limits by matching licensing data with salt water logbook data. This is impractical for some of the reasons stated below:

- Licensing data is not available until after the end of the fishing season. This creates significant evidentiary problems in prosecuting an angler for exceeding their annual limit. The halibut and the license or harvest card would likely be either discarded or carried out of state by the angler, witnesses are unlikely to have a clear memory of relevant events that occurred months before, and it would be extraordinarily labor intensive and expensive to prosecute cases involving small numbers of halibut.
- The saltwater logbook data doesn’t contain information that individually identifies youth anglers and there is no licensing data at all for youth anglers. There is no mechanism to audit or follow up on youth angler harvests. In 2012 there were approximately 7,340 youth anglers that retained halibut from Area 2C or 3A and in 2011 there were approximately 8,886.

It has also been suggested that annual limits are best enforced at-sea while fishing for halibut is ongoing or at the dock at the end of a trip. This isn't entirely accurate. When an enforcement contact occurs at-sea or at the dock, the authorized officer can only verify compliance with the regulations for the activities that the authorized officer observes at that point in time. The authorized officer has no way of verifying that any halibut that was harvested by the charter vessel angler on previous days or trips was properly recorded on the license or harvest record, nor does the authorized officer have any mechanism to follow up on any fishing activity that occurs after the enforcement contact.

If anglers suspect that they are unlikely to be caught doing something unlawful or if they suspect that violations are not likely to be prosecuted, the threat of being fined becomes a weak deterrent to breaking the law.

For the reasons outlined above, NOAA OLE recommends that an annual charter halibut limit should not be implemented without a more accurate method to fully account for individual annual charter halibut harvests.

*\*NOTE: AKD Enforcement prepared the following comments to this paper independently since the enforcement concerns were separated from the analysis being conducted by Sustainable Fisheries and ADF&G. AKD OLE has not had the opportunity to review the analysis and reserves the right for further comment once that analysis has been released.*



# **Analysis of Management Options for the Area 2C and 3A Charter Halibut Fisheries for 2014**

A Report to the North Pacific Fishery Management Council

Scott Meyer, Robert Powers  
Alaska Department of Fish and Game  
December 6, 2013

## **1.0 Introduction**

The North Pacific Fishery Management Council's Charter Halibut Implementation Committee met October 25 to select a list of management measures to be analyzed for the 2014 season. This choice was complicated by the fact that, at the time, it was unknown whether the charter halibut fishery will be managed under the current Guideline Harvest Level (GHL) regime or the Catch Sharing Plan (CSP) approved by the Council in October 2012. Management is quite different under these two regimes. Under GHL management, a GHL was set based on the Total Constant Exploitable Yield (TCEY) determined by the International Pacific Halibut Commission (IPHC). Charter harvest was estimated in numbers of fish by the Alaska Department of Fish and Game (ADF&G) using the Statewide Harvest Survey (SWHS). Under GHL management, the charter harvest did not include an estimate for release mortality, or "waste." Crew harvest of halibut is prohibited in IPHC Regulatory Area 2C but not in Area 3A. Under the CSP, however, a charter allocation is set as a fraction of a combined commercial-charter catch limit approved by the IPHC, and the charter sector's release mortality is included in their allocation. Likewise, the commercial sector's waste is included in their allocation. Charter harvest accounting under the CSP will be based on ADF&G charter logbooks, which generally have indicated a higher harvest than the SWHS, especially in Area 3A. Crew harvest will be prohibited in Areas 2C and 3A under the CSP.

Given the unknown management scenario and potentially wide range of possible harvest targets in each area, the committee selected a number of management measures to be analyzed for each IPHC area. The committee requested analysis of projected charter yield under the following measures for Area 2C:

1. One-fish bag limit and U45-O68 reverse slot limit (status quo),
2. One-fish bag limit with maximum size limit,
3. One-fish bag limit and annual limit combined with a maximum size limit.
4. One-fish bag limit, and annual limit combined with a reverse slot limit,

The committee requested the following analyses for Area 3A:

1. Two-fish bag limit, no size limit (status quo),
2. Two-fish bag limit with a maximum size limit on the second fish (one fish any size),
3. Two-fish bag limit ( any size) with annual limit,
4. Two-fish bag limit (any size) and prohibit harvest by skipper and crew (default under CSP),
5. Two-fish bag limit (any size) combined with vessel trip limit of one trip per day.

As of the date of this report, it was announced that the Secretary of Commerce signed the CSP rule. Therefore, this document assumes that the CSP will be in place for 2014 and does not explicitly analyze the prohibition on crew harvest in Area 3A. Instead, projections are made based on client harvest data only.

The objective of this analysis was to identify specific management measures or combinations of management measures that are expected to keep total charter removals (in units of net weight) in each regulatory area within the catch target determined by the IPHC at the annual meeting in January 2014. These catch limits will not be known by the Council when making recommendations. However, on December 4 the IPHC released results of the latest stock assessment and provided management targets for

the Area 2C and Area 3A charter fisheries associated with the “Blue Line” alternative. The Blue Line is the level of total removals in each area that meets the IPHC harvest policy target of 21.5%. In this document, the most liberal management measures that result in a projected charter removal that is less than or equal to the Blue Line are highlighted. A final section of the document will present some likely alternative targets for the charter fishery and indicate potential management measures that would achieve the desired harvest reduction.

## **2.0 Methods**

### **2.1 Subareas**

Projections of charter yield in this report are generally calculated as the product of harvest (in numbers of fish) and average net weight (headed and gutted) in pounds. In all cases, average weight was calculated from length using the current IPHC length-weight relationship (Clark 1992). Nearly all calculations for Area 2C and Area 3A were done by subarea and then combined to provide results for the regulatory area as a whole. Most analyses were done at the subarea level because most of the variables analyzed (client harvest, average weight, etc.) vary substantially by subarea.

There are six subareas in Area 2C and eight subareas in Area 3A (Table 1). ADF&G collected length data from harvested halibut and interviewed anglers and charter captains in at least one port in each subarea. With a few exceptions, the subareas correspond to ADF&G sport fishery management areas as well as SWHS reporting areas. In Area 2C, the halibut fishery in the Haines/Skagway area (SWHS Area F) is quite small and not sampled for size. Data from this area are combined with data from Juneau (SWHS Area E). In Area 3A, SWHS Area J is split into three subareas: Eastern Prince William Sound (EPWS), Western Prince William Sound (WPWS), and the North Gulf coast (NG). Likewise, Cook Inlet (SWHS Area P) is split into Central Cook Inlet (CCI) and Lower Cook Inlet (LCI) subareas. Both of these management areas are split into subareas based on the location of halibut landings, not the location of harvest. For example, Central Cook Inlet includes all points of landings north of and including Anchor Point. The splits are based on port of landing, rather than catch location because (a) this allows matching of harvest estimates of logbook data to estimates of average weight from port sampling, and (b) port of landing is recorded more precisely than catch locations.

### **2.2 Assumptions Regarding Harvest and Size**

For this analysis, management measures such as annual limits and trip limits were assumed to affect only the number of fish harvested, at least on a subarea basis. No direct effect on average weight was assumed, but because these measures alter the relative distribution of harvest among subareas, they can affect the overall average weight for a regulatory area. When calculations are made by subarea, the area average weight is essentially a weighted mean, where the weighting factors are the relative proportions of harvest in each subarea. On the other hand, size limits were assumed to affect only the average weight of harvested fish.

The real effects of management measures could be more complicated. For example, it is possible that implementation of annual limits could increase the average size of retained fish. If an annual limit is established that is significantly lower than an angler’s typical annual harvest, it may provide incentive for the angler to high-grade, or selectively retain larger fish. It is also possible that size limits have an effect on the number of halibut retained. For example, under a maximum size limit or reverse slot limit, an angler may choose to harvest more fish annually because the fish are smaller than they would have been without the limit. On the other hand, if a maximum size limit is set low enough, anglers may choose not to spend the money to book a charter trip for halibut.

These simplifying assumptions were adopted because there are insufficient data to either document or incorporate more complex relationships in the analysis. Neither annual limits nor trip limits have been enacted in the Alaska charter halibut fishery. Size limits have only been in effect for the charter fishery in Area 2C, and only since 2011. These data are inconclusive on the effects of size limits. Harvest in 2011

under the 37-inch maximum size limit was about 11% lower than in 2010, but the decrease in charter harvest in 2C coincided with a decrease in unguided harvest, which was not regulated under a size limit. It is possible that charter and unguided harvest decreased due to some other factor. The Area 2C charter harvest increased in 2012 with implementation of a reverse slot limit, but also increased in 2013 even though there was no change in the size limit. Factors other than regulations may affect the number of halibut harvested.

## 2.3 Harvest Projections

Forecasts for 2014 were based on the entire available time series of logbook harvest numbers, excluding crew, for each subarea through 2013, where the 2013 estimates are preliminary estimates (Table 2). The preliminary estimates for 2013 were based on regressions of harvest through July on harvest for the entire year. The relationships between partial-year and entire-year logbook harvest were very strong for nearly all subareas, and were felt to provide good preliminary estimates of harvest for 2013. Without them, the time series forecasts for 2014 would be two-period forecasts (from time series' ending in 2012) and would not include information from the most recent season. No other data, such as socioeconomic factors have yet been linked to the halibut fishery in a way that would allow forecasting of future effort or harvest. Time series forecasts are uncertain because they rely on past trends, which are not necessarily reliable predictors of future trends.

Forecasting was done using the Box and Jenkins (1976) procedure for fitting autoregressive integrated moving average (ARIMA) models, as recommended by the Council's Scientific and Statistical Committee in October 2012. The Box-Jenkins procedure employs a well-developed, interactive mathematical procedure to investigate properties of the past data that may be used for forecasting. ARIMA models can take on a variety of forms, and the goal of the Box-Jenkins procedure is to find the simplest model that adequately describes the data.

The time series of charter harvests are short (8 years, 2006-2013), which is generally shorter than recommended for ARIMA forecasting. In addition, the variability in these time series has at times been quite high compared to the level of harvest (Figures 1 and 2). As a result, the Box-Jenkins approach identified most of the harvest histories as random walks, with no autoregressive or moving average components. In these cases, the procedure identified the "naïve" model as best, which is to say that the best forecast of next year's harvest was simply last year's harvest (or estimate). The best model was typically selected as the model with the smallest Akaike's Information Criterion corrected for small sample size (AICc).

Simple exponential and double exponential smoothing models were also fit to the harvest time series as alternatives to the ARIMA forecasts. Simple exponential models tended to fit better when the data did not contain a strong trend, and double exponential models generally fit trended data better. Summing the best exponential forecasts for each subarea resulted in Area 2C and 3A forecasts that were virtually identical to the ARIMA forecasts. Therefore, all 2014 harvest forecasts for each IPHC area were based on the sum of the best ARIMA forecast for each subarea.

## 2.4 Projecting Harvest under Annual Limits

Data on annual harvests by license number are available from the charter logbook. This information can be compiled only for anglers required to be licensed (excludes unlicensed youth anglers). The number of individual license numbers was tallied for annual harvests of 1, 2, 3, etc. halibut up to the maximum. This analysis was done by subarea, both including and excluding crew harvest, using data from 2012, the most recent year with the same bag limit as the current year. The projection of harvest under various annual limits assumed that the distribution of annual harvest among license numbers would be the same in 2014 as in 2012, and would be the same as for unlicensed anglers. It further assumes that imposition of annual limits will not have an effect either way on the number of anglers, but that it will only truncate harvest associated with each license number at the annual limit. For example, if 1,000 anglers (actually license

numbers) each harvested five halibut in 2012, then a 4-fish annual limit would reduce the annual harvest of each of these anglers to four fish. The 4-fish annual limit would have no effect on harvest by anglers that harvested four or fewer halibut. Using these assumptions, the annual harvest was calculated over a range of annual limits and the percentage reduction in harvest was calculated by comparison to total harvest without an annual limit. The percentage reductions for each subarea were applied to harvest projections by subarea, and these were summed to obtain the total harvests under each annual limit.

The method used likely underestimates the effects of annual limits for three reasons. First, as noted above, imposition of an annual limit is assumed to have no effect on angler effort, or at least the number of anglers. It is possible that low annual limits could discourage guided angler effort. Second, some anglers (especially nonresidents) obtain more than one license per year. The analysis, however, only looked at harvests associated with each license, so it probably underestimates the effect. For example, if an angler purchased two licenses in 2012 and harvested four halibut on each, the analysis using license numbers would indicate that a four-fish annual limit would not reduce the harvest. However, if the angler abided by the annual limit, his harvest would have been cut in half. Third, some anglers fish in multiple subareas within a year, but the analysis was done by subarea. Again, the expected reduction in harvest would likely be less than the actual reduction. If an angler caught four fish in each of two subareas in 2012, the analysis by subarea would indicate that a four-fish annual limit had no effect in either subarea. If the angler abided by the annual limit, his harvest would have been cut in half relative to 2012. Even if we incorporated subarea locations into the analysis, there would be no way to predict how many fish the angler would be taken from each subarea.

The issue of subarea-based analysis was examined by calculating the percentage reductions for each annual limit using grouped data for each IPHC area, and comparing these to analyses done by subarea. In Area 2C, the harvest reductions associated with each annual limit (1 to 5 fish per year) were 0.4% to 1.3% greater when estimated using area-wide data. The largest difference was for an annual limit of one fish. For Area 3A, harvest reductions were evaluated over a range of annual limits from 1 to 10 fish per year. Harvest reductions were 0.4% to 4.6% greater using area-wide data including crew harvest, and 0.1% to 5.0% greater when using area-wide data excluding crew harvest. In each instance the greatest difference was at an annual limit of two fish. The area-wide estimates are believed to be more realistic expectations of harvest reduction because they include all harvest associated with a license, not just the harvest by subarea.

## 2.5 Projecting Average Weight under Status Quo Regulations (Areas 2C and 3A)

For Area 2C, the status quo regulations are a one-fish daily bag limit and U45O68 reverse slot limit. The average weight under this slot limit could be projected using a weighted formula, but this method overestimated average weight for 2012 and 2013 (see Section 3.4). Therefore, average weight under the current U45O68 reverse slot limit was also estimated using the mean of the 2012-2013 average weights for each subarea. Average weight decreased from 2012 to 2013 in four of six subareas, but overall decreased less than 0.2 lb.

Average weight projections for Area 3A under the status quo were assumed to equal estimated average weights by subarea from harvest sampling in 2013. Average weights were estimated for each subarea for 2013 based on a sample of 5,725 halibut. Sample sizes ranged from 220 to 1,244 fish per subarea. Average weight has exhibited a slow declining trend over time in most subareas, and in Area 3A overall (Figure 3). The overall Area 3A average weight decreased about 0.54 lb from 2012 to 2013. If average weight continues to decline in 2014, use of last year's average weight would be slightly conservative.

## 2.6 Projecting Average Weight under a Maximum Size Limit (Area 2C only)

Average weight corresponding with various maximum size limits was projected simply as the average weight of the portion of the charter harvest that was less than or equal to that length during a reference year. The reference years used for prediction were 2010 for Area 2C and 2013 for Area 3A. These were

the most recent years for which there was no size limit in each area. Average weight was predicted for each subarea and the overall average weight for each regulatory area was calculated as a weighted mean, where the predicted harvests in each subarea are the weighting factors.

This prediction method was evaluated by comparing predicted and observed (estimated) average weights for Area 2C for 2011 when the fishery was managed under a 37" maximum size limit. The Area 2C fishery was managed under a U45O68 reverse (or "protected") slot limit in 2012 and 2013. This allowed harvest of halibut less than or equal to 45 inches (U45) and halibut greater than or equal to 68 inches (O68). Because the lower limit essentially functions as a maximum size limit for the majority of harvest, the predicted and observed average weights of U45 halibut were also compared for 2012 and 2013. Small numbers of halibut were harvested each year that were over the maximum size limit, most within 5 inches of the size limit. To account for these fish in the comparison, the predicted average weight of U37 fish was also compared to the estimated average weight of all fish harvested in 2011, and the predicted average weight of U45 fish was also compared to the estimated average weight of all halibut under 50 inches in 2012 and 2013. The predicted average weights each year were 0.8 to 1.0 lb greater than the observed average weights of fish below the size limit, and 0.5 to 0.7 lb greater than the observed average weights including the illegal harvest. Therefore, this prediction method is conservative in that average weights obtained under these limits are likely to be smaller than predicted, at least under recently observed conditions.

#### 2.7 Projecting Average Weight under a Maximum Size Limit on the Second Fish (Area 3A only)

Average weight under a maximum size limit applied to the second fish in the bag limit was predicted using a two-step process. The first step was to tally the proportions of harvest in each subarea composed of "second fish." For example, if three anglers on a charter trip harvest two halibut each and two anglers harvest only one each, then three of the eight halibut kept represented second fish. The second step was to estimate average weights of first and second fish in the harvest. The average weight of first fish (a fish of any size) was simply the 2013 average weight by subarea (same as status quo projections). The average weight applied to the second fish was determined as described above for maximum size limits. These were then combined into a weighted mean for each subarea, where the weighting factors were the proportions of first and second fish in the recent harvest. This approach assumes that the average weight of first fish will not increase due to additional high-grading, and that the distribution of first and second fish will not change if a maximum size limit is applied to the second fish.

#### 2.8 Projecting Average Weight under Reverse Slot Limit (Area 2C only)

Average weight under a reverse slot limit was predicted using a slight modification of the procedure used last year (Meyer 2012). The change was needed because the past method overestimated the proportion of harvest of fish larger than the upper limit (the upper tail). In addition, the past method apportioned harvest under various limits to the tails of the distribution (above upper limit and below lower limit) using relative proportions from the source distribution. As the lower limit is dropped, this results in a greater proportion of harvest being assigned to the upper tail, where average weight is much higher because of the exponential length-weight relationship. The proportion of fish assigned to the upper tail can be unrealistically high, as these fish are rare in the population and are already high-graded. The result is that, for a given upper length limit, average weight stays relatively flat or even increases as the lower limit is dropped. This intuitively does not make sense. As the lower limit is dropped, a greater proportion of the harvest should be smaller fish, dragging down the average weight.

The method used this year fixed the proportion of harvest above the upper limit equal to the proportion in the reference year. The proportion of lower harvest was then set as the remainder. This method also overestimated the average weight under the U45O68 reverse slot limit in 2012 and 2013, but to a lesser degree. Some of the difference was due to overestimation of the observed proportion above the upper limit, and some was due to overestimation of average weight below the lower limit. More importantly, the estimates vary over the whole range of candidate size limits in a manner consistent with intuition. This

approach assumes that the length-frequency distribution of lengths in 2010 is representative of what the length-frequency distribution in 2014 in the absence of size limits. It also assumes that the reverse slot limit will have no effect on harvest and that all fish caught that are between the size limits (in the prohibited slot) will be replaced in the harvest by a legal-size fish.

## 2.9 Accounting for Release Mortality of Halibut Over 26 Inches (O26)

Under the CSP, the charter allocation includes total removals by the charter sector, including directed harvest and estimated release mortality (or waste). Estimation of release mortality requires information on short-term mortality rate from capture, handling, and release in the sport fishery, as well as information on the numbers and size of released halibut. There are no known estimates of the mortality rate of halibut associated with catch-and-release in the sport fishery. The number of released halibut each year is available from three sources: it is recorded for anglers interviewed in dockside sampling, it is estimated indirectly from the SWHS, and it is required to be recorded in charter logbooks. There are no data available on the sizes of individual released fish. However, anglers interviewed by ADF&G creel technicians in Area 2C are asked to report released fish by size class, where the categories are U45, 45-68", and O68.

ADF&G estimated halibut release mortality of O26 halibut in Area 2C and 3A for the first time in 2013 (Meyer et al. 2013). The estimates assumed release mortality rates for the charter fishery of 6% in Area 2C and 5% in Area 3A. The number of released fish was estimated by relating partial-year logbook data to past SWHS estimates using regression. The average weight of released fish was determined for Area 3A by modeling the selective retention of fish as a function of size, similar to the method used by Meyer (2007). This method was also used to obtain average weight for fish under 45 inches in length in Area 2C. For Area 2C fish in the 45-68 and O68 size classes, average weight was estimated from 2010 length data.

The magnitude of O26 release mortality, relative to the harvest, is probably relatively consistent from year to year as long as there is no major change in the regulations or numbers of fish released. The number of halibut reported released through July 2013 in logbooks was up 3% in Area 2C and down 28% in Area 3A relative to 2012. The total number of released halibut in each area in 2013 was estimated by regression using partial and complete-year logbook data. The estimate for Area 2C was 13% higher than the 2006-2012 average, and the Area 3A estimate was 37% lower than the average over the same period. It is unknown whether the changes, particularly in Area 3A, are anomalies or longer term changes.

Release mortality was generally not estimable under multiple alternative regulatory scenarios due to the lack of previous experience with most of the regulatory scenarios. Without data from the fishery, it was not possible to determine whether the management measures under consideration would significantly increase or decrease release mortality. In addition, the accuracy of the current release mortality estimates and underlying assumptions is unknown and cannot be assessed with available data. Therefore, the approach used was to apply assumed values for the percentage of total removals due to release mortality.

Assumed values were determined for various measures based on estimates of release mortality calculated for 2013 and provided to the IPHC (Meyer et al. 2013). These values were very close to estimates made using logbook data. Charter removals were inflated by an assumed value of 5% (multiplied by 1.05) to account for release mortality. Release mortality under a maximum size limit has not been estimated, but was assumed to be similar. Therefore, the 5% inflation factor was also applied to projected yields under the maximum limit in Area 2C in order to estimate total removals. In Area 3A, the maximum size limits considered would only apply to second fish in the bag limit, which in recent years represented about 48% of the harvest. Therefore, a slightly lower release mortality inflation factor of 4% was assumed for Area 3A. Finally, an inflation factor of 2% was assumed for measures in Area 3A that do not involve size limits. This value was rounded up to the nearest whole percentage point from the Area 3A estimates of release mortality for 2013.

### 3.0 Area 2C Projections

#### 3.1 Status Quo

Status quo measures for Area 2C include a one-fish bag limit, U45O68 reverse slot limit, and prohibition of halibut harvest by skipper and crew while guiding. The 2013 preliminary estimate of Area 2C charter harvest based on logbook data excluding crew was 58,005 halibut (Figure 4). The forecast for 2014 was also 58,005 halibut because the best-fitting ARIMA model for each subarea was simply to use the prior year's estimate. Applying the means of 2012-2013 average weights in each subarea, the yield forecast for 2014 was 0.815 M lb. The estimated total charter removal, after inflation to account for total release mortality, was 0.856 M lb (Table 3).

#### 3.2 Annual Limit

Projected harvests were estimated for annual limits of 1-5 halibut in Area 2C. The percentage harvest reduction associated with annual limits varied substantially by subarea (Table 4). Estimated harvests for Area 2C overall under annual limits ranged from about 28,000 to 57,000 halibut, with corresponding harvest reductions ranging from 51.2% to 1.5%. Annual limits greater than two halibut had a relatively small effect on harvest because few anglers harvested three or more halibut in 2012.

#### 3.3 Maximum Size Limit With and Without Annual Limit

Total charter removals were projected for maximum size limits ranging from 30 to 55 inches. These projections were also done for each level of harvest associated with annual limits ranging from one to five fish. In the case of no annual limit, projected removals ranged from 0.396 M lb under a 30-inch maximum size limit to 1.069 M lb under a 55-inch maximum size limit (Table 5). Combinations of size limits and annual limits that meet the Blue Line alternative are highlighted in this table. The corresponding average weights ranged from 6.5 to 17.6 pounds. Projected removals under any particular size limit vary primarily in proportion to the projected harvest under each annual limit. This is because the analysis did not assume that average weight was directly affected by the choice of annual limit. There was a small effect on average weight under each annual limit from differences in the distribution of harvest among subareas.

#### 3.4 Reverse Slot Limit With or Without Annual Limit

Total charter removals were projected for a range of reverse slot limits with lower limits ranging from 35 to 50 inches and upper limits ranging from 50 to 80 inches. A table of projected total removals was generated for 2014 under no annual limit, and for annual limits ranging from one to five halibut (Table 6). Measures that meet the fishery targets under the Blue Line alternative are highlighted in the table.

The projected removals are likely too high, based on comparison to data from the U45O68 limit in 2012 and 2013. For example, the projected mean weight for a U45O68 reverse slot limit with subarea harvests equal to the 2012 levels by subarea was 15.90 lb. Similarly, the predicted average weight based on 2013 harvests by subarea was 15.94 lb. Observed average weights from the fishery, however, were 14.27 lb in 2012 and 14.12 lb in 2013. Therefore, the projected average weights were high by roughly 11-13%, at least for the U45O68 reverse slot limit. Because projected charter removals are a linear combination of average weight and harvest, projected charter removals would be high by about the same proportions. For example, the projected removal for a U45O68 limit in the absence of an annual limit is 0.953 M lb (Table 6), which is 11% higher than the status quo projection of 0.856 M lb (Table 3).

For comparison purposes, charter removals were also calculated for the U45O68 reverse slot limit and annual limits of one to five halibut using the empirical average weights, or the average of the 2012 and 2013 average weights by subarea (Table 7). This was essentially the same approach used for the Area 2C status quo projection in Table 3. These projections are compared to projections using the standard methodology (Table 6). Projected removals using empirical average weights under annual limits from one to five fish ranged from 0.413 to 0.838 M lb. The corresponding projections using the standard method

ranged from 0.457 to 0.930 M lb. The standard projections were 10.5% to 11.3% higher than the projections based on empirical data across the range of annual limits from zero to five fish.

Therefore, even though predicted removals are likely overestimated using the standard methodology, Table 6 should still have utility for selecting an appropriate length limit. For example, if the target for removals is 0.76 M lb, the measure could be selected from the appropriate table that results in a predicted removal of  $0.76 \times 1.11$ , or 0.844 M lb. Therefore, Table 6 also highlights measures that should meet the Blue Line alternative assuming that the table overestimates removals by 11%.

## **4.0 Area 3A Projections**

### **4.1 Status Quo**

The status quo measures analyzed for Area 3A included a two-fish bag limit, no size limit, and no retention of halibut by skipper and crew. Although crew retention was allowed in 2013, it would be prohibited by regulation under the CSP even if there were no other changes to charter management measures. The 2013 preliminary estimate of Area 3A charter harvest based on logbook data excluding crew was 197,182 halibut. The harvest forecast for 2014 was 197,500 halibut (Figure 4). The slight difference between the 2013 estimate and the forecast was due to use of a 2-year lag in the forecast for the Yakutat subarea. The status quo projected yield was 2.493 M lb, and projected total charter removals including release mortality was 2.543 M lb (Table 8).

### **4.2 Annual Limit**

Harvests were projected for annual limits of 1-10 halibut in Area 3A. As in Area 2C, the percentage harvest reduction associated with annual limits varied substantially by subarea (Table 9). Projected annual harvests for Area 3A overall ranged from about 82,000 to nearly 197,000 halibut, with corresponding reductions in harvest (number of fish) ranging from 58.7% to 0.4%. A harvest reduction of at least 10% would not be achieved until the annual limit was set below four fish. Annual limits greater than two halibut had a relatively small effect on harvest because few anglers harvested three or more halibut in 2012. Projected total removals (including release mortality) under annual limits of one to ten halibut ranged from 1.061 M lb to 2.532 M lb (Table 10).

### **4.3 Maximum Size Limit on Second Fish with and Without Annual Limit**

The numbers of first and second fish were tallied for each subarea from 2010-2012 logbook data, excluding crew harvest. The 2010-2012 average proportions of second fish were used in the analysis and ranged from 33% in the Glacier Bay (3A) subarea to 49% in the Central and Lower Cook Inlet subareas (Table 11). Because the maximum size limit only applies to the second fish in each bag limit, and because harvest length distributions vary by subarea (Figure 5), the impact of this regulation would vary by subarea.

Total Area 3A charter removals were projected for maximum size limits on the second fish that ranged from 26 to 50 inches and annual limits ranging from zero to ten fish. Without an annual limit, projected removals ranged from 1.776 M lb with a 26-inch maximum size limit to 2.348 M lb under a 55-inch maximum size limit (Table 12). The corresponding area-wide average weights ranged from 9.0 to 11.9 pounds. For each size limit, there was a small amount of variation (0.1 lb or less) in area-wide average weight across the range of annual limits due to shifts in the distribution of harvest among subareas.

### **4.4 Limit Vessels to One Trip per Day**

This measure was analyzed for the Council in 2012 for Areas 2C and 3A using ADF&G charter logbook data from 2007-2010 (King et al. 2012). This analysis is for Area 3A only, and updated using logbook data through 2012 excluding crew harvest.

The practice of taking more than one trip per day is relatively common in Area 3A. Since 2007, about 28-39% of businesses in Area 3A reported making more than one trip per day where they targeted bottomfish

or harvested halibut (Table 13). The proportions of vessels that made more than one bottomfish trip per day were similar (27-36%). Since 2007, vessels in Area 3A have made 18,452 to 25,491 bottomfish trips annually. Trips beyond the first trip of the day accounted for 4.0 to 6.3% of all bottomfish trips, and the percentage has increased every year since 2009.

Even though one-third or more of the charter vessels in Area 3A make multiple trips per day, the majority of these engage in this practice only a few days per year (Table 14). Even so, the number of businesses that do this on a more frequent basis appears to be increasing. The number and percentage of businesses that make multiple trips per day more than 20 days per year increased from seven (4.9%) in 2009 to 21 (18.8%) in 2012 (Table 14).

The critical information for understanding the effect of a daily trip limit is the amount of halibut harvest that occurs on trips after the first trip of the day (trips that would be prohibited). The fraction of harvest that occurs after the first trip of the day has varied somewhat by year, but varied considerably by subarea. From 2007 to 2012, the Central and Lower Cook Inlet subareas had the highest fractions of harvest after the first trip of the day. Halibut harvest on the second and subsequent trips represented 8.3% to 14.6% of the Lower Cook Inlet halibut harvest and 7.7% to 15.9% of the Central Cook Inlet harvest (Table 15). For Area 3A overall, the percentage of harvest occurring after the first trip of the day was around 6-7% from 2007 to 2009 but has increased every year since 2009 to a high of 9.8% in 2012.

For 2014, we would assume that the effect of limiting vessels to one trip per day with halibut harvest would reduce the charter halibut harvest (in numbers of fish) by a maximum of approximately 10%. This would also represent the potential reduction if the average weight of halibut taken on trips after the first trip of the day was different from first trips. ADF&G creel surveys in Area 3A do not collect trip numbers in association with size data, but halibut caught on half-day trips are suspected to be smaller than the overall average. In Cook Inlet, vessels that routinely conduct half-day trips typically fish closer to port and the emphasis is on filling bag limits in a shorter time frame.

The 10% figure provided above is considered a maximum for the potential reduction in harvest because of the potential for displaced effort to be absorbed by other vessels or other dates. If approved by the IPHC in January, trip limits would be published in the Federal Register in March. Anglers that have already booked a trip may have to re-book alternate dates or book another boat. Anglers that have not yet reserved a trip might find it harder to book a trip during peak use periods. The ability of anglers to re-book would depend on the availability of suitable vessels, their flexibility in their desire for a particular boat or captain, and their flexibility in desired dates.

The only factor that could be examined with available data is the number of available angler days. Charter halibut permits specify the maximum number of anglers that can be carried. Theoretically, the total number of angler endorsements represents the number of anglers that could be fish on a particular day. Endorsement data were obtained from the Area 3A permit information posted in July 2013. Logbook data and charter halibut permit data for 2012 were combined to examine the amount of effort that occurred in relation to the potential effort for major ports of landings in Area 3A. Ports in close proximity to each other (e.g., Anchor Point, Ninilchik, and Deep Creek) were combined on the assumption that they function as a single port in terms of booking. Angler effort either exceeded or came close to the theoretical maximum during July and August in Central Cook Inlet, and at Homer, Seward, Whittier, and Valdez in 2012 (Figure 6).

This graphic analysis likely overestimates the availability of charters for several reasons. First, some permits were probably endorsed for more anglers than the vessels they were being used on were able to carry. Second, some percentage of charter businesses choose not to run at full capacity, both in the number of anglers per trip and the number of trips they are willing to make per year. These operators may be reluctant to book more anglers or trips even if there was demand. Third, some businesses choose to target only salmon, or at least limit the number of trips targeting halibut. Finally, the peak season for halibut harvest in Area 3A is from early July through mid-August (Figure 6). During this time, the peak in

demand combines with the aforementioned factors to create a shortage in the availability of halibut charters, especially at major ports. Unfortunately, the true availability cannot be calculated with available data. The willingness of charter operators to do halibut trips and the flexibility of clients to book alternate vessels, dates, or ports are all unknown. Therefore, there is currently no way to precisely project charter removals under trip limits.

## **5.0 Implementation Issues**

### **5.1 Size Limits**

There are no anticipated implementation issues that would prevent implementation of maximum size limits on the second fish in the bag limit. In order to meet harvest targets for Area 3A, the size limit will likely be set low enough that it will be easy to release oversize halibut with low mortality. The number of released halibut could increase as a result of selecting for fish below the maximum size limit. The number of released fish is captured in logbooks, in SWHS estimates, and in creel survey interviews. The ability of anglers to harvest a second fish below the maximum size limit would likely vary by subarea. That is because length-frequency distributions of harvest vary among subareas.

### **5.2 Annual Limits**

It is envisioned that annual limits would be implemented in the charter fishery for halibut as they are by the State of Alaska for king salmon, and as they are for halibut by the Department of Fisheries and Oceans in Area 2B (British Columbia). That is, all anglers would be required to record, in ink, the species, date, and location immediately upon harvesting a halibut. Recording would be on the back of a State of Alaska fishing license, or, if an angler does not have a paper license or is not required to be licensed, on an ADF&G harvest card available at license vendors and ADF&G offices. Charter anglers would not be required to record any Guided Angler Fish (GAF) taken under the CSP provision. This should not present a problem for enforcement or accounting – under the CSP, GAF are required to be recorded in the logbook immediately upon capture. When checking anglers at sea or dockside, enforcement personnel should be able to deduct GAF from fish that count toward an angler's annual limit.

The license or harvest card would not be required to be submitted at the end of the year. Halibut harvest accounting by individual angler would continue to be implemented through ADF&G charter logbooks. Logbooks require reporting of the numbers of halibut harvested and released by individual angler, as well as the angler's name and fishing license number. For anglers fishing under the authority of an ADF&G Permanent Identification (PID) or Disabled Veteran (DAV) card, the PID or DAV number must be recorded. No number need be recorded for youth anglers not required to be licensed. Under the CSP, all anglers (including youth) will be required to sign the logbook verifying that the catch recorded for them is correct.

A number of concerns have been expressed regarding effective enforcement and compliance with a halibut annual limit. A chief concern is that unscrupulous anglers will obtain duplicate or multiple licenses in order to comply with the reporting requirement yet still violate the annual limit. Although this is likely, the magnitude of cheating that will occur cannot be known in advance. However, ADF&G now has the ability to merge licensing and logbook data to examine the number of fish harvested by individual anglers, regardless of the number of licenses, duplicates, PIDs, or DAVs held. This capability provides a post-season evaluation of compliance by individual charter anglers with annual limits for any species included in the logbook.

This capability was recently tested by examining compliance with the nonresident 4-fish annual limit for king salmon in Southeast Alaska in 2012. Statistical data in the logbooks allowed exclusion of harvests from special use areas or terminal harvest areas where annual limits do not apply. Last year, 13,187 nonresidents that held 13,293 licenses harvested at least one king salmon. Of these anglers, 76 anglers harvested more than four king salmon over 28 inches (annual limit violations). The illegal harvest (in excess of annual limits) of 102 king salmon represented 0.4% of the total harvest of large kings. The low

rate of violations among licensed nonresidents in this popular fishery suggests that enforcement of annual limits through the reporting requirement alone creates an effective incentive for compliance.

Compliance among youth anglers that are not required to be licensed cannot be evaluated post-season using logbook data. However, youth anglers have made up only about 6% of the saltwater angler effort in Area 3A in recent years. As stated earlier, all unlicensed youth anglers would be required to report each halibut on a harvest record. Youth typically fish on charter boats with parents or other adults, who, along with the guide or deck hand, would be expected to remind them of recording requirements. The proportion of youth that would violate annual limits is likely small.

Post-season evaluations of annual harvests per angler cannot be done until license data are finalized, which is usually by March of the year following harvest. This several-month lag may make post-season enforcement impractical, but the data can be used to inform the Council with respect to compliance issues and assist enforcement by identifying individuals, guides, or businesses frequently associated with annual limit violations.

### 5.3 Trip limits

It is anticipated that implementation of this measure would be a rule that limits charter vessels to one trip per day during which any halibut are harvested. The trip limit would not apply to vessels or trips targeting or catching only salmon or other state-managed species over which the federal government lacks authority. One potential issue may be whether the rule would limit vessels or limited entry permits to one trip per day. For example, if the rule was specified to limit each vessel to one trip per day, businesses with multiple vessels could still make multiple trips per day. On the other hand, limiting the use of a permit to one vessel trip per day may be more effective in terms of achieving the desired harvest reduction. Another potential issue is whether a day is defined as a calendar day or a 24-hour period. There are an unknown number of charter vessels in Area 3A that conduct overnight charters in order to allow anglers to harvest a possession limit of halibut (4 fish) on a single trip. These vessels typically leave port in the evening and return the next morning. To be legal, anglers must not harvest more than a daily bag limit before or after midnight. Vessels doing overnight trips on a daily basis would be conducting portions of two trips in a single calendar day.

Not all businesses that make multiple trips per day are doing so with a different group of clients. Lodges with clients that fish several days in a row likely make up a portion of the businesses that regularly make multiple trips per day. Some may be taking the same clients out several times per day, returning to the lodge for meals or rest. Current logbook reporting rules define a trip as ending when charter clients or fish are offloaded. If multiple trips per day were prohibited, these businesses would have to make sure that all halibut harvest occurred on one trip per day.

There may be enforcement issues associated with trip limits. When contacting a vessel in the field, enforcement personnel would have to be able to determine whether the vessel is engaged in the first trip of the day, or whether it had made another trip earlier in the day. There is no requirement to retain logbook data for completed trips on board the vessel.

## 6.0 Possible Targets for Charter Removals and Candidate Measures

In order to help frame the decision-making process, this section develops likely targets for charter removals under the CSP and identifies a range of potential options for suitable management measures

Likely alternative targets for total charter removals in Area 2C include:

1. The Blue Line, based on the combined charter-commercial fishery constant exploitation yield (FCEY) announced by the IPHC on December 4. This value is 0.76 M lb, and is calculated by applying the 18.3% allocation defined in the CSP to the combined FCEY of 4.16 M lb.
2. The charter allocation associated with the combined FCEY that results from increasing the commercial catch limit 1/3 of the distance between the 2013 catch limit of 2.97 M lb and the Blue

Line catch limit for 2014 of 4.16 M lb. This commercial catch would be 3.16 M lb, and the resulting charter sector allocation would be 0.71 M lb. Commercial waste was estimated from the waste-to-catch ratio for the Blue Line ( $0.08 / 3.32 = 0.024$ ).

For Area 3A, the following alternative targets were identified:

1. The Blue Line value of 1.78 M lb, which was determined by applying the CSP allocation of 18.9% to the combined FCEY of 9.43.
2. The fixed charter allocation of 1.89 M lb specified in the CSP when the combined FCEY is between 10.0 and 10.8 M lb.
3. The charter allocation associated with the combined FCEY that results from the commercial catch limit that is halfway between the 2013 catch limit of 11.03 M lb and the Blue Line catch limit of 7.32 M lb. This charter allocation is 2.03 M lb, arrived at by applying the CSP allocation of 17.5% to a combined FCEY of 11.62. The combined FCEY was calculated as for Area 2C, using the waste-to-catch ratio for the Blue Line to estimate commercial waste.

These potential targets and the values used to calculate them are presented in Table 16. The general suite of measures that could potentially meet these targets and the corresponding tales numbers are also listed. This brief list of management options is intended to frame a discussion without assuming that any of these alternatives will necessarily be chosen. The Council may wish to evaluate measures for additional or alternative harvest targets.

## 8.0 References

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Table 1. Subareas of IPHC Areas 2C and 3A, ports where ADF&G creel surveys and halibut sampling occur, and subarea abbreviations used in tables and figures in this report.

IPHC Area	Subarea (sampled ports)	Ports With Sampling and Angler Interviews	Abbreviations
2C	Ketchikan	Ketchikan	A, Ket
	Prince of Wales Island	Craig, Klawock	B, PWI
	Petersburg/Wrangell	Petersburg, Wrangell	C, Pburg
	Sitka	Sitka	D
	Juneau, Haines, Skagway	Juneau	EF, Jun
	Glacier Bay (2C portion)	Gustavus, Elfin Cove	G2C
3A	Glacier Bay (3A portion)	Gustavus, Elfin Cove	G3A
	Yakutat	Yakutat	H, Yak
	Eastern Prince William Sound	Valdez	EPWS
	Western Prince William Sound	Whittier	WPWS
	North Gulf	Seward	NG
	Lower Cook Inlet	Homer	LCI
	Central Cook Inlet	Anchor Point, Deep Creek	CCI
	Kodiak	Kodiak city	Q, Kod

Table 2. Charter logbook harvest (numbers of halibut) excluding crew, by subarea for IPHC Areas 2C and 3A, 2006-2013. The 2013 numbers are preliminary estimates based on regression using data through July 2013.

<b>Area 2C</b>									
Year	Subarea						<b>Area 2C</b>		
	Ket	PWI	Pburg	Sitka	Jun	G2C			
2006	10,933	38,053	5,505	34,430	9,471	12,468	110,860		
2007	11,719	42,044	5,912	34,056	9,325	17,251	120,307		
2008	8,595	38,047	5,452	29,465	8,004	17,016	106,579		
2009	4,471	13,097	2,246	15,896	4,873	10,433	51,016		
2010	4,322	12,403	2,138	14,010	5,051	9,612	47,536		
2011	3,746	12,045	1,444	16,022	5,377	9,365	47,999		
2012	5,234	13,985	1,748	16,711	4,903	8,175	50,756		
2013	6,872	17,282	1,927	17,112	6,684	8,128	58,005		

<b>Area 3A:</b>									
Year	Subarea								<b>Area 3A</b>
	G3A	Yak	EPWS	WPWS	NG	LCI	CCI	Kod	
2006	86	3,266	9,176	3,896	44,888	93,652	65,958	16,624	237,546
2007	150	3,028	9,284	3,674	54,109	98,730	69,708	19,452	258,135
2008	493	3,413	7,032	4,567	50,508	83,165	64,277	17,822	231,277
2009	280	3,042	7,066	4,220	40,165	69,361	52,704	13,934	190,772
2010	142	3,357	7,219	4,843	45,116	75,986	53,074	13,418	203,155
2011	972	2,751	5,925	4,006	45,635	78,572	52,904	14,437	205,202
2012	1,300	3,422	4,953	4,766	45,094	76,381	50,281	13,396	199,593
2013	1,684	3,104	5,544	6,134	45,380	72,636	50,833	11,867	197,182

Table 3. Area 2C projected yield and total removals for 2014 under status quo regulations (one-fish bag limit and U45O68 reverse slot limit).

Subarea	Harvest Forecast	Average Wt (lb)	Yield (M lb)	Release Mortality (5%)	Total Removals (M lb)
Ket	6,872	13.90	0.096	0.005	0.100
PWI	17,282	11.36	0.196	0.010	0.206
Pburg	1,927	20.85	0.040	0.002	0.042
Sitka	17,112	12.91	0.221	0.011	0.232
Jun	6,684	13.09	0.087	0.004	0.092
G2C	8,128	21.51	0.175	0.009	0.184
Area 2C	58,005	14.05	0.815	0.041	0.856

Table 4. Estimated percent change and projected 2014 charter halibut harvests (numbers of fish) in Area 2C under annual limits of one to five halibut. The percentage reductions were calculated from 2012 logbook harvests by licensed anglers excluding crew.

Annual Limit	Subarea						Area 2C
	Ket	PWI	Pburg	Sitka	Jun	G2C	
Estimated percent change in harvest:							
1	-30.2%	-57.0%	-49.6%	-50.3%	-48.4%	-61.6%	-51.2%
2	-10.0%	-26.9%	-22.8%	-18.8%	-24.6%	-39.5%	-23.9%
3	-2.0%	-7.7%	-7.8%	-3.6%	-10.9%	-24.1%	-8.5%
4	-0.6%	-1.6%	-2.4%	-0.5%	-3.8%	-13.8%	-3.2%
5	-0.1%	-0.5%	-0.3%	-0.1%	-1.2%	-8.4%	-1.5%
Projected harvest:							
1	4,799	7,429	972	8,505	3,450	3,124	28,279
2	6,184	12,638	1,488	13,895	5,042	4,917	44,165
3	6,733	15,955	1,777	16,496	5,958	6,172	53,092
4	6,833	17,000	1,881	17,025	6,429	7,006	56,173
5	6,862	17,203	1,921	17,092	6,601	7,449	57,128
None	6,872	17,282	1,927	17,112	6,684	8,128	58,005

Table 5. Area 2C projected charter removals including release mortality (A) and projected average net weight of harvested halibut (B) under a range of maximum size limits and annual limits (including no annual limit) for 2014. Shaded values represent candidate measures for implementation under the IPHC Blue Line alternative of 0.76 M lb of total removals for the charter fishery.

A. Projected Total Removals incl. release mortality (M lb)							B. Projected Average Weight (lb)					
Size Limit (inches)	Annual Limit						Annual Limit					
	1	2	3	4	5	None	1	2	3	4	5	None
30	0.193	0.302	0.363	0.384	0.390	0.396	6.52	6.51	6.51	6.51	6.51	6.51
31	0.208	0.324	0.389	0.412	0.419	0.425	7.00	6.99	6.98	6.98	6.98	6.98
32	0.226	0.352	0.423	0.447	0.455	0.463	7.61	7.59	7.58	7.58	7.59	7.59
33	0.239	0.371	0.445	0.471	0.479	0.487	8.03	8.00	7.99	7.99	7.99	8.00
34	0.253	0.393	0.472	0.499	0.508	0.516	8.52	8.48	8.46	8.46	8.46	8.47
35	0.264	0.410	0.492	0.521	0.530	0.539	8.90	8.85	8.83	8.83	8.84	8.85
36	0.282	0.438	0.525	0.556	0.565	0.575	9.50	9.45	9.42	9.42	9.43	9.44
37	0.293	0.455	0.546	0.578	0.588	0.598	9.88	9.82	9.79	9.79	9.80	9.82
38	0.311	0.482	0.577	0.611	0.622	0.633	10.46	10.38	10.35	10.36	10.37	10.39
39	0.323	0.500	0.599	0.635	0.646	0.658	10.88	10.79	10.75	10.76	10.77	10.80
40	0.334	0.517	0.620	0.656	0.668	0.680	11.25	11.16	11.12	11.13	11.14	11.17
41	0.348	0.538	0.644	0.683	0.695	0.708	11.70	11.60	11.56	11.57	11.59	11.63
42	0.357	0.552	0.662	0.701	0.714	0.728	12.01	11.91	11.87	11.89	11.91	11.95
43	0.367	0.568	0.680	0.721	0.735	0.750	12.35	12.25	12.21	12.23	12.26	12.31
44	0.380	0.589	0.705	0.747	0.762	0.776	12.80	12.69	12.65	12.67	12.70	12.75
45	0.394	0.611	0.731	0.775	0.790	0.806	13.28	13.17	13.12	13.14	13.17	13.23
46	0.404	0.626	0.749	0.794	0.810	0.826	13.61	13.50	13.44	13.47	13.50	13.56
47	0.418	0.647	0.775	0.821	0.838	0.854	14.08	13.95	13.90	13.93	13.96	14.03
48	0.428	0.662	0.792	0.840	0.856	0.874	14.40	14.27	14.21	14.24	14.27	14.34
49	0.443	0.686	0.822	0.872	0.889	0.908	14.93	14.80	14.74	14.78	14.82	14.90
50	0.455	0.705	0.844	0.896	0.914	0.934	15.33	15.20	15.15	15.19	15.24	15.33
51	0.467	0.723	0.866	0.919	0.938	0.958	15.73	15.60	15.54	15.58	15.63	15.72
52	0.484	0.750	0.898	0.953	0.973	0.994	16.31	16.17	16.11	16.16	16.21	16.31
53	0.495	0.766	0.918	0.974	0.994	1.016	16.66	16.52	16.47	16.51	16.57	16.67
54	0.509	0.788	0.944	1.002	1.022	1.045	17.14	16.99	16.93	16.98	17.04	17.15
55	0.521	0.807	0.966	1.025	1.046	1.069	17.54	17.39	17.33	17.38	17.44	17.55

Table 6. Area 2C projected charter removals (including release mortality) under reverse slot limits ranging from U35O50 to U50O80 and annual limits ranging from zero to five fish. Shaded values represent candidate measures under the IPHC Blue Line alternative of 0.76 M lb, and boxed values indicate measures that would meet the Blue Line charter target of 0.76 M lb assuming that projected removals are overestimated by 11%.

**No annual limit, harvest = 58,005 halibut**

Lower Limit (in)	Upper Length Limit (in)															
	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80
35	1.155	1.091	1.034	0.971	0.922	0.874	0.813	0.753	0.722	0.692	0.661	0.644	0.621	0.604	0.601	0.587
36	1.185	1.122	1.066	1.004	0.955	0.908	0.848	0.788	0.757	0.727	0.697	0.680	0.656	0.640	0.637	0.623
37	1.204	1.142	1.086	1.025	0.976	0.930	0.870	0.810	0.779	0.750	0.719	0.702	0.679	0.663	0.660	0.646
38	1.233	1.172	1.117	1.057	1.008	0.963	0.903	0.844	0.813	0.784	0.754	0.737	0.714	0.697	0.695	0.681
39	1.254	1.193	1.139	1.079	1.031	0.986	0.927	0.868	0.837	0.808	0.778	0.761	0.738	0.722	0.719	0.705
40	1.272	1.212	1.158	1.099	1.052	1.007	0.948	0.890	0.859	0.831	0.801	0.784	0.761	0.745	0.742	0.728
41	1.294	1.235	1.183	1.124	1.078	1.033	0.974	0.917	0.886	0.858	0.828	0.811	0.789	0.772	0.770	0.756
42	1.309	1.251	1.199	1.141	1.095	1.051	0.993	0.936	0.905	0.877	0.847	0.831	0.808	0.791	0.789	0.775
43	1.326	1.269	1.217	1.160	1.114	1.070	1.013	0.956	0.926	0.898	0.868	0.851	0.829	0.812	0.810	0.796
44	1.348	1.291	1.241	1.184	1.139	1.096	1.038	0.982	0.952	0.924	0.895	0.878	0.856	0.839	0.837	0.823
45	1.371	1.316	1.266	1.210	1.166	1.123	1.066	1.010	0.981	0.953	0.923	0.907	0.885	0.868	0.866	0.852
46	1.387	1.333	1.284	1.228	1.184	1.142	1.085	1.030	1.000	0.972	0.943	0.927	0.905	0.889	0.886	0.872
47	1.410	1.357	1.308	1.254	1.210	1.168	1.112	1.057	1.028	1.000	0.971	0.955	0.933	0.917	0.914	0.901
48	1.425	1.372	1.325	1.270	1.227	1.185	1.130	1.075	1.046	1.019	0.990	0.974	0.951	0.935	0.933	0.919
49	1.452	1.401	1.354	1.301	1.258	1.217	1.162	1.108	1.079	1.052	1.023	1.007	0.985	0.969	0.967	0.953
50	1.472	1.422	1.376	1.323	1.282	1.241	1.187	1.133	1.104	1.077	1.049	1.033	1.011	0.995	0.993	0.979

**5-fish annual limit, harvest = 57,128 halibut**

Lower Limit (in)	Upper Length Limit (in)															
	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80
35	1.125	1.062	1.006	0.945	0.897	0.852	0.793	0.735	0.704	0.676	0.646	0.629	0.607	0.591	0.588	0.575
36	1.155	1.093	1.038	0.978	0.930	0.885	0.827	0.769	0.738	0.710	0.681	0.664	0.642	0.626	0.623	0.610
37	1.173	1.112	1.058	0.998	0.951	0.906	0.848	0.791	0.760	0.732	0.703	0.687	0.664	0.648	0.646	0.632
38	1.201	1.141	1.088	1.029	0.983	0.938	0.881	0.824	0.794	0.766	0.737	0.720	0.698	0.682	0.680	0.666
39	1.222	1.162	1.110	1.051	1.005	0.961	0.904	0.847	0.817	0.790	0.761	0.744	0.722	0.706	0.704	0.691
40	1.239	1.181	1.129	1.071	1.025	0.982	0.925	0.869	0.839	0.811	0.783	0.766	0.744	0.728	0.726	0.713
41	1.261	1.204	1.152	1.095	1.050	1.007	0.950	0.895	0.865	0.838	0.809	0.793	0.771	0.755	0.753	0.740
42	1.275	1.219	1.168	1.111	1.067	1.024	0.968	0.913	0.883	0.856	0.827	0.811	0.789	0.774	0.771	0.758
43	1.292	1.236	1.186	1.130	1.086	1.043	0.987	0.933	0.903	0.876	0.848	0.832	0.810	0.794	0.792	0.779
44	1.313	1.258	1.209	1.154	1.110	1.068	1.013	0.958	0.929	0.902	0.874	0.858	0.836	0.820	0.818	0.805
45	1.336	1.283	1.234	1.179	1.136	1.095	1.040	0.986	0.957	0.930	0.902	0.886	0.864	0.849	0.846	0.833
46	1.352	1.299	1.251	1.197	1.154	1.113	1.058	1.005	0.976	0.949	0.921	0.905	0.884	0.868	0.866	0.853
47	1.374	1.322	1.275	1.221	1.179	1.139	1.085	1.032	1.003	0.976	0.949	0.933	0.911	0.896	0.893	0.881
48	1.389	1.337	1.291	1.238	1.196	1.156	1.102	1.049	1.021	0.994	0.967	0.951	0.929	0.914	0.911	0.899
49	1.415	1.365	1.319	1.267	1.226	1.186	1.133	1.081	1.053	1.026	0.999	0.983	0.962	0.947	0.944	0.932
50	1.435	1.386	1.341	1.289	1.249	1.210	1.157	1.105	1.077	1.051	1.024	1.008	0.987	0.971	0.969	0.957

(continued)

Table 6. (continued).

**4-fish annual limit, harvest = 56,173 halibut**

Lower Limit (in)	Upper Length Limit (in)															
	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80
35	1.099	1.038	0.983	0.923	0.877	0.833	0.775	0.719	0.688	0.661	0.632	0.616	0.594	0.578	0.576	0.563
36	1.128	1.068	1.014	0.955	0.909	0.866	0.808	0.752	0.722	0.695	0.667	0.650	0.628	0.613	0.611	0.598
37	1.147	1.087	1.034	0.975	0.930	0.886	0.829	0.774	0.744	0.716	0.688	0.672	0.650	0.635	0.632	0.620
38	1.174	1.116	1.063	1.005	0.960	0.918	0.861	0.806	0.776	0.749	0.721	0.705	0.683	0.668	0.666	0.653
39	1.194	1.136	1.085	1.027	0.983	0.940	0.884	0.829	0.800	0.773	0.745	0.729	0.707	0.692	0.689	0.677
40	1.211	1.154	1.103	1.046	1.002	0.960	0.904	0.850	0.821	0.794	0.766	0.750	0.728	0.713	0.711	0.698
41	1.233	1.177	1.126	1.070	1.026	0.985	0.929	0.875	0.846	0.819	0.792	0.776	0.754	0.739	0.737	0.724
42	1.247	1.191	1.142	1.086	1.043	1.001	0.946	0.893	0.864	0.837	0.810	0.794	0.772	0.757	0.755	0.743
43	1.263	1.208	1.159	1.104	1.061	1.020	0.965	0.912	0.883	0.857	0.830	0.814	0.792	0.777	0.775	0.762
44	1.284	1.230	1.182	1.127	1.085	1.044	0.990	0.937	0.908	0.882	0.855	0.839	0.818	0.803	0.801	0.788
45	1.307	1.254	1.206	1.153	1.111	1.070	1.017	0.964	0.936	0.910	0.883	0.867	0.846	0.831	0.828	0.816
46	1.322	1.270	1.223	1.170	1.128	1.088	1.035	0.983	0.954	0.929	0.902	0.886	0.865	0.850	0.848	0.835
47	1.343	1.292	1.246	1.194	1.153	1.113	1.060	1.009	0.981	0.955	0.928	0.913	0.891	0.877	0.874	0.862
48	1.358	1.308	1.262	1.210	1.169	1.130	1.078	1.026	0.998	0.973	0.946	0.930	0.909	0.894	0.892	0.880
49	1.384	1.335	1.290	1.239	1.199	1.160	1.108	1.057	1.029	1.004	0.977	0.962	0.941	0.926	0.924	0.912
50	1.403	1.354	1.310	1.260	1.220	1.182	1.131	1.080	1.053	1.028	1.001	0.986	0.965	0.950	0.948	0.936

**3-fish annual limit, harvest = 53,092 halibut**

Lower Limit (in)	Upper Length Limit (in)															
	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80
35	1.031	0.973	0.921	0.865	0.821	0.781	0.727	0.674	0.645	0.620	0.594	0.579	0.558	0.544	0.542	0.530
36	1.058	1.001	0.951	0.895	0.852	0.812	0.758	0.706	0.678	0.652	0.627	0.611	0.590	0.576	0.574	0.563
37	1.075	1.019	0.969	0.914	0.871	0.831	0.778	0.726	0.698	0.673	0.647	0.632	0.611	0.597	0.595	0.583
38	1.101	1.046	0.997	0.942	0.900	0.861	0.808	0.756	0.728	0.703	0.678	0.663	0.642	0.628	0.626	0.615
39	1.120	1.066	1.017	0.963	0.921	0.882	0.829	0.778	0.750	0.726	0.700	0.685	0.664	0.650	0.648	0.637
40	1.136	1.083	1.035	0.981	0.940	0.901	0.849	0.798	0.770	0.745	0.720	0.705	0.684	0.671	0.669	0.657
41	1.157	1.104	1.056	1.003	0.962	0.924	0.872	0.821	0.794	0.769	0.744	0.729	0.709	0.695	0.693	0.682
42	1.170	1.118	1.071	1.018	0.978	0.939	0.888	0.838	0.810	0.786	0.761	0.746	0.726	0.712	0.710	0.699
43	1.185	1.133	1.087	1.035	0.995	0.957	0.906	0.856	0.829	0.804	0.779	0.765	0.744	0.730	0.728	0.717
44	1.205	1.154	1.108	1.057	1.017	0.980	0.929	0.880	0.852	0.828	0.804	0.789	0.768	0.755	0.753	0.742
45	1.226	1.177	1.132	1.081	1.042	1.005	0.954	0.905	0.878	0.854	0.830	0.815	0.795	0.781	0.779	0.768
46	1.241	1.192	1.147	1.097	1.058	1.021	0.971	0.923	0.896	0.872	0.847	0.833	0.813	0.799	0.797	0.786
47	1.261	1.213	1.169	1.120	1.082	1.045	0.995	0.947	0.921	0.897	0.872	0.858	0.838	0.824	0.822	0.811
48	1.275	1.227	1.184	1.135	1.097	1.061	1.012	0.964	0.937	0.914	0.889	0.875	0.855	0.841	0.839	0.828
49	1.299	1.253	1.210	1.162	1.125	1.089	1.040	0.992	0.966	0.943	0.919	0.904	0.884	0.871	0.869	0.858
50	1.317	1.271	1.230	1.182	1.145	1.110	1.061	1.014	0.988	0.965	0.941	0.926	0.906	0.893	0.891	0.880

(continued)

Table 6. (continued).

**2-fish annual limit, harvest = 44,165 halibut**

Lower Limit (in)	Upper Length Limit (in)															
	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80
35	0.854	0.806	0.763	0.716	0.680	0.647	0.602	0.558	0.535	0.514	0.493	0.480	0.463	0.452	0.450	0.441
36	0.878	0.830	0.788	0.742	0.706	0.673	0.629	0.585	0.562	0.541	0.520	0.508	0.490	0.479	0.478	0.468
37	0.892	0.845	0.803	0.757	0.723	0.690	0.646	0.602	0.579	0.558	0.537	0.525	0.507	0.496	0.495	0.486
38	0.914	0.868	0.827	0.781	0.747	0.714	0.671	0.628	0.605	0.584	0.563	0.551	0.534	0.522	0.521	0.512
39	0.930	0.884	0.844	0.799	0.765	0.732	0.689	0.646	0.623	0.603	0.582	0.570	0.552	0.541	0.540	0.531
40	0.944	0.899	0.858	0.814	0.780	0.748	0.705	0.663	0.640	0.619	0.599	0.586	0.569	0.558	0.557	0.548
41	0.961	0.916	0.877	0.832	0.799	0.767	0.724	0.683	0.660	0.640	0.619	0.607	0.590	0.579	0.577	0.568
42	0.971	0.928	0.889	0.845	0.812	0.780	0.738	0.696	0.673	0.653	0.633	0.621	0.604	0.593	0.591	0.582
43	0.984	0.941	0.902	0.859	0.826	0.795	0.752	0.711	0.688	0.668	0.648	0.636	0.619	0.608	0.606	0.598
44	1.001	0.958	0.920	0.877	0.845	0.814	0.772	0.731	0.708	0.689	0.668	0.656	0.639	0.628	0.627	0.618
45	1.019	0.977	0.940	0.897	0.866	0.835	0.793	0.752	0.730	0.710	0.690	0.678	0.661	0.650	0.649	0.640
46	1.031	0.990	0.953	0.911	0.879	0.849	0.808	0.767	0.745	0.725	0.705	0.693	0.676	0.666	0.664	0.655
47	1.048	1.008	0.972	0.930	0.899	0.869	0.828	0.788	0.766	0.746	0.726	0.714	0.698	0.687	0.685	0.676
48	1.060	1.020	0.984	0.943	0.912	0.882	0.842	0.802	0.780	0.760	0.740	0.729	0.712	0.701	0.699	0.691
49	1.080	1.041	1.006	0.965	0.935	0.905	0.865	0.825	0.804	0.784	0.765	0.753	0.736	0.725	0.724	0.715
50	1.095	1.056	1.022	0.982	0.952	0.923	0.882	0.843	0.822	0.803	0.783	0.771	0.755	0.744	0.742	0.734

**1-fish annual limit, harvest = 28,279 halibut**

Lower Limit (in)	Upper Length Limit (in)															
	50	52	54	56	58	60	62	64	66	68	70	72	74	76	78	80
35	0.547	0.515	0.488	0.458	0.436	0.415	0.386	0.358	0.343	0.329	0.316	0.308	0.297	0.290	0.289	0.283
36	0.562	0.531	0.504	0.474	0.453	0.432	0.403	0.375	0.361	0.347	0.334	0.326	0.315	0.308	0.307	0.301
37	0.571	0.541	0.514	0.485	0.463	0.442	0.414	0.386	0.372	0.358	0.345	0.337	0.326	0.319	0.318	0.313
38	0.586	0.556	0.529	0.500	0.479	0.459	0.430	0.403	0.388	0.375	0.362	0.354	0.343	0.336	0.335	0.330
39	0.596	0.566	0.540	0.512	0.491	0.470	0.442	0.415	0.400	0.387	0.374	0.367	0.355	0.349	0.348	0.342
40	0.605	0.576	0.550	0.522	0.501	0.480	0.453	0.426	0.411	0.398	0.385	0.377	0.366	0.360	0.358	0.353
41	0.616	0.587	0.562	0.534	0.513	0.493	0.466	0.439	0.424	0.411	0.398	0.391	0.380	0.373	0.372	0.367
42	0.623	0.595	0.570	0.542	0.521	0.501	0.474	0.447	0.433	0.420	0.407	0.400	0.389	0.382	0.381	0.375
43	0.631	0.603	0.578	0.551	0.530	0.511	0.484	0.457	0.443	0.430	0.417	0.410	0.398	0.392	0.391	0.385
44	0.642	0.615	0.590	0.563	0.543	0.523	0.496	0.470	0.456	0.443	0.430	0.423	0.412	0.405	0.404	0.399
45	0.654	0.627	0.603	0.576	0.556	0.537	0.510	0.484	0.470	0.457	0.444	0.437	0.426	0.419	0.418	0.413
46	0.662	0.635	0.611	0.585	0.565	0.546	0.519	0.493	0.479	0.467	0.454	0.447	0.436	0.429	0.428	0.423
47	0.673	0.647	0.623	0.597	0.578	0.559	0.533	0.507	0.493	0.480	0.468	0.460	0.450	0.443	0.442	0.437
48	0.681	0.655	0.632	0.606	0.587	0.568	0.542	0.516	0.502	0.490	0.477	0.470	0.459	0.452	0.451	0.446
49	0.693	0.668	0.645	0.620	0.601	0.582	0.556	0.531	0.517	0.505	0.492	0.485	0.474	0.468	0.467	0.462
50	0.703	0.678	0.656	0.630	0.612	0.593	0.568	0.543	0.529	0.517	0.504	0.497	0.486	0.480	0.479	0.473

Table 7. Comparison of Area 2C projected charter removals (including release mortality, M lb) using the standard methodology (same as Table 6) and using empirical estimates of average weight from the 2012-2013 fishery.

Method	Annual Limit					
	1	2	3	4	5	None
Standard method based on 2010 data	0.457	0.710	0.854	0.910	0.930	0.953
Empirical – mean of 2012-2013 average weights	0.413	0.642	0.772	0.821	0.838	0.856
Percent difference relative to empirical	10.6%	10.5%	10.6%	10.8%	11.0%	11.3%

Table 8. Area 3A projected yield and total removals for 2014 under status quo regulations (two-fish bag limit, no size limit, crew harvest prohibited).

Subarea	Harvest Forecast	Mean Wt (lb)	Yield (M lb)	Release Mortality (2%)	Total Removals (M lb)
G3A	1,684	42.25	0.071	0.001	0.073
Yak	3,422	27.90	0.095	0.002	0.097
EPWS	5,544	20.59	0.114	0.002	0.116
WPWS	6,134	16.35	0.100	0.002	0.102
NG	45,380	12.27	0.557	0.011	0.568
LCI	72,636	10.73	0.779	0.016	0.795
CCI	50,833	12.60	0.641	0.013	0.653
Kod	11,867	11.38	0.135	0.003	0.138
Area 3A	197,500	12.62	2.493	0.050	2.543

Table 9. Estimated percent change and projected 2014 charter halibut harvests (numbers of fish) in Area 3A under annual limits of one to ten halibut. The percentage reductions were calculated from 2012 logbook harvests by licensed anglers excluding crew.

Annual Limit	Subarea								Area 3A
	Kod	CCI	LCI	NG	WPWS	EPWS	Yak	G3A	
Estimated percent change in harvest:									
1	-70.3%	-60.0%	-59.8%	-54.7%	-50.3%	-49.3%	-56.8%	-59.1%	-58.7%
2	-44.0%	-20.7%	-20.6%	-14.0%	-11.0%	-9.1%	-25.8%	-29.1%	-20.0%
3	-30.1%	-13.6%	-12.7%	-8.4%	-4.7%	-5.1%	-14.5%	-15.6%	-12.6%
4	-18.8%	-6.7%	-5.1%	-3.7%	-0.7%	-2.0%	-7.0%	-5.9%	-5.8%
5	-11.7%	-4.6%	-3.3%	-2.3%	-0.4%	-1.3%	-3.7%	-2.3%	-3.8%
6	-6.5%	-2.7%	-1.7%	-1.2%	-0.2%	-0.8%	-1.9%	-0.6%	-2.1%
7	-3.8%	-2.0%	-1.1%	-0.8%	-0.1%	-0.5%	-1.0%	-0.1%	-1.4%
8	-2.0%	-1.3%	-0.6%	-0.5%	-0.1%	-0.3%	-0.4%	0.0%	-0.8%
9	-1.2%	-1.1%	-0.5%	-0.4%	-0.1%	-0.2%	0.0%	0.0%	-0.6%
10	-0.7%	-0.8%	-0.3%	-0.3%	0.0%	-0.1%	0.0%	0.0%	-0.4%
Projected harvest:									
1	3,524	20,357	29,180	20,572	3,049	2,809	1,477	688	81,656
2	6,642	40,323	57,676	39,040	5,462	5,041	2,538	1,193	157,916
3	8,296	43,941	63,424	41,562	5,843	5,259	2,926	1,421	172,672
4	9,638	47,447	68,907	43,705	6,093	5,431	3,184	1,585	185,991
5	10,476	48,476	70,211	44,328	6,108	5,469	3,294	1,645	190,007
6	11,098	49,445	71,406	44,829	6,123	5,501	3,358	1,675	193,436
7	11,417	49,811	71,807	45,001	6,126	5,517	3,389	1,683	194,750
8	11,631	50,152	72,172	45,145	6,129	5,529	3,410	1,684	195,850
9	11,728	50,297	72,291	45,206	6,130	5,535	3,421	1,684	196,291
10	11,784	50,426	72,400	45,258	6,131	5,539	3,422	1,684	196,645
None	11,867	50,833	72,636	45,380	6,134	5,544	3,422	1,684	197,500

Table 10. Estimated total halibut removals (including release mortality) for Area 3A under annual limits of one to ten fish.

Annual Limit	Subarea								Area 3A
	Kod	CCI	LCI	NG	WPWS	EPWS	Yak	G3A	
1	0.041	0.262	0.319	0.257	0.051	0.059	0.042	0.030	1.061
2	0.077	0.518	0.631	0.488	0.091	0.106	0.072	0.051	2.036
3	0.096	0.565	0.694	0.520	0.097	0.110	0.083	0.061	2.228
4	0.112	0.610	0.754	0.547	0.102	0.114	0.091	0.068	2.397
5	0.122	0.623	0.769	0.555	0.102	0.115	0.094	0.071	2.449
6	0.129	0.636	0.782	0.561	0.102	0.116	0.096	0.072	2.492
7	0.133	0.640	0.786	0.563	0.102	0.116	0.096	0.073	2.509
8	0.135	0.645	0.790	0.565	0.102	0.116	0.097	0.073	2.522
9	0.136	0.647	0.791	0.566	0.102	0.116	0.097	0.073	2.528
10	0.137	0.648	0.792	0.566	0.102	0.116	0.097	0.073	2.532
None	0.138	0.653	0.795	0.568	0.102	0.116	0.097	0.073	2.543

Table 11. Percent of Area 3A charter harvest made up of second fish in angler's bag limits, by subarea, 2010-2012. Data are from the ADF&G charter logbook (excluding crew harvest).

Subarea	2010	2011	2012	Average
CCI	49.2%	49.3%	49.3%	49.2%
EPWS	43.7%	45.0%	43.7%	44.1%
G3A	26.1%	33.7%	38.2%	32.7%
Yak	40.4%	38.1%	38.6%	39.0%
LCI	48.7%	49.0%	49.1%	49.0%
NG	47.5%	48.1%	46.9%	47.5%
Kod	41.8%	43.0%	42.7%	42.5%
WPWS	42.7%	42.2%	41.9%	42.2%
Area 3A Overall	47.6%	48.0%	47.7%	47.8%

Table 12. Area 3A projected charter removals including release mortality (A) and projected average net weight of harvested halibut (B) under a range of maximum size limits and annual limits (including no annual limit) for 2014. Shaded values represent candidate measures for implementation under the IPHC Blue Line alternative of 1.78 M lb of total removals for the charter fishery.

<b>A. Projected Total Removals including release mortality (Mlb)</b>											
Size Limit on 2nd fish (in)	Annual Limit										
	1	2	3	4	5	6	7	8	9	10	None
26	0.769	1.477	1.617	1.741	1.779	1.811	1.823	1.833	1.837	1.840	1.848
27	0.786	1.510	1.653	1.780	1.819	1.851	1.864	1.874	1.878	1.881	1.889
28	0.812	1.559	1.707	1.838	1.878	1.912	1.924	1.935	1.939	1.943	1.951
29	0.828	1.592	1.742	1.876	1.917	1.951	1.964	1.975	1.979	1.982	1.991
30	0.854	1.642	1.797	1.935	1.977	2.012	2.025	2.036	2.041	2.045	2.053
31	0.872	1.675	1.834	1.974	2.017	2.053	2.067	2.078	2.083	2.086	2.095
32	0.894	1.718	1.880	2.025	2.069	2.105	2.120	2.131	2.136	2.140	2.149
33	0.908	1.745	1.910	2.056	2.101	2.138	2.153	2.164	2.169	2.173	2.182
34	0.923	1.774	1.942	2.091	2.136	2.174	2.189	2.201	2.206	2.210	2.219
35	0.933	1.793	1.963	2.113	2.159	2.198	2.212	2.225	2.230	2.233	2.243
36	0.946	1.818	1.990	2.142	2.189	2.228	2.243	2.255	2.260	2.264	2.274
37	0.952	1.830	2.003	2.156	2.203	2.243	2.258	2.270	2.275	2.279	2.289
38	0.960	1.847	2.021	2.176	2.224	2.263	2.278	2.291	2.296	2.300	2.310
39	0.968	1.861	2.037	2.193	2.241	2.281	2.296	2.309	2.314	2.318	2.328
40	0.974	1.872	2.049	2.206	2.254	2.294	2.309	2.322	2.327	2.331	2.341
41	0.979	1.882	2.060	2.218	2.266	2.306	2.322	2.335	2.340	2.344	2.354
42	0.983	1.891	2.069	2.228	2.276	2.317	2.332	2.345	2.351	2.355	2.365
43	0.989	1.902	2.082	2.241	2.290	2.331	2.347	2.359	2.365	2.369	2.379
44	0.993	1.908	2.088	2.248	2.297	2.338	2.354	2.367	2.372	2.376	2.386
45	0.997	1.917	2.098	2.258	2.307	2.348	2.364	2.377	2.383	2.387	2.397
46	1.000	1.922	2.103	2.264	2.313	2.354	2.370	2.383	2.388	2.393	2.403
47	1.004	1.929	2.111	2.273	2.322	2.364	2.380	2.393	2.398	2.402	2.412
48	1.006	1.933	2.116	2.278	2.327	2.369	2.384	2.398	2.403	2.407	2.417
49	1.012	1.945	2.128	2.291	2.341	2.382	2.398	2.412	2.417	2.421	2.431
50	1.016	1.953	2.137	2.301	2.351	2.392	2.409	2.422	2.427	2.431	2.442

(continued)

Table 12. (continued).

Size Limit on 2nd fish (in)	B. Projected Average Weight (lb)										
	Annual Limit										
	1	2	3	4	5	6	7	8	9	10	None
26	9.06	9.00	9.01	9.00	9.00	9.00	9.00	9.00	9.00	9.00	8.99
27	9.26	9.19	9.21	9.20	9.21	9.20	9.20	9.20	9.20	9.20	9.20
28	9.56	9.50	9.51	9.50	9.50	9.50	9.50	9.50	9.50	9.50	9.50
29	9.75	9.69	9.70	9.70	9.70	9.70	9.70	9.69	9.69	9.69	9.69
30	10.06	10.00	10.01	10.00	10.00	10.00	10.00	10.00	10.00	10.00	10.00
31	10.26	10.20	10.21	10.21	10.21	10.21	10.20	10.20	10.20	10.20	10.20
32	10.52	10.46	10.47	10.47	10.47	10.47	10.47	10.46	10.46	10.46	10.46
33	10.69	10.62	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.63	10.62
34	10.87	10.80	10.81	10.81	10.81	10.81	10.81	10.81	10.80	10.80	10.80
35	10.98	10.92	10.93	10.92	10.93	10.92	10.92	10.92	10.92	10.92	10.92
36	11.13	11.07	11.08	11.07	11.08	11.07	11.07	11.07	11.07	11.07	11.07
37	11.21	11.14	11.15	11.15	11.15	11.15	11.15	11.15	11.15	11.14	11.14
38	11.31	11.24	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25	11.25
39	11.40	11.33	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.34	11.33
40	11.46	11.40	11.41	11.40	11.41	11.40	11.40	11.40	11.40	11.40	11.40
41	11.53	11.46	11.47	11.46	11.47	11.46	11.46	11.46	11.46	11.46	11.46
42	11.58	11.51	11.52	11.52	11.52	11.52	11.52	11.51	11.51	11.51	11.51
43	11.65	11.58	11.59	11.59	11.59	11.59	11.59	11.58	11.58	11.58	11.58
44	11.69	11.62	11.63	11.62	11.63	11.62	11.62	11.62	11.62	11.62	11.62
45	11.74	11.67	11.68	11.68	11.68	11.67	11.67	11.67	11.67	11.67	11.67
46	11.77	11.70	11.71	11.70	11.71	11.70	11.70	11.70	11.70	11.70	11.70
47	11.82	11.75	11.76	11.75	11.75	11.75	11.75	11.75	11.75	11.75	11.74
48	11.85	11.77	11.78	11.78	11.78	11.77	11.77	11.77	11.77	11.77	11.77
49	11.92	11.84	11.85	11.85	11.85	11.84	11.84	11.84	11.84	11.84	11.84
50	11.97	11.89	11.90	11.90	11.90	11.89	11.89	11.89	11.89	11.89	11.89

Table 13. Number and percent of businesses and vessels that reported at least one day of multiple trips (targeting bottomfish or harvesting halibut), and number and percent of trips in excess of the one trip per day in Area 3A, 2007-2012.

Year	Number of businesses that reported more than one bottomfish trip per day	Total businesses that reported bottomfish effort	Percent of businesses that reported more than one bottomfish trip per day	Number of vessels that reported more than one bottomfish trip per day	Total number of vessels that reported bottomfish effort	Percent of vessels that reported more than one bottomfish trip per day	Number of bottomfish trips in excess of one trip per day (2nd, 3rd, or 4th trip)	Total number of bottomfish trips	Percent of bottomfish trips in excess of one trip per day
2007	189	483	39.1%	230	643	35.8%	1,198	25,491	4.7%
2008	164	459	35.7%	205	604	33.9%	1,077	23,314	4.6%
2009	143	412	34.7%	186	547	34.0%	757	18,981	4.0%
2010	109	397	27.5%	140	523	26.8%	807	19,607	4.1%
2011	120	337	35.6%	155	462	33.5%	976	19,029	5.1%
2012	111	293	37.9%	143	419	34.1%	1,164	18,452	6.3%

Table 14. Frequency of multiple trips per day by Area 3A businesses from 2007 through 2012. The frequency in each cell represents the number of businesses that reported making multiple trips per day on 1 to 5 days, 6 to 20 days, and more than 20 days per year. The total only includes businesses that reporting making multiple trips per day with bottomfish effort or halibut harvest.

Number of Days Made Multiple Trips	Number of Businesses					
	2007	2008	2009	2010	2011	2012
1 to 5 days	153	130	120	83	88	78
6 to 20 days	25	19	16	17	17	13
>20 days	11	15	7	9	15	21
Total	189	164	143	109	120	112
Percent > 20 days	5.8%	9.1%	4.9%	8.3%	12.5%	18.8%

Table 15. Area 3A charter harvest (number of halibut, excluding crew harvest) and percent of harvest on trips after the first trip of the day (bold) by subarea, 2007-2012. The percentages of harvest after the first trip of the day represent the maximum potential reduction in harvest that would accrue by limiting vessels to one trip per day.

Year	Trip	Subarea								Area 3A
		G3A	Yak	EPWS	WPWS	NG	LCI	CCI	Kod	
2007	First	150	2,969	9,206	3,602	53,645	89,120	61,913	19,111	239,716
	After First	0	59	78	72	464	9,610	7,795	341	18,419
	% After	0.0%	1.9%	0.8%	2.0%	0.9%	9.7%	11.2%	1.8%	<b>7.1%</b>
2008	First	493	3,310	7,003	4,510	49,818	76,229	57,233	17,570	216,166
	After First	0	103	29	57	690	6,936	7,044	252	15,111
	% After	0.0%	3.0%	0.4%	1.2%	1.4%	8.3%	11.0%	1.4%	<b>6.5%</b>
2009	First	280	2,981	7,023	4,190	39,604	62,873	48,620	13,650	179,221
	After First	0	61	43	30	561	6,488	4,084	261	11,528
	% After	0.0%	2.0%	0.6%	0.7%	1.4%	9.4%	7.7%	1.9%	<b>6.0%</b>
2010	First	127	3,332	7,210	4,811	45,006	66,536	48,514	13,365	188,901
	After First	15	25	9	32	110	9,450	4,560	53	14,254
	% After	10.6%	0.7%	0.1%	0.7%	0.2%	12.4%	8.6%	0.4%	<b>7.0%</b>
2011	First	945	2,706	5,913	3,926	45,295	68,581	46,797	14,351	188,514
	After First	27	45	12	80	340	9,991	6,107	86	16,688
	% After	2.8%	1.6%	0.2%	2.0%	0.7%	12.7%	11.5%	0.6%	<b>8.1%</b>
2012	First	1,295	3,388	4,906	4,739	44,877	65,236	42,300	13,318	180,059
	After First	5	34	47	27	217	11,145	7,981	78	19,534
	% After	0.4%	1.0%	0.9%	0.6%	0.5%	14.6%	15.9%	0.6%	<b>9.8%</b>

Table 16. Derivation of some example charter harvest targets (bold text) that the Council may wish to consider for recommended management measures for the Area 2C and Area 3A charter fisheries in 2014.

Area 2C Scenario			Area 3A Scenario		
Area	Commercial catch limit is up 1/3 from 2013 <sup>a</sup>	Blue Line FCEY	Blue Line FCEY	FCEY is 10.0-10.8 Mlb	Commercial catch limit is 1/2 down from 2013 <sup>a</sup>
combined FCEY	3.87	4.16	9.43	--	11.62
Commercial Alloc %	81.7%	81.7%	81.1%	--	82.5%
Commercial Alloc M lb	3.16	3.40	7.65	--	9.59
Commercial Catch Limit	3.09	3.32	7.32	--	9.17
Commercial Waste <sup>b</sup>	0.07	0.08	0.33	--	0.41
Charter Alloc %	18.3%	18.3%	18.9%	--	17.5%
<b>Charter Removal Targets</b>	<b>0.71</b>	<b>0.76</b>	<b>1.78</b>	<b>1.89</b>	<b>2.03</b>
Candidate measures	Maximum size limit with or without annual limit (Table 5).		Annual limit of one fish, no size limit (Table 10).	Annual limit of one fish, no size limit (Table 10).	Annual limit of two fish, no size limit (Table 10).
	Reverse slot limit with or without annual limit (Table 6).		Max size limit on second fish with annual limits from one to five fish (Table 12).	Max size limit on second fish with or without annual limits (Table 12).	Max size limit on second fish with or without annual limits (Table 12).

<sup>a</sup> - 2013 catch limits were 2.97 Mlb in Area 2C and 11.03 M lb in Area 3A (excluding waste)

<sup>b</sup> - Commercial waste was provided for the Blue Line, scaled for other scenarios based on the Blue Line ratio of waste to catch.

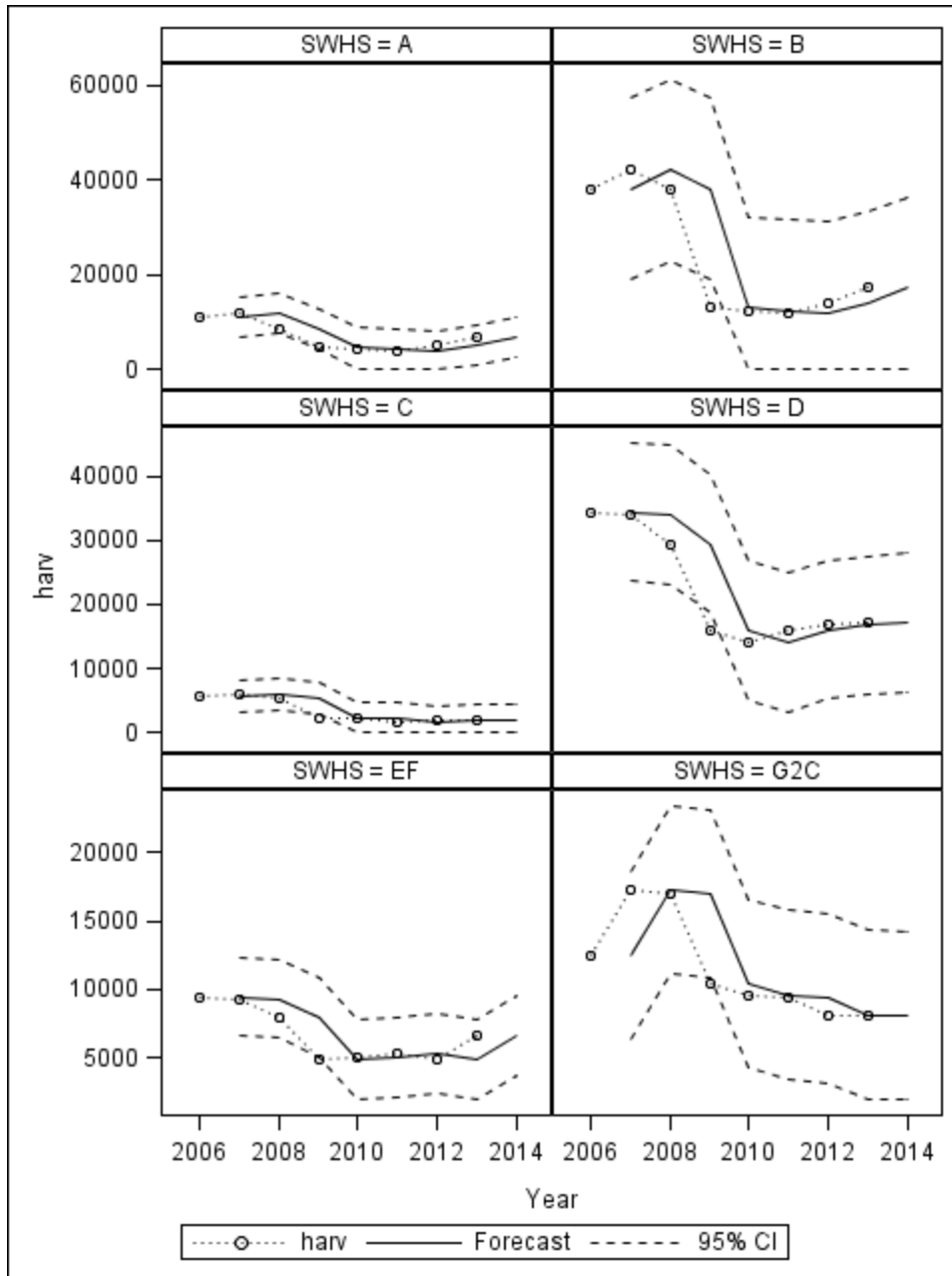


Figure 1. Area 2C halibut harvest (logbook data excluding crew) and ARIMA time series forecasts by subarea. The 2014 subarea forecasts were summed to provide the Area 2C status quo harvest forecast.

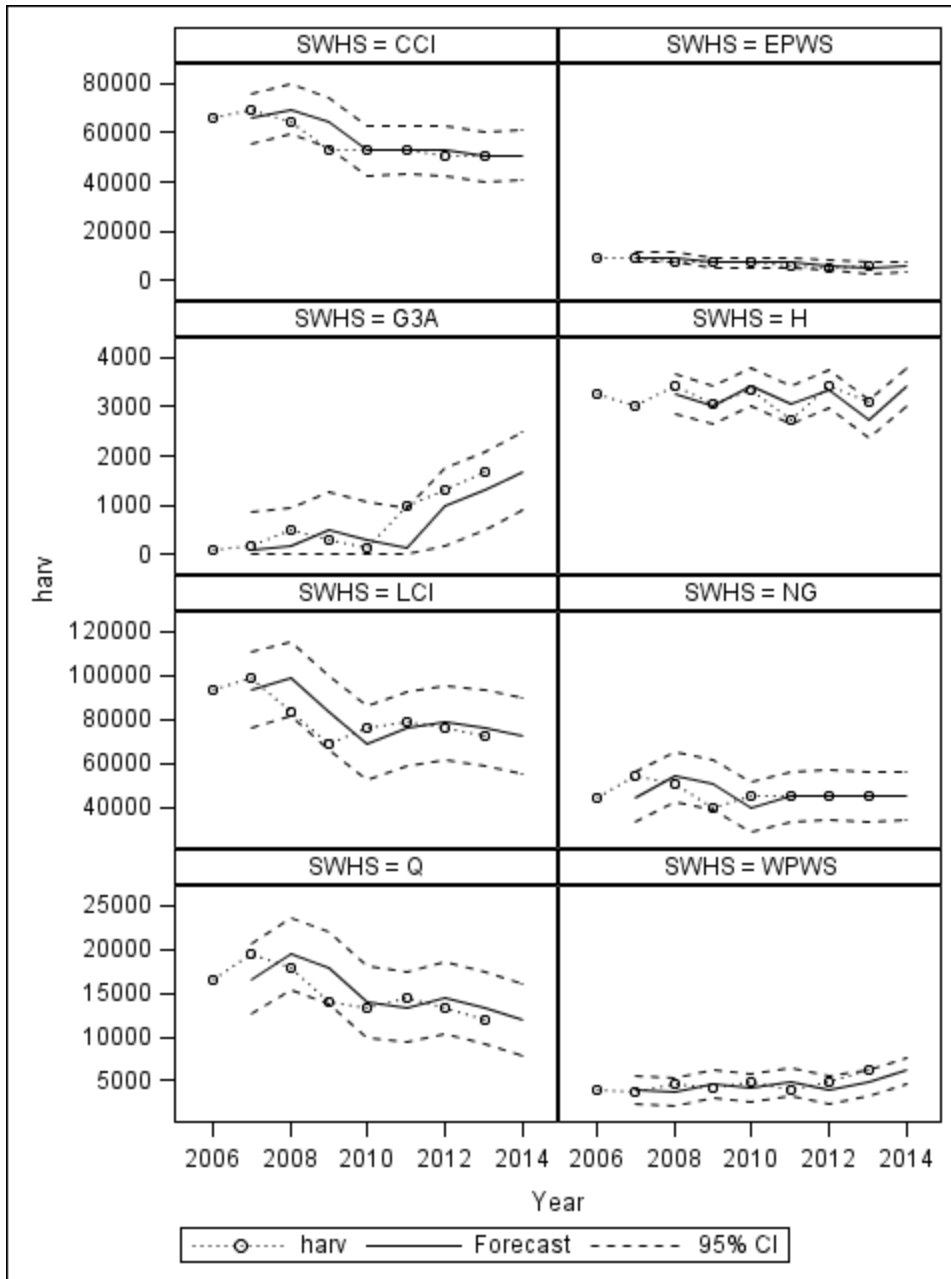


Figure 2. Area 3A halibut harvest (logbook data excluding crew) and ARIMA time series forecasts by subarea. The 2014 subarea forecasts were summed to provide the Area 3A status quo harvest forecast.

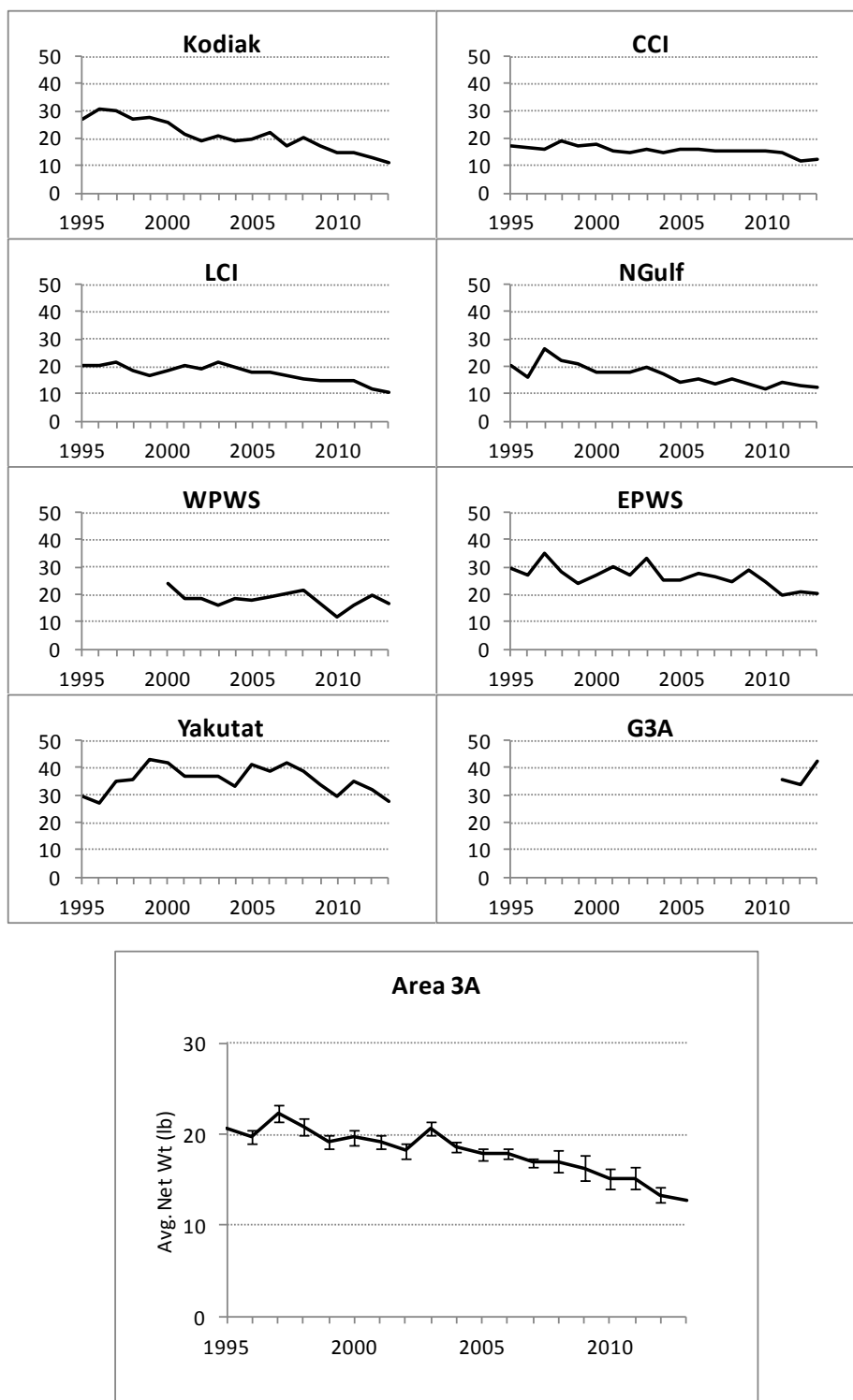


Figure 3. Trends in average weight of charter halibut harvest by subarea and in Area 3A overall, 1995-2013.

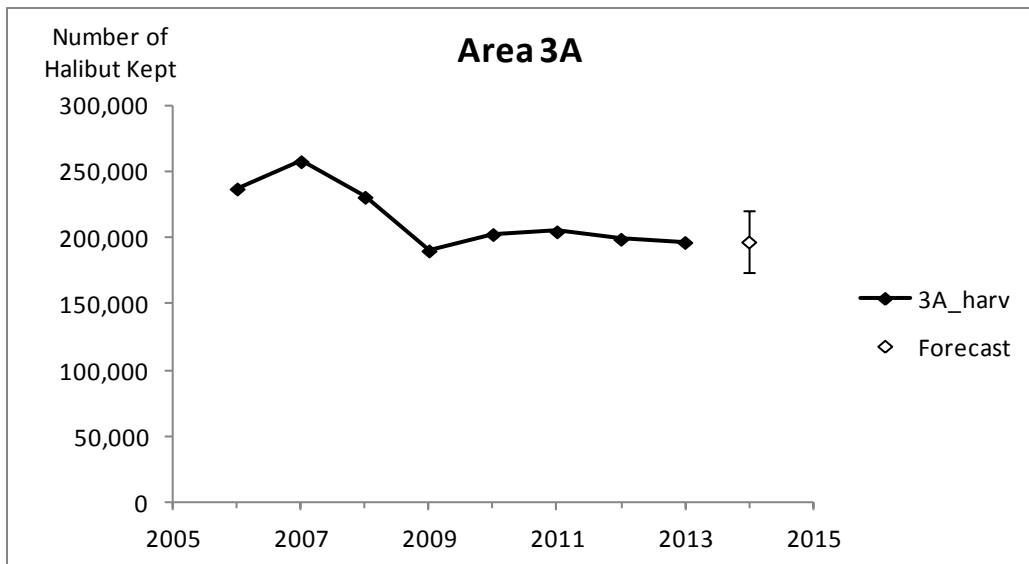
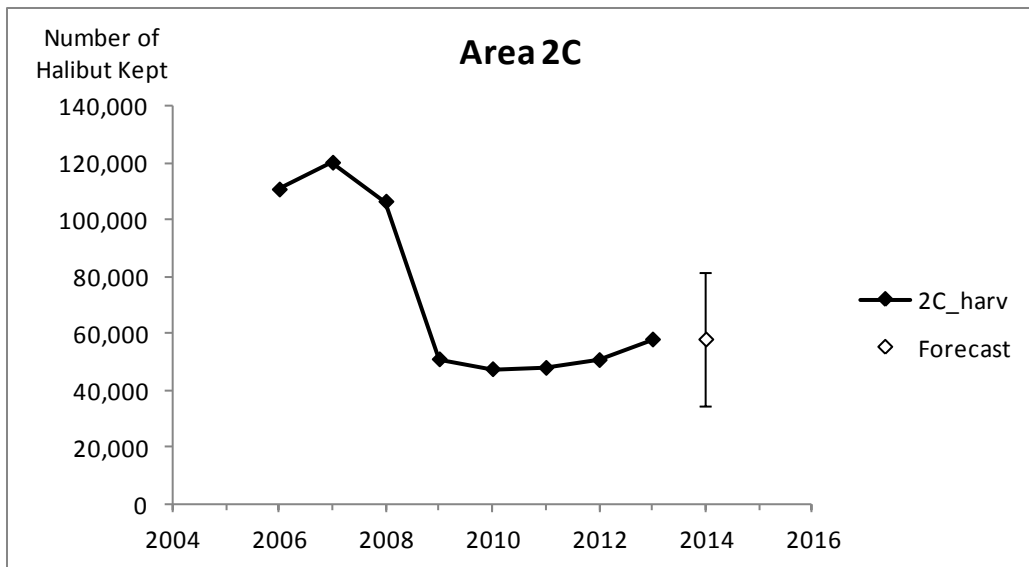


Figure 4. Time series forecasts of charter harvest (logbook data excluding crew), in numbers of halibut, for Area 2C and Area 3A for 2014, with 95% confidence interval.

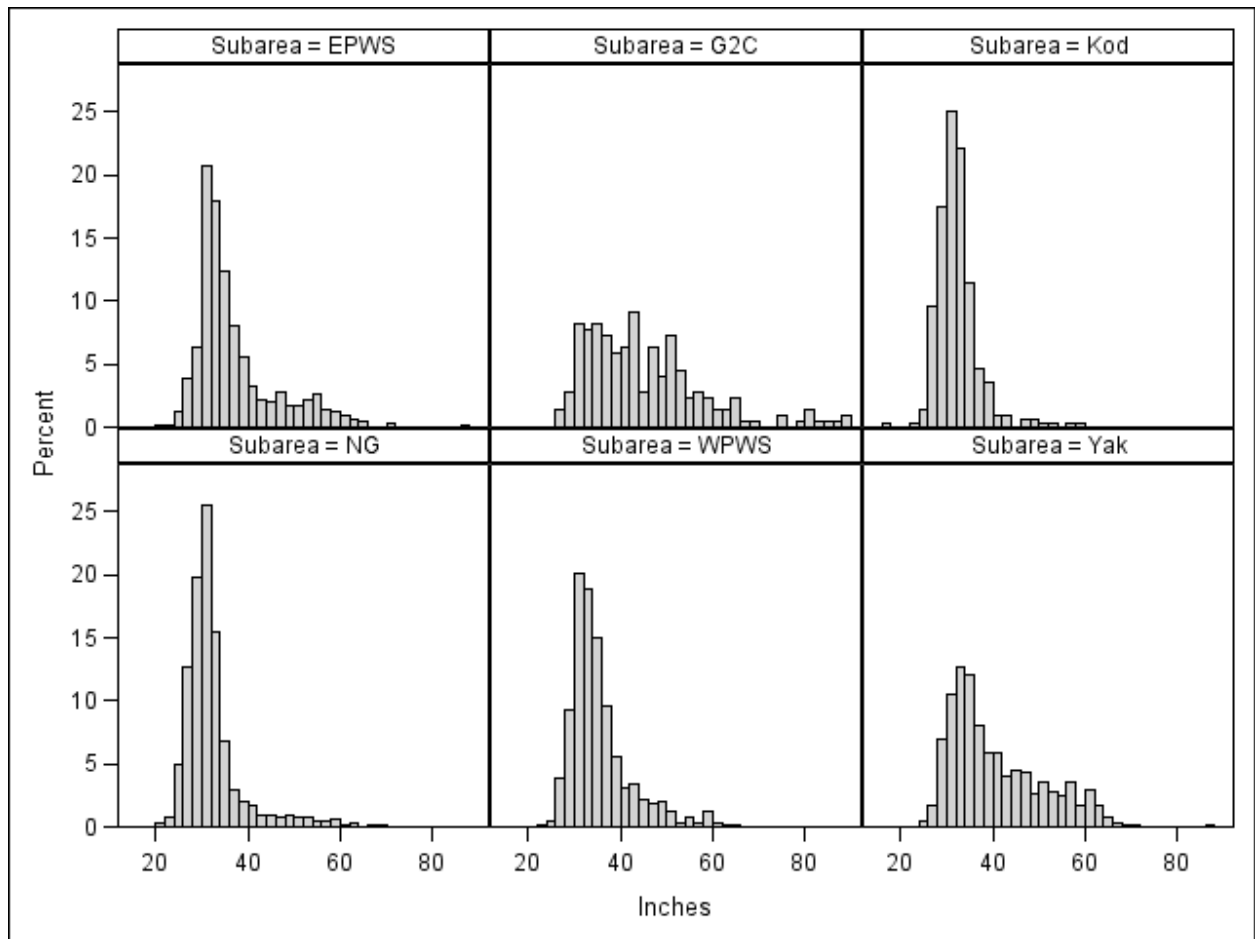


Figure 5. Relative length frequency of Area 3A charter halibut harvest by subarea in 2013.

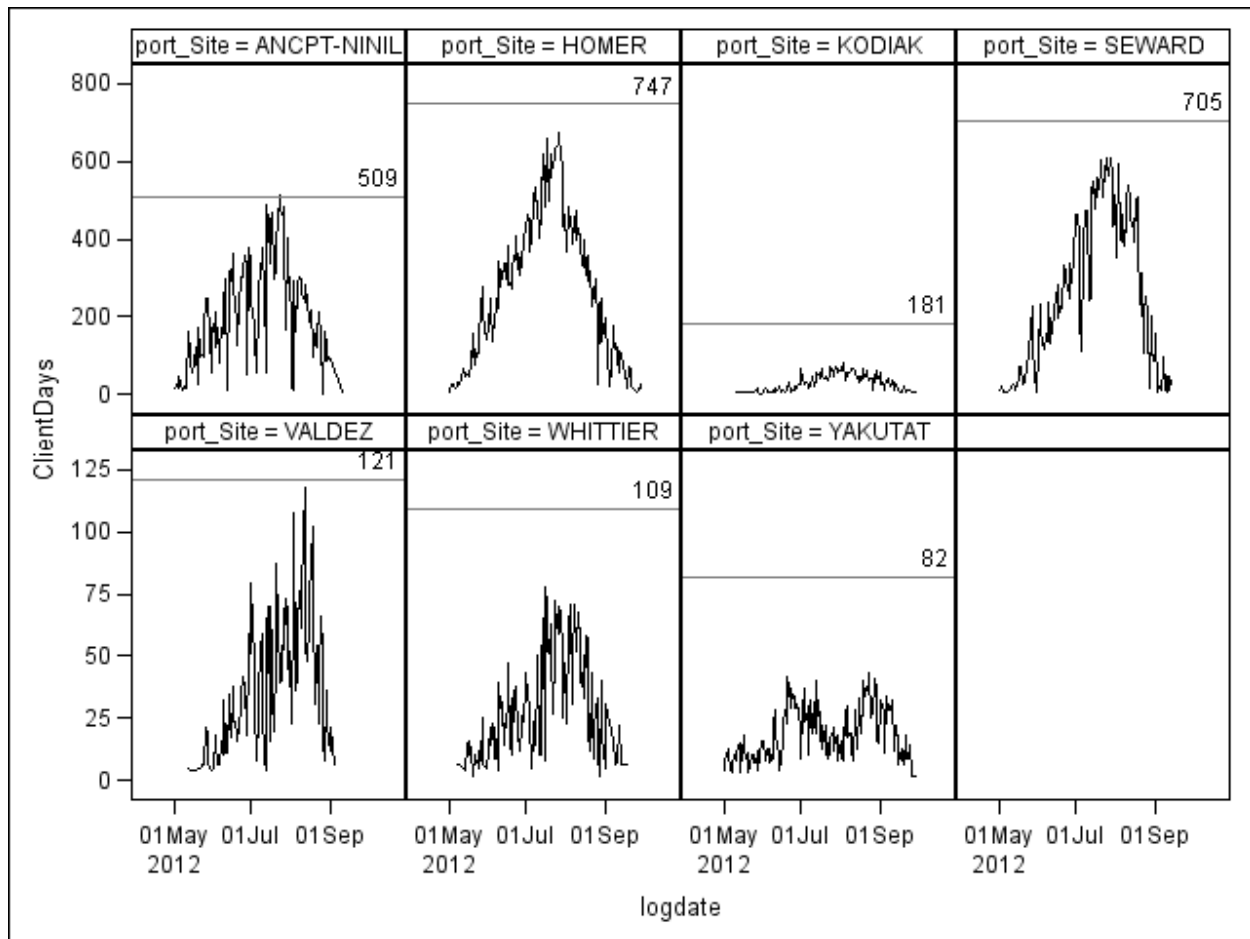


Figure 6. Daily charter client effort (client-days) relative to total angler endorsements at major ports in Area 3A, 2012. Reference lines and values indicate the total angler endorsements for the corresponding vessels.



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**GF 13-012

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**Agenda Date:** 12/9/2013

**Agenda Number:** C-2

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

Initial Review of Round Island Transit

**ESTIMATED TIME:**

8 hours (all Groundfish Issues)

**ACTION REQUIRED:**

Review Draft EA/RIR for Round Island transit analysis, choose Preferred Alternative

**BACKGROUND:**

This Draft EA/RIR analyzes the potential environmental and economic effects of a proposal to establish season transit areas through the Round Island and Cape Peirce walrus protection areas in northern Bristol Bay, Alaska. The proposed action would establish one or more transit areas through the walrus protection areas at Round Island and Cape Peirce in order to allow vessels with Federal Fisheries Permits (FFPs) to transit through the areas while tendering for State of Alaska managed herring and salmon fisheries in Togiak Bay, Cape Peirce and Cape Newenham, and Security Cove, or while transferring groundfish to floating processors or trampers in Togiak Bay or Hagemeister Strait. Before implementation of Component 10 to GOA FMP Amendment 83, vessels with FFPs were allowed to surrender their FFP for the tendering season in order to transit through the walrus protection area, with the expectation that they could reactivate their FFP when tendering was completed. Now those vessels are prohibited from reapplying for a FFP within a three year period, putting their FFP at risk or putting themselves at risk of violating regulations if they transit the walrus protection area. The purpose of this action is to maintain suitable protection for walrus on Round Island and Cape Peirce, to restore access to routes used by tendering vessels before implementation of GOA FMP Amendment 83, and to allow vessels delivering groundfish to the route north of Round Island to reduce the likelihood of disturbance to walrus on Hagemeister Island.

At this meeting, the Council will review the Draft EA/RIR and select one or more alternatives for review in the final EA/RIR/IRFA which was mailed to you on 11/4/2013. The Executive Summary is attached as **Item C-2(a)**.

## **Executive Summary**

This document analyzes the potential environmental and economic effects of a proposal to establish seasonal transit areas through the Round Island and Cape Pierce walrus protection areas in northern Bristol Bay, Alaska. The proposed action would establish one or more transit areas through the walrus protection areas at Round Island and Cape Peirce in order to allow vessels with Federal Fisheries Permits (FFPs) to transit through the areas while tendering for State of Alaska managed herring and salmon fisheries in Togiak Bay, Cape Peirce and Cape Newenham, and Security Cove. Previous Council action (Component 10 to GOA FMP Amendment 83) prevents vessels from surrendering their FFP and reapplying for an FFP within a three year period. As a result, vessels that had previously temporarily surrendered their FFP in order to tender herring or salmon through the walrus protection area were at risk of being out of compliance with federal regulations if they transit the walrus protection area during tendering, or risk losing their FFP if they chose to surrender their permit during tendering.

### **Purpose and Need**

Until implementation of GOA FMP Amendment 83, vessels with FFPs tendering herring or salmon in the Togiak Bay fishery were able to surrender their FFP during the tendering season and transit the walrus protection area around Round Island. Tendering vessels transited north of Round Island as they tendered product from fishing vessels in Togiak Bay, Kulukak Bay, and other bays in northern Bristol Bay to processing plants in Dillingham and other communities. Passage through federal waters north of Round Island is necessary because of shallow waters along the mainland that make it dangerous for vessels to pass through Stat waters north of the walrus protection area. Amendment 83 to the GOA FMP prevents vessels from surrendering their FFP and reactivating it within a three year period. As a result, vessels with FFPs face risk of fine for being out of compliance with existing regulations if they pass through the walrus protection area, or must surrender their FFP in order to tender herring or salmon for the northern Bristol Bay fisheries.

Passage to the south of the Round Island walrus protection area requires vessels to transit through Hagemeister Strait, and around Round Island, adding considerable distance and time to each transit, and potentially exposing vessels to adverse weather conditions. The same is true for vessels wishing to deliver yellowfin sole from the Northern Bristol Bay Trawl Area to floating processors in the Togiak Bay area. Passage through Hagemeister Strait also puts these vessels in close proximity to an emerging walrus haulout on the southern tip of Hagemeister Island where they may have increased likelihood of disturbing those walrus.

The purpose of this action is to maintain suitable protection for walruses on Round Island, to restore access to vessels with FFPs serving as tenders for the northern Bristol Bay herring and salmon fisheries to the routes used by tenders before implementation

of GOA FMP Amendment 83, and to allow vessels delivering yellowfin sole access to the route north of Round Island to reduce the likelihood of disturbance to walrus on Hagemeister Island. Any action would only affect vessels with FFPs, vessels without FFPs are not affected by the walrus protection area closures.

The Council adopted the following problem statement to originate this action in April 2013.

*The purpose of this action is to establish opportunities for federally-permitted vessels to transit the walrus protection area closures at Round Island and Cape Peirce. Currently, federally-permitted vessels that operate as tenders during the Togiak herring and salmon fisheries cannot transit through the Round Island Walrus protection area. This effectively precludes vessels with FFPs tendering the Togiak herring and salmon fisheries. Federally-permitted vessels that tender for the herring fishery at Cape Peirce and Security Cove travel through State waters to avoid the Exclusive Economic Zone (EEZ) closures, moving vessels closer to walrus haulouts in these areas. Salmon tender vessels may be similarly affected. Additionally, vessels fishing yellowfin sole in the Northern Bristol Bay Trawl Area, that deliver to processors or trampers in the roadsteads located in Hagemeister Strait or Togiak Bay, must travel south of the Round Island Walrus protection area, which may increase interactions with walrus at Hagemeister Island haulout and walrus moving from Round Island to their feeding grounds in Bristol Bay. Opportunities to transit these areas are necessary to alleviate the unintended consequences of an unrelated Council action and to maintain appropriate protection for walruses.*

## **Alternatives**

The Council adopted the following alternatives for analysis in December 2012. Alternatives 2 and 3 are not exclusive

**Alternative 1** is the No Action alternative, and would not establish any transit corridors through Walrus protection areas at Round Island or Cape Peirce. Any vessel with a FFP is prohibited from transiting through these areas.

**Alternative 2** would establish a transit area in the EEZ north of Round Island, open from April 1 – August 15. There are three options analyzed:

1. Establish a transit area north of a line from 58.80°N, 160.36°W to 58.55°N, 159.59°W, maintaining a minimum of 3 nm from Round Island.
2. Establish a transit area north of a line from 58.77°N, 160.18°W to 58.58°N, 159.58°W, maintaining a minimum of 4.5 nm from Round Island.
3. Establish a transit area north of a line from 58.28°N, 160.74°W to 58.61°N, 159.58°W, maintaining a minimum of 6 nm from Round Island.

**Alternative 3** would establish a transit area in the EEZ near Cape Peirce, open from April 1 – August 15. There is one option analyzed: establish a transit area east of a line from 58.50°N, 161.77°W to 58.35°N, 161.77°W.

### **Environmental Assessment**

None of the alternatives considered are expected to change the timing, duration, effort, or harvest levels in the herring, salmon, or groundfish fisheries in northern Bristol Bay.

Action is limited to transit through walrus protection areas by vessels with FFPs.

Therefore, no substantial changes are expected on groundfish or other fish species, habitat, ecosystem components, or seabirds. Potential impacts are limited to direct take (ship strike) or disturbance to marine mammals including Pacific walrus, Steller sea lions, bearded seals, ringed seals, spotted seals, and harbor seals. Levels of direct take via ship strike of marine mammals are very low. Because none of the alternatives would change the level of fishing or other vessel traffic in the area, the effects of the alternatives on direct take (ship strikes) of marine mammals are expected to be insignificant.

Disturbance to Pacific walrus and Steller sea lions hauled out on Round Island and Hagemeister Island is possible for all alternatives. Alternative 1 has incrementally less likelihood for disturbance of marine mammals hauled out on Round Island because vessels with FFPs would not be allowed to transit within 12 nm of the island. However, vessels circumnavigating the walrus protection area would transit close to an emerging walrus haulout on Hagemeister Island, potentially increasing disturbance to animals hauled out there.

Alternative 2 would allow vessels with FFPs to transit the Round Island walrus protection area from April 1 – August 15, with options to allow the closest point of approach at increasing distances from Round Island. Vessels have been recorded to disturb walrus on haulouts on Round Island, but no disturbance events have been observed for vessels passing more than 3 nm from the island (outside the State of Alaska no transit zone). Because none of the options would allow vessels within 3 nm of Round Island, the likelihood for disturbance to marine mammals hauled out on the island is very low, and any impacts to walrus or other marine mammals are expected to be insignificant.

Alternative 3 would allow vessels with FFPs to transit the Cape Peirce walrus protection area from April 1 – August 15, east of a line from 58.50°N, 161.77°W to 58.35°N, 161.77°W. This alternative could reduce the potential for disturbance to walrus hauled out at Cape Peirce and nearby haulouts compared to the status quo, as tenders currently transit to the fishing grounds using State waters less than 3 nm from shore. Moving vessels outside of the State waters could reduce the potential for disturbance to marine mammals hauled out on shore.

### **Management and Enforcement Considerations**

Implementation of the any alternative would require NMFS to monitor the activities of federally-permitted vessels to ensure that vessels comply with existing regulations.

Existing Vessel Monitoring Systems (VMS) are likely sufficient to monitor the groundfish fisheries. The VMS in Alaska is a relatively simple system that transmits a vessel's identification and location to the NOAA Office of Law Enforcement (OLE) at fixed 30-minute intervals. These data are analyzed daily, to identify anomalies such as vessels failing to send VMS signals, or vessels entering closed waters. Automated data checks identify instances of possible non-compliance and highlight them for manual analysis.

Increasing the VMS polling rate from twice-per-hour may be required to ensure compliance with transit provisions, depending on the size of the transit area through the walrus protection areas. Increasing the polling rate allows for more accurate vessel tracks, but increases the cost to the VMS participant. Those costs are estimated to be approximately \$25.88 per month for each additional poll (NPFMC 2012). Increasing to three polls per hour for the five month herring tendering season would add \$129.40 to the annual transmission costs resulting in an estimated total cost of \$944.40. Increasing to four polls per hour for the same period would add \$258.80, resulting in an estimated total cost of \$1,073.80.

Vessels without a FFP would not be constrained by the Walrus protection areas around Round Island and Cape Peirce. The lack of VMS on these vessels would, therefore, not have any impact on the enforcement of this action. The NOAA OLE has noted that there is an innate disparity between vessels with a FFP that are prohibited from transiting the walrus protection area, and those without a FFP that are allowed free access through the walrus protection area (B. Pristas, NOAA OLE, Pers. Comm.).

### **Regulatory Impact Review**

Under Alternative 1, the status quo, transit areas would not be established through either the Round Island or Cape Peirce Walrus protection area. Vessels with FFPs would be precluded from tendering for the Togiak herring or salmon fishery unless they could transit through State waters 0-3 nm from shore or through federal waters around the Walrus protection areas. Vessels with FFPs could continue to serve as tender vessels for the Cape Peirce, Cape Newenham, and Security Cove herring fisheries by transiting through State waters 0-3 nm from shore or around the Cape Peirce Walrus protection area. If vessels with FFPs were precluded from tendering, there may be costs for processing companies associated with a reduced pool of available tender vessels. Alternately, vessels with FFPs that served as tenders for either the herring or salmon fishery would be required to travel outside of the walrus protection areas. Additional costs associated with the longer transit around the protection areas would depend on the fuel consumption rate and additional time required for each vessel.

Amendment 80 vessels delivering yellowfin sole to domestic floating processors or foreign trampers would be prohibited from transiting the Walrus protection areas, and would instead have to circumnavigate the Protection Areas. Vessels transiting from the Norther Bristol Bay Trawl Area would continue to be required to transit south of Round Island and along the west coast of Hagemeister Island, through Hagemeister Strait. This would add 6-8 hours per trip (J. Gauvin, AKSC, Pers. Comm.) compared to transiting through the Walrus protection area. Those larger Amendment 80 vessels typically burn

105 – 145 gallons per hour (J. Anderson, AKSC, Pers. Comm.), and the cost of fuel in Dutch Harbor for the summer of 2013 was \$4.04/gallon (Aleutian Fuel Services, Dutch Harbor, 7/26/2013). That results in additional fuel costs of \$2,545 to \$4,686 per trip compared to transiting north of Round Island.

Under Alternative 2, a transit area would be established through the Round Island Walrus protection area from April 1 – August 15. This would allow vessels with FFPs tendering for the Togiak area herring and salmon fisheries, and Amendment 80 vessels delivering yellowfin sole to processors in Togiak Bay to transit through the Walrus protection area. Transiting through the Walrus protection area would save approximately 6-8 hours per trip compared to transiting south of Round Island and through Hagemeister Strait (J. Gauvin, AKSC, Pers. Comm.). Amendment 80 vessels typically burn 105 – 145 gallons per hour (J. Anderson, AKSC, Pers. Comm.), and the cost of fuel in Dutch Harbor for the summer of 2013 was approximately \$4.00/gallon (Aleutian Fuel Services, Dutch Harbor, North Pacific Fuel 7/26/2013). Transiting the Walrus protection area would result in fuel savings of \$2,520 to \$4,640 per trip compared to transiting south of Round Island and through Hagemeister Strait. Shortening the trip to processors would reduce the delivery time for those fish, and may reduce the likelihood of bruising, which reduces product quality (J. Anderson, AKSC, Pers. Comm.).

Options under Alternative 2 would establish a southern boundary of the transit area, at increasing distances from Round Island: 3 nm, 4.5 nm, and 6 nm. The boundaries farther from Round Island may incrementally reduce the potential for disturbance to walrus on Round Island, but are not likely to significantly affect the distances traveled as vessels with FFPs transit the protected area. Therefore, the differences in transit time or fuel costs are not likely to be significantly different between the options.

Under Alternative 3, a transit area would be established in the eastern portion of the Cape Peirce Walrus protection area from April 1 – August 15. This would allow vessels with FFPs to access the Cape Peirce, Cape Newenham, and Security Cove herring fisheries through federal waters. Currently vessels tendering those fisheries access the grounds through State waters, 0-3 nm from shore. Allowing vessels to access federal waters would move vessels farther from walrus haulouts at Cape Peirce, potentially reducing disturbance to those walrus. Distances traveled and transit times are not likely to be significantly different when traveling through federal vs. State waters.



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:GF 13-025**

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**Agenda Date:** 12/9/2013

**Agenda Number:** C-3

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

Chinook salmon PSC limit rollover for GOA non-pollock trawl catcher vessels

**ESTIMATED TIME:**

8 hours (all Groundfish Issues)

**ACTION REQUIRED:**

Take final action on measures to roll over unused Chinook salmon PSC from the Central GOA Rockfish Program catcher vessel sector to other non-pollock catcher vessel fisheries.

**BACKGROUND:**

This analysis considers a set of alternatives that could allow unused Chinook salmon prohibited species catch (PSC) to be rolled over from the Central Gulf of Alaska Rockfish Program's catcher vessel (CV) sector to support other CV fisheries that occur later in the year. If an action alternative is selected, it would be added to the Council's final recommendation for management measures to address Chinook salmon PSC in the Central and Western Gulf of Alaska (GOA) non-pollock trawl fisheries, as voted on at the June 2013 meeting. The 'no action' alternative would result in a final recommendation that is identical to the Council's preferred alternative for the related action. The Council designated a preliminary preferred alternative (PPA) at its October 2013 meeting.

This "trailing" analysis primarily considers whether or not incorporating a Chinook PSC rollover might reduce the efficacy of the "uncertainty pool" mechanism that the Council has already selected for its final recommendation. The document also examines the extent to which the Council's existing preferred alternative might relatively disadvantage some CV fisheries relative to others.

Selecting the 'no action' alternative would apportion 1,200 Chinook salmon PSC to the CV sector of the Central GOA Rockfish Program fishery, resulting in a 2,700 Chinook PSC annual hard cap for all other non-pollock CV activity. Both CV sectors would retain the ability to earn a "buffer" of additional PSC for the year following one in which that sector performed to a defined standard of Chinook avoidance.

Alternatives 2 and 3 would make some amount of the Rockfish Program CV sector's unused Chinook PSC available to the non-Rockfish Program CV sector on October 1. That amount would depend on how much of the Rockfish Program CV sector's 1,200 Chinook apportionment remains used on that date; these alternatives and their options differ in how much of the unused PSC may be rolled over. Under either alternative, all sectors would again remain eligible to earn a PSC buffer in the following year if their Chinook avoidance meets a certain standard.

Alternative 4 would not limit the amount of unused Chinook PSC that could be rolled over from the Rockfish Program CV sector to other CV fisheries, nor would it set a specific date on which the rollover would occur. If the rollover is to occur before the end of the Rockfish Program fishery (November 15), *all* Rockfish Program cooperatives must have "checked out" of the Program fishery. Selecting Alternative 4 would make the Rockfish Program CV sector ineligible to earn a PSC buffer by achieving a certain Chinook avoidance

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**Agenda Date:** 12/9/2013

**Agenda Number:** C-3

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standard in the preceding year.

Alternative 5 (the Council's PPA) would establish an initial date-certain Chinook PSC rollover on October 1. The rollover could occur even if some cooperatives are still active in the Rockfish Program fishery. The amount of PSC rolled over is determined by the Rockfish Program CV sector's unused PSC on October 1, less some amount that is held back to support Rockfish Program fishing between October 1 and November 15. There are two options for the amount of PSC held back from the initial rollover: 50 or 100 Chinook salmon. The PPA would make the Rockfish Program CV sector ineligible to earn a PSC buffer for the following year, so the Chinook PSC that is held back serves only to support the late-season Rockfish Program fishery. When that fishery closes on November 15, all remaining Chinook PSC allowances would then be rolled over to support other non-pollock CV activity.

The EA summarizes what was presented in June 2013, since none of the alternatives under consideration would allow an annual amount of Chinook salmon PSC that is greater than the levels previously analyzed. The document also includes an IRFA, which uses the PPA as the baseline for comparing significant alternatives to the proposed action.

A draft of the analysis was mailed to the Council in mid-November 2013. The Executive Summary is attached as **Item C-3(a)**.

## Executive Summary

This document analyzes proposed management measures that could be incorporated into the Council's preferred alternative (PA) for managing Chinook salmon prohibited species catch (PSC) in the Western and Central Gulf of Alaska (GOA), as selected during the June 2013 meeting. The Council will consider the alternatives analyzed in this document, and any measure selected would become part of the proposed rule to be developed from the existing PA.

### Purpose and Need

The Council noted that there may be a net benefit in allowing unused Chinook salmon PSC to rollover from the catcher vessel (CV) sector apportionment for the Rockfish Program to support non-Rockfish Program CV fishing activity in the fall. The Council noted that the number of Chinook salmon PSC apportioned to the Rockfish Program CV sector in the PA (1,200 fish) is greater than the sector's historical average PSC use, and that this amount had been proposed with some sort of within-year rollover in mind. An effectively large PSC allowance may alter the incentive for the Rockfish Program CV sector to minimize trawl catch of Chinook salmon. The alternatives analyzed in this document reflect the Council's desire to ensure that the additional flexibility provided by a within-year PSC rollover provision would not reduce the Chinook avoidance incentives designed into the uncertainty pool mechanism, which is part of the existing PA. The alternatives also aim to form a rollover provision in a manner that will not allow the portion of unused PSC that qualified the Rockfish Program CV sector for the following year's uncertainty pool to be taken later in the same year by the non-Rockfish Program CV sector.

### Description of the Alternatives

The following alternatives propose management measures that would apply exclusively to the catcher vessel sector in the directed non-pollock trawl fisheries in the Western and Central Gulf of Alaska.

Alternative 1: No action.

Alternative 2: The addition of the rollover provision as described in the EA/RIR to the Rockfish Program CV Chinook PSC cap and uncertainty pool.

Alternative 3: The addition of a provision allowing the rollover of all but 160 Chinook PSC and a Rockfish Program CV uncertainty pool.

[Staff note: Council clarified that such a rollover would occur on October 1]

Alternative 4: Roll over all Chinook PSC remaining in the Rockfish Program CV Chinook PSC cap when all Rockfish cooperatives have checked-out of the fishery but no later than November 15, and no uncertainty pool.

[Staff note: Council clarified that "no uncertainty pool" would only apply to the Rockfish Program CV sector]

Alternative 5: Roll over all Chinook PSC but 50 or 100 fish remaining in the Rockfish Program CV sector Chinook cap on October 1. Any salmon remaining when the Rockfish Program fishery closes will be released to the other CV non-pollock fisheries on November 15. No uncertainty buffer would apply to the Rockfish Program CV sector.

**(Council's preliminary preferred alternative)**

For the purpose of this follow-on action, the analyst considers the status quo to be the Council's preferred alternative for a GOA non-pollock trawl Chinook salmon PSC limit, described in the

motion approved by the Council in June 2013. Selecting the no action alternative would result in a final recommendation on Chinook salmon PSC limits consisting of the elements in the existing preferred alternative.

#### Alternative 1

The three sectors defined in the Council's PA are the GOA catcher/processors (CP), catcher vessels that are declared fishing under the Rockfish Program (RP CV), and catcher vessels that are not fishing under the Rockfish Program (non-RP CV). Based on historic average Chinook salmon PSC, the PA apportions the combined annual hard cap between the CP and CV sectors, and further subdivides the CV sector apportionment between RP trips and all other CV fishing activity. Of the 3,900 Chinook salmon PSC apportioned to the CV sector, 1,200 are set aside for trips by vessels fishing in the Rockfish CV sector. This apportionment to the RP CV sector is not further allocated among the specific cooperatives. Reaching the limit would close all CV fishing under the Rockfish Program for the year. Unused Chinook PSC would not become available to support non-RP CV fishing in any case. The difference between the Chinook taken in the RP CV sector and the limit of 1,200 fish would be, in essence, retired at the point when either (1) all RP CV cooperatives have checked-out of the Program for the year, or (2) after November 15, whichever comes first. All other CV activity in the non-pollock trawl fisheries, from January 20 through December 31, would be limited by a Chinook PSC hard cap of 2,700 fish.

The Council's preferred alternative includes a provision to incentivize taking fewer Chinook PSC than the amount set by the limit, while also providing sectors that perform well with a moderate amount of flexibility around their PSC apportionment in the case of a subsequent year with high PSC encounter. Termed the "uncertainty pool" in the PA, this mechanism allows any sector that records less than its proportional share of a 6,500 Chinook salmon total hard cap in one year to access up to its proportional share of 1,000 *additional* Chinook in the following year, if that sector surpasses its base apportioned PSC limit. This provision could be thought of as an insurance policy that must be earned in every year.

Table ES-1 shows the apportionment of the total Chinook PSC limit to each of the three sectors defined in the preferred alternative. A sector's performance in relation to the uncertainty pool threshold does not affect, nor is it affected by, the performance of other sectors. If a sector performs within its uncertainty pool threshold in a year (Year 1), and continues to do so in subsequent years (Year 2), the sector's effective maximum allowable amount of PSC will never exceed its base PSC limit plus its uncertainty pool buffer. A sector that earns an uncertainty buffer for Year 2 is held to the same performance standard (threshold) that it faced in Year 1 in order to maintain the benefit of the uncertainty buffer in the following year (Year 3). These limits guarantee that the incentive to avoid Chinook salmon does not decrease over time, even if performance has been good.

**Table ES-1 Chinook salmon PSC Limit apportionment, uncertainty pool performance thresholds and buffer sizes**

		Rockfish Program Catcher Vessels	Non-Rockfish Program Catcher Vessels	Catcher/Processors
<i>Apportionment Share</i>		<i>16%</i>	<i>36%</i>	<i>48%</i>
Base PSC Limit	<b>7,500</b>	1,200	2,700	3,600
Uncertainty Pool Threshold	<b>6,500</b>	1,040	2,340	3,120
Uncertainty Pool Buffer	<b>1,000</b>	160	360	480

**Alternative 2**

Alternative 2 would incorporate the CV aspect of the rollover provision, as described in the EA/RIR presented to the Council in June 2013, into the Council's PA. Chinook salmon PSC that was not utilized in the Rockfish Program CV sector – less a defined amount of PSC to be “held back” – would be rolled over to the non-RP CV sector on October 1. The amount of the rollover would be effectively determined by Chinook PSC usage in the RP CV sector up to that date. If Alternative 2 were selected, the Council would need to choose one of three potential amounts of the unused Rockfish Program CV Chinook salmon PSC to roll over for use in the fall non-Rockfish Program non-pollock CV trawl fisheries:

- Option 1: All but **104** of the remaining Rockfish Program CV Chinook salmon PSC;
- Option 2: All but **156** of the remaining Rockfish Program CV Chinook salmon PSC;
- Option 3: All but **208** of the remaining Rockfish Program CV Chinook salmon PSC.

Any Chinook salmon taken in the Rockfish Program CV sector between October 1 and November 15 would be debited from the amount of PSC that is not rolled into the non-Rockfish Program fall fisheries – i.e., the pool of between 104 and 208 Chinook salmon.

**Alternative 3**

Alternative 3 is functionally similar to Alternative 2 in that it would, on October 1, allow a portion of unused Chinook PSC from the Rockfish Program CV sector to be rolled over for use in the fall non-Rockfish Program CV fisheries. As above, selecting Alternative 3 would not alter the design of the uncertainty pool mechanism. Alternative 3 would allow the rollover of all but **160** of the remaining Chinook PSC apportioned to the Rockfish Program CV sector. As with Alternative 2, staff assumes that any Chinook PSC occurring in the Rockfish Program CV sector between October 1 and November 15 would be debited against the pool of 160 Chinook salmon that remains with the sector.

**Alternative 4**

Alternative 4 would allow all Chinook salmon PSC that was not utilized by the Rockfish Program CV sector to be rolled over for use by CVs that are not operating under the Rockfish Program. This rollover would take place once all RP CV cooperatives have been officially “checked out” of the Program by their respective cooperative manager, or on November 15 – whichever occurs first. Alternative 4 would also remove the Rockfish Program CV sector from the uncertainty pool mechanism. This is necessary because using *all* of the Chinook PSC rolled over from the RP CV sector to the fall non-Rockfish fishery would include catching the 160 Chinook salmon that the RP CV sector avoided in order to earn its share of the uncertainty buffer.

### Alternative 5

Alternative 5, the Council's preliminary preferred alternative (PPA), would create a date-certain October 1 rollover of unused Chinook salmon PSC – less some amount held back – from the RP CV sector to the other non-pollock CV fisheries. The alternative contains two options for the hold-back amount: **50** Chinook salmon (Option 1), or **100** Chinook salmon (Option 2). The PPA removes the RP CV sector from the uncertainty pool mechanism, obviating the need for Chinook PSC allowances to be held back to preserve salmon savings that might be utilized in the form of the following year's uncertainty buffer. The Chinook PSC that is held back on October 1 serves only to cover any Chinook encounter that occurs within the RP CV sector after the rollover date. Any PSC remaining in the RP CV's annual apportionment of 1,200 Chinook salmon would be rolled over upon the Rockfish Program's regulatory closure date (November 15).

### **Environmental Assessment**

The proposed action includes a no action alternative and three alternatives that would constitute a minor change to the Council's existing preferred alternative. None of the alternatives considered in this report would allow annual Chinook salmon PSC to exceed the levels that were examined in the EA that was presented in June 2013. By extension, the proposed action will have no effect on the human environment, as defined in NAO 216-6, beyond those examined in the existing EA (NPFMC 2013, Section 3).

As described in the EA that informed the Council's selection of a preferred alternative, the proposed action affects vessels – specifically catcher vessels, here – fishing in the federal non-pollock groundfish trawl fisheries in the Central and Western GOA, and may also affect vessels fishing in “parallel” Pacific cod fisheries in the adjacent waters of the State of Alaska. The referenced EA describes the groundfish species, Chinook salmon, marine mammal, seabird, habitat and ecosystem components of the GOA environment. For each component, the EA also describes the possible effect of a Chinook salmon PSC limit set at various levels. The analyzed cap levels range from 5,000 to 12,500 Chinook salmon PSC per year across all GOA non-pollock trawl fisheries, compared to the existing management regime of no Chinook salmon PSC cap. The range of annual PSC limits that the fishery could experience under the Council's PA includes the range of scenarios possible when applying the uncertainty pool buffer – that is, 7,500 or 8,500 Chinook PSC per year, but not more than an average of 7,500 over a set of consecutive years.

### **Regulatory Impact Review**

Any of the alternatives could directly affect the amount of Chinook salmon PSC that is available to the GOA non-pollock trawl CV fleet at a given point during the year. The analysis focuses on whether, and to what extent, the considered alternatives increase the likelihood of non-pollock trawl fisheries closing as a result of Chinook PSC limits being reached. The direct impact of any potential closure is roughly measured in terms of when the fishery might close, and how much groundfish is typically harvested by the sector after that point in the season. As before, analysis of potential closures is based on historical PSC data, which varies from year to year without a discernible trend.

Downstream effects, which are no less important, include potential changes in the amount of product delivered to shore-based plants at certain times in the year, changes to employment opportunities at fishery-supporting businesses in GOA port communities, and state and municipal tax revenues. These impacts are treated qualitatively, and have been presented in greater detail in the original RIR (NPFMC 2013, Section 4.7).

### Alternative 1

Over the course of the Rockfish (Pilot) Program, the RP CV sector has taken more than 1,040 Chinook salmon only once, in 2008. Aside from that high PSC year, the RP CV sector would be carrying 1,360 allowable Chinook PSC. Median Chinook salmon PSC for the sector was 795 per year, meaning that 405 Chinook PSC would go unused in any sector; the analysis notes that Chinook PSC levels varied widely from year to year, but were typically well below the base apportionment of 1,200.

Using the RP CV sector's highest recorded level of Chinook PSC (1,649 in 2008) to gauge the maximum potential impact, the fishery would have been closed at the end of May. In a characteristic year, the RP CV sector harvests roughly 5,700 mt of groundfish from June to mid-November, generating around \$10 million in gross first wholesale revenues, or around two-thirds of the average annual groundfish wholesale revenue generated in the sector. Years and months of especially high Chinook salmon PSC encounter did not correlate to greater harvest or revenue. As a result, the analysis concludes that fishing in a PSC-intensive manner is not necessarily beneficial to gross productivity, though it could reduce costs associated with avoiding salmon.

If the Council chooses the no action alternative, the non-RP CV sector would be limited to 2,700 Chinook salmon PSC for the entirety of its GOA non-pollock trawl activity. The non-RP CV sector has, on average, taken 2,234 Chinook salmon per year since 2007, with a median value of 1,944 per year. The sector's Chinook encounter is concentrated from March to May, in the arrowtooth flounder and rex sole fishery, and in September and October, during the Pacific cod B season and the beginning of the fall shallow water flatfish fishery; historical PSC use from June through August has been very low. If future outcomes resemble the non-RP CV sector's experience from 2007 to 2012, fishery closures may occur in years of above average Chinook PSC encounter. Two of six analyzed years would have experienced a closure, with the greatest observed forgone harvest impact being an October closure that precluded 59% of Pacific cod B season production. The potential impact of the Council's PA in a high-Chinook PSC year would be on the order of 5,500 mt of forgone groundfish harvest, with a wholesale value loss of around \$5.6 million.

Under the uncertainty pool mechanism, the non-RP CV sector could qualify for an additional 360 Chinook salmon PSC, which would not have kept the sector's fall fisheries open for the entirety of its highest PSC years. However, if the sector were approaching its base apportionment of 2,700 Chinook around the beginning of September, the additional PSC would likely have forestalled closure by four to six weeks at the beginning of the valuable Pacific cod season. The sector's typical weekly PSC during that time of the year is around 50 Chinook, and average weekly wholesale revenues generated from the sector's catch are relatively high – around \$1 million – when that season opens. If the sector made it through the Pacific cod B season on its base apportionment of PSC (2,700) but reached the limit in early or mid-October, the supplemental uncertainty buffer earned in the previous year would likely extend the fishing season by only two or three weeks, as average weekly PSC increases to around 150 Chinook salmon once shallow water flatfish activity predominates. The timing of GOA fall fisheries is difficult to predict; in recent years, the starting date for the fall Pacific cod season has been affected by voluntary cooperative decisions to delay the start of the pollock C season in order to reduce Chinook PSC in that hard-capped fishery.

With a hard cap of 2,700 Chinook salmon PSC and no potential rollover, the non-RP CV sector's ability to make deliveries in the fall could hinge upon its ability to limit PSC in April and

May. The sector would not likely face a fall closure if spring PSC conforms to the monthly average levels – combining to equal 850. Looking to the future, spring Chinook salmon PSC in the non-RP CV sector could increase relative to historically observed levels, due to forthcoming changes in trawl halibut PSC management. Upon the implementation of the proposed rule for GOA Amendment 95 (revised halibut PSC limits), available deep-water and shallow-water complex halibut PSC from the second season allocation may be combined and used in either complex from May 15 to June 30. This change is likely to increase the amount of halibut mortality available to flatfish trawlers in May and June, and result in some amount of Chinook salmon PSC counted against the non-RP CV hard cap that was not being taken during the analyzed historical period. Thirty-three of the 93 vessels that were active at some point since 2007 in the GOA non-pollock trawl fishery displayed no participation in the non-pollock fall fisheries, though 19 of those 33 vessels did fish for pollock after September. These vessels may have a low incentive to alter their fishing behavior or refrain from expanding their spring flatfish harvest in order to reserve available PSC for the end of the year.

### Alternative 2

By reincorporating the rollover provision, Alternative 2 introduces an element of strategic behavior into the business planning of the RP fleet and cooperatives. By and large, vessels participating in the RP CV fishery also participate in the fall non-pollock trawl fisheries. As such, these vessels have an interest in ensuring that sufficient Chinook PSC is available to target Pacific cod and flatfish in the post-September months.

Aside from the year of particularly high Chinook PSC in the RP CV sector (2008), the average rollover to the fall non-RP CV sector would have been between 314 and 418 Chinook PSC, depending on the selected option (roll over “all but” 104, 156, or 208 unused Chinook PSC). The maximum rollover in any year would have been 728 Chinook PSC, observed under Option 1. The minimum rollover for a year in which the RP CV sector stayed below its 1,200 Chinook cap would have been 27 Chinook PSC, observed under Option 3. The range of potential rollover amounts – as they would have occurred from 2007 to 2012 – assumes that “unused” PSC as of October 1 is counted in relation to the RP CV sector’s base apportionment of 1,200 Chinook.

Noting that the non-RP CV sector averages 891 Chinook PSC after October 1, it appears unlikely that the amount rolled over from the RP CV sector would, by itself, fully meet fall PSC demand in all years. Depending on pre-October Chinook encounter in the non-RP CV sector, and how much PSC remains from the sector’s own apportionment, the October 1 rollover could extend the Pacific cod B season and fall flatfish fisheries. If, after receiving the rollover, the non-RP CV sector initially targets Pacific cod, the fishery would likely stay open for at least a month. If the non-RP CV sector uses the rollover to target flatfish, or a mix of flatfish and Pacific cod, the fishery would likely be extended by around one to three weeks.

If Chinook salmon PSC in the RP and non-RP CV sectors is low, the RP sector will prosecute the Program fishery in much the same way as it has done historically – avoiding Chinook and halibut PSC to the extent practicable, while focusing on fully harvesting TACs for the primary and secondary managed species allocated to the Program. If Chinook PSC in the RP sector is low or average, and PSC in the non-RP sector is high, the RP CV sector would likely continue prosecuting the Program fishery as it has done in the past, with moderate confidence that the rolled over amount of Chinook PSC – on the order of 250 to 550 Chinook salmon – should be sufficient to see the fall non-RP fishery through the valuable Pacific cod B season. Finally, if Chinook PSC is high in both the RP and the spring/summer non-RP fishery, the RP CV sector will face a business decision at the inter-cooperative level of weighing RP harvest against some marginal amount of Pacific cod and flatfish harvest.

A subset of the CV fleet does not participate in the fall non-pollock fisheries; these are overwhelmingly non-RP vessels. It might be the case that these vessels will fish in a manner that maximizes spring and summer flatfish harvest at the cost of additional Chinook PSC that is debited against the non-RP CV apportionment. If this behavior does emerge, the RP CV sector might feel a burden to “provide” a rollover to support fall fishing. That feeling could re-order some of the priorities in Rockfish co-op management. A rollover creates at least some possibility of relief for vessels that depend on fall fishing if a race for PSC does emerge.

Analysis of the action alternatives also considers whether reincorporating a rollover provision will create accounting problems in administering the uncertainty pool element of the program. If the RP CV sector carries over 160 Chinook into Year 2, and then uses that extra allowance in a high-PSC year, then those 160 fish must have been truly “saved” in Year 1. If there is a possibility that the non-RP CV fishery will use *all* of the Chinook PSC available to it, then the integrity of the RP CV sector’s uncertainty buffer is best maintained by selecting a rollover option that holds back at least 160 Chinook PSC. This would be accomplished under Option 3 to Alternative 2 (roll over “all but 208” unused Chinook PSC).

The Council could clarify that the rollover should be calculated in relation to an RP CV annual allowance of 1,360 during years in which the sector is carrying an uncertainty buffer from the preceding year. Doing so would increase the potential size of the rollover by 160, but would not change the fact that less than 1,040 of the Chinook PSC allowances that began the year with the RP CV sector must be taken in order for that sector to receive an uncertainty buffer in the following year.

### Alternative 3

The Council chose to consider holding back precisely 160 Chinook salmon in the RP CV sector because that is the amount of Chinook in the sector’s uncertainty buffer. Keeping those 160 Chinook allowances within the sector prevents a scenario where the PSC that is marked for possible use in case of high-PSC during the following year is, instead, caught by the non-RP CV sector in the fall. As with Alternative 2, the Council could clarify that the rollover amount should be calculated in relation to a starting RP CV allowance of 1,360 Chinook PSC, when applicable; however, the avoidance threshold for earning an uncertainty buffer in the following year would remain at 1,040 of the RP CV’s allowable Chinook.

Alternative 3 and Option 2 to Alternative 2 differ only in that Alternative 3 requires four additional Chinook salmon PSC to remain with the RP CV sector at the time of the October 1 rollover. As such, the potential impacts on fleet behavior and Chinook avoidance incentives are much the same as those described in the previous section. In short, most RP CVs participate in the non-Program fall fisheries, so they have an incentive to preserve a viable rollover to support that activity. On the other hand, a significant number of non-RP CVs do not participate in the fall at all, and therefore have little cause not to fish up to their sector’s base apportionment of 2,700 Chinook by the end of the spring flatfish season. Those vessels have equally little incentive to limit Chinook PSC to the non-RP CV sector’s uncertainty pool threshold (2,340), since the benefits of any Year 2 uncertainty buffer are most valued in the fall. In broad terms, the responsibility for keeping the post-September fisheries open could fall on the RP CVs, which forces the cooperatives to make a harvest-for-harvest trade-off decision.

### Alternative 4

There would be no “hold back” requirement under Alternative 4, because with no Year 2 uncertainty buffer to protect against potential double-counting, there is no reason to strand

unused Chinook PSC in the RP CV sector. Historical Chinook PSC levels in the RP CV sector (an average of 843, median of 795) suggest that a rollover is likely to occur in most years.

Managing Chinook salmon with hard caps carries an inherent perverse incentive to utilize PSC up to the limit. The uncertainty pool mechanism was, in part, included in the PA to lower the level of Chinook PSC up to which a sector would be indifferent. The analysis suggests that the RP CV sector is likely to actively avoid Chinook PSC and provide a rollover, since on average 87% of the CVs that are active in the Rockfish Program also participate in the non-RP fall fisheries; those that do not fish in the fall still have an interest in maintaining positive business relationships with their cooperative partners.

The cooperatives' greatest challenge under Alternative 4 will be when to execute the rollover. The timing of any coordinated check-out by the RP CV cooperatives would be determined by three factors: (1) the amount of allocated RP harvest quota remaining at a given time; (2) the amount of Chinook PSC remaining in the non-RP CV sector's apportionment, which is largely determined by the amount of Chinook salmon taken in the April flatfish fishery; and (3) the anticipated start date for the Pacific cod B season, or the related start date for the pollock C season.

Given the fact that *all* RP cooperatives must check out in order to roll over Chinook PSC, it is possible that one cooperative could hold up the rollover in order to finish harvesting its Program quota. If this issue were to arise, it would likely force an inter-cooperative decision in September, when both pollock and Pacific cod fisheries could potentially be open. If the need for a rollover looks imminent, cooperatives are more likely to shift their Program harvest to earlier in the year, as opposed to leaving it unharvested. Shifting this harvest to earlier in the summer could impact processor operations, where predictability and distribution of product delivery over time are not only among the objectives of the Rockfish Program, but also important to employment patterns, product value and profitability. The PSC impact of moving up RP harvest to accommodate an earlier rollover are not clear; Chinook PSC rates in the Program tend to be lower in July and August than in September, but racing to harvest rockfish quota quickly could carry a marginal trade-off in efforts made to avoid Chinook salmon.

In a characteristic year, the non-RP CV sector uses 930 Chinook PSC by the end of April, and 1,141 by the end of August. Neither one of those benchmark levels would raise concern in the RP CV sector about the need to terminate the Program fishery early in order to support the opening of the Pacific cod B season. However, spring and late-summer PSC totals have ranged up to around 2,500 Chinook in certain years. If the RP CV sector experiences negative effects from shifting or curtailing its harvest in order to fund PSC demand in the fall fisheries, it is likely because the non-RP CV sector recorded high PSC rates in the spring. If those high PSC rates were the result of either increased effort or revenue-maximizing PSC-intensive practices, then one might conclude that the non-RP participants who do not fish in the fall expropriated rents from the rest of the CV fleet.

#### Alternative 5 (preliminary preferred alternative)

The PPA makes the initial PSC rollover date-certain on October 1, at time that can be crucial to the prosecution of the valuable Pacific cod B season during a year in which the non-RP CV sector records high spring Chinook PSC levels. While the RP cooperatives would not have the ability to dictate a rollover on the September 1 start of the Pacific cod season, a date-certain rollover alleviates pressure on RP cooperatives to complete fishing early or to leave rockfish quota unharvested if fall fisheries require PSC allowances in order to open. Establishing a

consistent rollover date also reduces business planning uncertainty as the need for additional Chinook PSC allowances in the non-RP sector becomes apparent.

Stakeholders who participate in both the RP and non-RP CV sectors indicated to the Council that the ability to utilize additional Chinook PSC allowances in the fall is more beneficial to their operations than is the opportunity to increase their maximum potential RP Chinook PSC allowance from 1,200 to 1,360. Chinook PSC encounter in the RP sector has rarely approached either of those levels. In contrast, Chinook PSC in the non-RP CV sector has reached potentially constraining levels in the past, is highly variable, and could increase due to forthcoming changes to halibut PSC regulations that might facilitate increased spring flatfish effort. This analysis supports the notion brought forward during public testimony that alternatives removing the RP CV sector from the uncertainty pool and increasing the potential size of the Chinook PSC rollover provide a likely benefit to the fleet at a low expected cost.

By removing the RP CV sector from the uncertainty pool mechanism, the PPA reduces the need to hold back Chinook PSC from the rollover. With no uncertainty buffer to ensure for the following year, the amount of PSC held back can be selected primarily on the basis of how much Chinook salmon encounter the RP CV sector might expect between October 1 and November 15. The hold back options in the PPA – 50 or 100 Chinook PSC – are smaller than the 160 Chinook minimum savings target under the alternatives that keep the RP CV sector in the uncertainty pool.

Based on the first six years of the RP CV fishery, either 50 or 100 Chinook salmon PSC would have been sufficient to support the sector's activity from October 1 through the end of the season. However, PSC trends could change in the future, resulting in either higher or lower post-rollover PSC in the RP CV sector. As co-ops prioritize active PSC rate management, more voluntary standdowns in May could shift effort to later in the year; seasonal PSC rates could vary due to environmental or other unobservable factors; or TAC levels for allocated RP species could increase or decrease relative to present levels. Even considering the low historical PSC rates during this calendar period, a post-rollover PSC limit of 50 or 100 Chinook salmon provides a narrow range for precise inseason management of the RP fishery. Knowing that NMFS might have to close the fishery to prevent a PSC overage could cause RP CV participants to take a risk-averse strategy and fish as much as possible prior to October 1. That response would, in turn, further decrease the expected level of Chinook PSC taken after the rollover. While post-rollover PSC levels in the RP CV sector are not expected to be large, either of the two hold-back options present NMFS inseason management with a challenging task during exceptional years. Given this fact, and recognizing that confidence in seasonal Chinook PSC forecasts is limited, the Agency has indicated a preference for the larger hold-back option of 100 Chinook salmon.

Holding back 100 Chinook PSC for the RP CV sector upon the initial rollover might benefit the CV fleet as a whole. First, based on the ample size of most historically simulated rollovers, rolling over an additional 50 Chinook does not improve the expected outcome for the non-RP CV sector by a large margin. On October 1, the amount remaining in the sector's annual base apportionment (2,700 Chinook) has been observed at over 2,000, and less than 200. The median October 1 PSC remainder was 1,570, or 1,930 if the sector had begun the year with a 360 Chinook uncertainty buffer. The rollover is most critical in years when the non-RP sector's October 1 PSC remainder is low, so those instances should be the focus of the choice between hold-back options under the PPA. In these cases, even the low end of the historically observed range of rollovers (150 Chinook) would be a substantial benefit. In the rare case when the non-RP sector has used its entire PSC allowance by October 1, the low end of the historical

rollovers would still facilitate a significant portion of the Pacific cod B season. Though improbable, a partial loss of the cod season represents the worst of the foreseeable scenarios in a high PSC year. That outcome would not be significantly improved by 50 additional Chinook PSC, and it is not clearly worse than the combination, in every year, of a rush to finish the RP season early and the extra challenge of managing the RP fishery to a 50 Chinook PSC seasonal limit under Option 1. Second, selecting Option 2 would comport with the Agency's preference for a marginally more manageable RP CV sector between October 1 and November 15. While it is small in terms of active vessels, managing that fishery with 50 Chinook PSC could have the real effect of closing the sector after only one small Chinook encounter; even if some of the 50 Chinook allowance remains, NMFS might have to close the fishery based on projected PSC rates and the number of vessels active. Option 2 might also mitigate a further time shift in RP effort, where late-season vessels might rush to complete their RP harvest before October 1.

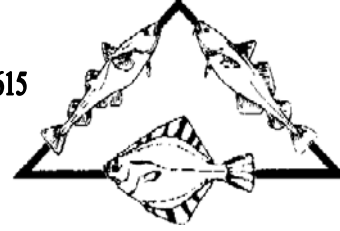
The PPA allows any of the held-back Chinook PSC that is not used in the post-rollover RP CV sector to be used in the other fall fisheries after November 15. Chinook PSC in the non-RP CV sector is typically low after November 15. The CV fleet's Chinook PSC during that time has averaged around 40 fish, with one high-PSC year of 100, and two years where no salmon were taken after mid-November. Judging from the historical period, the sector might expect to have around 500 to 800 PSC remaining in its apportionment in mid-November. This portion of the non-pollock CV fishery, which has accounted for between 0.4% and 2.3% of annual first wholesale value from the fishery, would likely be sustained by the sector's remaining PSC apportionment and the expected November rollover in all but the most unusual years.

# Groundfish Data Bank

**Alaska**

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Julie Bonney, Executive Director jbonney@gci.net  
Katy McGauley, Fisheries Biologist agdb@gci.net



North Pacific Fishery Management Council  
605 W. 4<sup>th</sup>, Suite 306  
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Fax (907) 271-2817  
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December 2, 2013

Re: Agenda Item C-3 – Final action Chinook Salmon PSC limit rollover for GOA non-pollock trawl catcher vessels

Dear Chairman Olson and members of the Council:

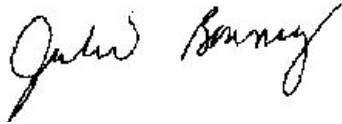
Alaska Groundfish Data Bank (AGDB) is a member organization that includes the majority of both the shorebased processors located in Kodiak and the trawl catcher vessels based in Kodiak. AGDB is also the inter-cooperative manager and the co-op manager for all of the seven shorebased rockfish cooperatives. The cooperatives and our members appreciate the Council's willingness to address the need to allow rollovers of Chinook salmon PSC from the Rockfish Program CV sector to the other CV non-pollock fisheries to support both fisheries in the fall time period. Allowing rollovers between the two sectors will improve incentives for Chinook salmon avoidance and still maintain the Council's goal of maintaining an overall Chinook cap of 7,500 for the GOA trawl non-pollock fisheries.

The members of AGDB support Alternative 5, the Council's preliminary preferred alternative as the preferred alternative, but request that the amount of Chinook PSC remaining in the Rockfish program be revised to 150 fish. Thus the preferred alternative would state: *"Roll over all Chinook PSC but 150 fish remaining in the Rockfish Program CV sector Chinook cap on October 1. Any salmon remaining when the Rockfish fishery closes will be released to the other CV non-pollock fishery on November 15. No uncertainty buffer would apply to the Rockfish Program CV sector."*

The CV cooperatives are requesting an increase to the range of 50 to 100 fish remaining within the rockfish program to the requested 150 fish. The cooperatives want to preserve fishing opportunities after October 1<sup>st</sup> for both the CGOA CV rockfish program and the CV non-pollock non-rockfish fisheries. Because of the Agency concern of managing a small PSC cap and the expected increasing quotas for both Pacific Ocean Perch and Northern Rockfish, the 150 fish amount seems to be the appropriate number. Choosing the 150 fish level is well within the analysis which examines leaving behind a range of zero to 208 fish across the five alternatives considered.

Thanks for considering our comment.

Sincerely,

A handwritten signature in black ink, appearing to read "Julie Bonney". The signature is fluid and cursive, with the first name "Julie" and last name "Bonney" clearly distinguishable.

Julie Bonney  
Executive Director  
Alaska Groundfish Data Bank

Paul Olson, Attorney-at-Law  
606 Merrell St.  
Sitka, AK 99835  
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December 2, 2013

Eric Olson, Chairman  
North Pacific Fishery Management Council  
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Re: Agenda Item C-3 Addendum/Supplemental Analysis for Chinook PSC Limits for non-pollock Groundfish Trawl Fisheries

Dear Chairman Olson:

The Boat Company (“TBC”) thanks the North Pacific Fishery Management Council (Council) for its efforts to establish Chinook PSC limits for the Gulf of Alaska (GOA) non-pollock trawl fisheries and submits the following comments regarding alternatives presented in a supplemental analysis that would roll over unused chinook PSC from the Rockfish Program (RP) to support non-RP catcher vessel (CV) activity in the fall. TBC is a tax exempt, charitable, education foundation with a long history of operating in southeast Alaska and conducts multi-day conservation and wilderness tours in southeast Alaska aboard its two larger vessels, the 145’ M/V Liseron and the 157’ M/V Mist Cove. Clients participate in various activities that include environmental education, kayaking, hiking, beachcombing and sport fishing. Clients who enjoy sport fishing activities particularly enjoy the opportunity to catch Chinook salmon - the most important salmon species in terms of recreational value.

TBC requests that the Council adopt Alternative 1 as the measure that best meets the Council’s responsibility to minimize bycatch and addresses the Council’s concern about Chinook bycatch in the GOA non-pollock trawl fisheries. TBC also requests that the Council consider management differences between the RP and non-RP fisheries in its decision, as well as the potential vulnerability of chinook stocks in non-RP fall fisheries with high PSC rates.

Alternative 1 would maintain the Council’s preferred alternative from June 2013 which sets an annual hard cap of 7,500 Chinook divided by sector, including 1,200 for the RP CV sector and 2,700 fish for the non-RP CV sector.<sup>1</sup> Unused Chinook would be “retired” by November 15 or when the cooperatives check out of the program. *Id.* at 18. The alternative establishes an “uncertainty pool” for each sector that allows for an increased limit for the next year if the sector meets a performance standard by leaving roughly 13% of its limit in the water. *Id.* at 19.

Alternatives 2, 3 and 4 would modify the June 2013 preferred alternative by rolling over Chinook PSC from the RP to other non-pollock trawl fisheries in the fall. *Id.* at 20. Alternatives 2 and 3 would rollover all of the unused RP PSC but reserve between 104 and 208 fish for the RP between October 1 and November 15. *Id.* at 20-21. Alternative 4 would establish an unlimited CV rollover and remove the Rockfish CV program from the uncertainty

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<sup>1</sup> NPFMC. 2013. Addendum to the Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis for Chinook Salmon Prohibited Species Catch in the Gulf of Alaska non-Pollock Trawl Fisheries at 17-18. November 13, 2013. (Addendum).

pool. *Id.* at 22. The preferred alternative would establish an October 1 rollover of most of the unused RP PSC to the non-RP fisheries and remove the RP from the uncertainty pool. *Id.*

TBC requests that the Council evaluate the alternatives with a goal of selecting the alternative that is most likely to result in an actual PSC reduction. In previous comments, TBC has noted that previous efforts to establish Chinook PSC limits have failed to actually reduce bycatch below estimated historical averages and instead set higher limits to preserve flexibility for the groundfish fisheries.<sup>2</sup> The EA cited flexibility as a justification for increasing the range of limits under consideration above the estimated ten-year average of 6,176 Chinook in order to encompass maximum historical bycatch levels.<sup>3</sup> The Council's June 2013 preferred alternative set apportionments at levels meant, in part, to accommodate PSC usage in the highest PSC years. Addendum at 48. The 1,200 fish RP CV sector allocation is greater than the sector's recent historical average of 843 Chinook per year. *Id.* at 33, Table 4-5. The Addendum explains that the June 2013 preferred alternative apportioned the RP CV sector "excess" PSC relative to its annual average and describes the RP CV allowance as "over-funded." *Id.* at 48.

The Addendum describes the potential for unused PSC from the over-funded allocation "as a salmon saving over and above the Council's intent" and adds that "there is no reason to strand unused Chinook PSC in the RP CV sector, unless it is the Council's intention to build in [a] possible PSC retirement." *Id.* at 16, 48. TBC submits that the Addendum's approach fails to reflect the conservation purposes of National Standard 9; leaving unused PSC in the water is not "stranding" Chinook, but instead is meeting the mandate to minimize bycatch. The rollover alternatives increase the risk that annual chinook PSC would closely approach the limit and exceed the estimated historical annual average, thus failing to minimize bycatch. Based on the RP sector's PSC patterns, the October 1 rollover is likely to occur every year. *Id.* at 44, 48. Alternatives 2 – 5 would thus increase Chinook PSC and thus not actually minimize bycatch. Alternative 5 options 1 and 2 would rollover, on average, either 422 or 472 fish per year with a maximum rollover of 685 Chinook, effectively setting a potential 3,385 fish PSC limit in some years for the non-RP CV sector – well above its estimated recent five-year average of 2,234. *Id.* at 23, 33.

The rollover alternatives would also transfer the excess allowance to sectors with less management accountability and higher PSC rates during the fall season when monthly Chinook PSC is at its peak. In previous comments on the proposed amendment, TBC expressed support for alternative options that manage PSC at a fine scale in light of the uncertainties about the impact of PSC on rapidly declining Chinook populations. In particular, TBC supported dividing the cap between CVs and CPs primarily because of the increased observer coverage for the CP fleet, which allowed for better enforcement of the limit. The preferred alternative would transfer PSC from a sector that has 100% observer coverage to sectors operating under low observer coverage levels. The Addendum acknowledges that the RP PSC is managed differently in explaining that "RP CVs have a high level of observer coverage, so Chinook PSC rates are rarely extrapolated from one vessel to

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<sup>2</sup> NMFS. 2012. Chinook Prohibited Species Catch in the Gulf of Alaska Pollock Fishery, Public Review Draft EA/RIR/IRFA at 23 (Amendment 93 established a 25,000 fish limit for the GOA Pollock fisheries, an increase over the historical average bycatch of 15,116 fish); Fisheries of the Exclusive Economic Zone Off Alaska; Chinook Salmon Bycatch Management in the Bering Sea Pollock Fishery. 75 Fed. Reg. 53026, 53035-36 (August 30, 2010)(Amendment 91 adopted a 60,000 fish limit rather than the pre-2001 five-year average of 29,323 chinook).

<sup>3</sup> NPFMC. 2013. Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis for Chinook Salmon Prohibited Species Catch in the Gulf of Alaska non-Pollock Trawl Fisheries at 3, 10. May 15, 2013. (EA).

another and are stable over time” and the PSC rates also monitored by cooperative managers which better enables PSC avoidance measures. *Id.* at 51.

Conversely, there is increased potential for underestimation of Chinook PSC under the rollover alternatives. The EA anticipated that the possibility that there could be “minimal observer data” available for PSC estimation for some weeks and target fisheries. EA at 227. The Addendum notes that the uncertainty associated with PSC estimates is one of the factors that make it impossible for NMFS to assess the relationship between PSC patterns and salmon stock status. Addendum at 24. As the Addendum indicates, while reported PSC levels are the best available estimates, GOA CVs have historically had low levels of observer coverage. *Id.* at 33. NMFS characterized its estimates of ESA-listed chinook PSC in the GOA groundfish fisheries as “very minimum estimates.” EA at 47. Expert reviews show that NMFS underestimates chinook bycatch by a substantial amount even in more heavily observed fisheries.<sup>4</sup> The more heavily observed CPs targeting flatfish and cod have a PSC rate two to three times as high as the marginally observed CVs. *Id.* at 160. Thus, the Addendum’s suggestion that the alternatives would not increase the number of salmon taken in any given year is questionable and the potential for under-reporting of Chinook is most likely to occur in the non-RP CV sector that would receive the excess allowance.

Further, the Council’s intent in setting the PSC limit in part reflected a precautionary approach that recognized the lack of sufficient information to evaluate the relationship between increased bycatch trends and declines in specific Gulf of Alaska salmon populations. The Addendum indicates that “[t]he Chinook salmon stock composition of the GOA non-pollock trawl fishery PSC is unavailable” and that the lack of data is one of the primary factors that makes it impossible to assess the impact of PSC on salmon stock status. *Id.* at 24. Thus, NMFS is not able “to discern and accurately describe small scale impacts on particular individual stocks” and thus assess whether or not the agency’s PSC management “is, or is not, causing escapement failures in Alaska’s rivers.” *Id.*; EA at 50.

Recent high PSC levels in 2010 and 2011 are much more significant now relative to overall Chinook abundance because they risk removing a larger percentage of a smaller and more fragile population. If declining stocks are increasingly at risk, the impacts of further removals – even if small – have increased potential to undermine recovery efforts. The rollover alternatives would transfer excess PSC at a time when Chinook of unknown origin are most vulnerable to sectors with high PSC rates. Based on 2007 – 2012 data, October is the month with the highest PSC rate and highest average monthly chinook PSC, 83% of which is taken in the flatfish fisheries. Addendum at 33-34. Overall, the flatfish fisheries – particularly rex sole, arrowtooth flounder and flathead sole, have by far the highest Chinook PSC rate. EA at 160, Tables 4-51 – 4-53. Because the stock composition of PSC in the fall fisheries is unknown, TBC requests that the Council act cautiously and reject rollover alternatives which would increase chinook PSC beyond the established sector limit.

In sum, TBC thanks the Council for its efforts to address Chinook bycatch in the non-pollock fisheries and requests that the Council move forward with Alternative 1 as the measure that best meets the conservation goals established in National Standard 9.

Sincerely,

Paul Olson, Attorney-at-Law

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<sup>4</sup> Pella, J., and Geiger, H.J. 2009. Sampling considerations for estimating geographic origins of Chinook salmon bycatch in the Bering Sea pollock fishery. ADF &G Special Publication No SP 09-08.



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**GF 13-026

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**Agenda Date:** 12/9/2013

**Agenda Number:** C-4

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

Grenadier management

**ESTIMATED TIME:**

8 hours (all Groundfish Issues)

**ACTION REQUIRED:**

Initial review of Grenadier management

**BACKGROUND:**

In June 2012, the Council adopted a problem statement and set of alternatives to consider adding the grenadier assemblage into either or both of the Bering Sea/Aleutian Islands (BSAI) and Gulf of Alaska (GOA) Groundfish Fishery Management Plans (FMPs). The analysis outlines management measures that would need to be adopted for grenadiers if the Council recommended that grenadiers be added to the FMPs, and listed either "in the fishery" or under the "ecosystem component" category. The grenadier assessment authors, the BSAI and GOA Groundfish Plan Teams, and the SSC have all recommended that grenadiers be included in the FMPs where they would be subject to management.

The analysis was distributed to the Council prior to the meeting and is posted on the Council website. The Executive Summary is attached as **Item C-4(a)**.

## Executive Summary

This document analyzes alternatives for managing three species of grenadiers (giant, Pacific, and popeye grenadiers) in the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands () Management Area (BSAI FMP) and the Fishery Management Plan for Groundfish of the Gulf of Alaska (GOA FMP). The purpose of this action is to improve the reporting and catch accounting of grenadiers in order to provide additional protection for grenadiers from the potential adverse effects of groundfish fisheries off Alaska. This action is necessary to amend the FMPs to include grenadiers, thereby allowing the adoption of management measures and catch accounting requirements. These management measures would be achieved by including grenadiers in the fishery management plans (FMPs) as either “in the fishery” or an “ecosystem component” and adopting management measures designed to improve the protection, conservation, and catch accounting of grenadiers.

### Council Problem Statement

The Council formulated the following problem statement in June 2012 to initiate this analysis.

*Grenadiers are not included in the BSAI or GOA groundfish FMPs. There are no limits on their catch or retention, no reporting requirements, and no official record of their catch. However, grenadiers are taken in relatively large amounts as bycatch, especially in longline fisheries; no other Alaskan groundfish has such high catches that is not included in the FMPs. Considerable information on giant grenadier exists that can be used for stock assessment (under Tier 5). Inclusion in the groundfish FMPs would provide for their precautionary management by, at a minimum, recording their harvest and/or placing limits on their harvest.*

The purpose of the proposed action is to give managers more control over grenadier catch, and catch reporting, to reduce the risk of overfishing of this ecologically important species.

### Alternatives

The action alternatives evaluated in this analysis are based on the alternatives adopted by the Council in June 2012. The alternatives apply separately at the FMP level: an alternative will need to be selected for the BSAI FMP and for the GOA FMP. Under both the action alternatives, grenadier species are aggregated due to a lack of data necessary to manage the species separately. This section outlines management measures that need to be adopted for grenadiers when considered for inclusion as “in the fishery” or an “ecosystem component,” as well as additional management measures that could be, but need not be, adopted.

#### Alternative 1: No action (Status Quo)

Under this alternative, grenadiers are not federally managed and are not included in the groundfish FMPs. Directed fishing is not prohibited and there are no catch or retention limits for grenadiers, and unlimited amounts may be taken and sold. There are no reporting or recordkeeping requirements for grenadiers, and currently the best estimate of catch comes from observer data. Vessels which have a Federal Fisheries Permit may use their retention of grenadiers as basis species for the retention of other groundfish up to the maximum retainable amounts listed in Tables 10 and 11 to 50 CFR 679, for the GOA and BSAI.

#### Alternative 2: Include grenadiers in the FMP as an Ecosystem Component species.

This alternative would manage grenadiers in ecosystem component category under the FMP. The term “ecosystem component” is defined in the National Standard 1 guidelines (50 CFR 600.310). According to the National Standard 1 guidelines, in order to be designated as an “ecosystem component” (EC), the species or species group should be

- a non-targeted species or species group;
- not subject to overfishing, overfished, or approaching an overfished condition;
- not likely to become subject to overfishing or overfished in the absence of conservation and management measures; and
- not generally retained (a small amount could be retained) for sale or commercial use.

According to the National Standard 1 guidelines, it is important to consider whether use of the EC species classification in a given instance is consistent with Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) conservation and management requirements. Species may be included in the FMP as an EC for any of the following reasons: for data collection and catch monitoring purposes; for ecosystem considerations related to specification of optimum yield (OY) for the associated fishery; as considerations in the development of conservation and management measures for the associated fishery; or to address other ecosystem concerns.

As an EC species, the catch of grenadiers would be required to be reported for monitoring purposes and directed fishing for grenadiers would be prohibited. Under the ecosystem component, targeting grenadiers would not be possible without moving them to “in the fishery” and establishing status determination criteria. While grenadiers are currently not targeted commercially, moving them to the ecosystem component would be intended to discourage uncontrolled fishing on these species without applicable management measures in place should they become economically viable in the future.

### **Alternative 3: Include grenadiers in the FMP as “in the fishery.”**

This alternative would include grenadiers “in the fishery” as incidental catch species.

The term “in the fishery” is defined in the National Standard 1 guidelines (50 CFR 600.310). Stocks of fish that are “in the fishery” are

- stocks that are targeted, and retained for sale or personal use;
- stocks that are not directly targeted but are taken incidentally in other directed fisheries and are retained for sale or personal use; and
- stocks not targeted or retained but are taken as incidental catch and for which overfishing or overfished status may be a concern.

For each stock “in the fishery”, all Magnuson-Stevens Act requirements under 303(a) must be met. Therefore, the Council and NMFS must establish Overfishing Limits (OFLs), Allowable Biological Catches (ABCs), and Total Allowable Catches (TACs) each year in the annual harvest specifications process. Recordkeeping and reporting of grenadier catch would be required and other management measures discussed in Chapter 2 would need to be adopted. Additionally, the Council would need to describe and identify Essential Fish Habitat for grenadiers.

### **Impacts of the Alternatives**

The proposed action is limit in scope and will likely not affect most environmental components of the BSAI and GOA. The effects discussion is limited to impacts on grenadiers, impacts on groundfish target species, ecosystem impacts, and cumulative effects.

## **Alternative 1: No Action**

### *Potential Effects on Grenadiers*

Under the no action alternative, NMFS does not manage grenadiers and there is no prohibition on “unmanaged targeted fishing” of grenadiers. Present and past harvests of grenadiers taken incidentally are well below the current OFLs calculated for grenadiers, there are no significant effects (either adverse or beneficial) on the stock biomass, fishing mortality, spatial or temporal distribution, or changes in prey availability for grenadier and groundfish target species in either the BSAI or GOA.

Under Alternative 1, NMFS does not have the ability to protect grenadiers from the risk of overfishing should a market for grenadier products develop. This is particularly problematic since there is great uncertainty about the biology and population dynamics of grenadiers. Grenadier species have low fecundity and low growth rates, which would lead to slow recoveries if stocks were fished down. Historically, nearly all incidental catch of grenadiers has been discarded; however, the status quo allows retention of grenadier as a basis species in the retention of other, valuable, groundfish. Once delivered as a basis species these grenadier are either turned to meal or, more frequently, discarded leading to wasting of the catch.

### *Potential Effects on Groundfish*

Under Alternative 1, the status quo, grenadiers would continue as non-FMP species without any harvest limitations or recordkeeping and reporting requirements. Since there is no limit on grenadier catch or retention, and grenadiers are not assessed in the calculation of optimum yield in the groundfish fishery, there would be no short term effects (either adverse or beneficial) on the stock biomass, fishing mortality, spatial or temporal distribution, or changes in prey availability for other groundfish target species in either the BSAI or GOA.

Alternative 1; however, retains the possibility for “unmanaged targeted fishing” of grenadiers to occur. Were a market to develop, grenadier could be targeted and there would be no required recordkeeping and reporting of catch and disposition of catch. Given the ecological importance of grenadiers, increased removals of grenadiers in an unmanaged and unreported fishery could have adverse effects on prey availability for other groundfish target species. However, little information is available on food web and habitat interactions between grenadiers and other groundfish. The information that is available indicates that in the Aleutian Islands, the diet comprised mostly squid and bathypelagic fish (myctophids) (Yang 2003), whereas in the Gulf of Alaska, squid and pasiphaeid shrimp predominated as prey (Yang et al. 2006). Thus, other groundfish do not appear to compose the prey field of grenadiers. However, sablefish do appear to prey on grenadiers. The extent of grenadier in the diet of sablefish is unknown. Thus it is not possible to determine whether incidental catches of grenadiers under the status quo remove a substantial amount of sablefish prey, nor what might happen if incidental catches were to increase under the status quo. Alternative 1 does not provide for improvements in that level of scientific knowledge through, at a minimum, accurate recording of their harvest and/or placing limits on their harvests.

Alternative 1 also allows the retention of grenadiers for use as a basis species in retaining other groundfish; however, the additional harvest of groundfish would not have a significant impact on groundfish stocks, because the harvest is conducted within the MRA limits and is subtracted from the annual TAC specified for each groundfish species group. It is still possible, under Alternative 1 for grenadier to be used as a basis species and then be discarded at the shoreside plant level as there is no market for grenadier at present. Thus, Alternative 1 does nothing, in any formalized way, to address the problem of grenadier incidental catch potentially resulting in discard waste, either on the fishing grounds or post-delivery when used as a basis species.

### *Potential Effects on the Ecosystem*

Under Alternative 1, grenadiers would continue as non-FMP species without any harvest limitations or recordkeeping and reporting requirements. The Council and NMFS are considering federal conservation and management for grenadiers because, although grenadiers have not been managed as an FMP species since 1980, there is no longer a valid scientific reason to exclude them. Bottom trawl surveys have shown giant grenadier is the most abundant species at depths 200 m to 1,000 m on the continental slope of the GOA, eastern Bering Sea, and Aleutian Islands. Alternative 1 provides no management structure for either tracking or limiting harvest of this ecologically important species. Under Alternative 1, the overall risk to grenadier stocks and their ecological role would appear to be limited based on known biomass, harvests, and reasonably foreseeable harvest trends. However, under Alternative 1, NMFS would not have management tools to accurately track catch or limit harvests should a directed fishery develop quickly. The likelihood of such a fishery developing in the foreseeable future is unknown.

### *Potential Cumulative Effects*

While it is not known what the exact effect climate change may have on grenadier stocks, it is possible that changing ocean conditions, such as salinity, temperature, and acidity, may affect grenadiers in several life stages and as they move through the water column to feed. This is partly due to the lack of comprehensive harvest information collection on grenadiers that is perpetuated under the status quo.

## **Alternative 2: Grenadiers in the FMP as “Ecosystem Component” species.**

### *Potential Effects on Grenadiers*

Under Alternative 2 grenadier would be included in the FMP as an “ecosystem component” species. Recordkeeping and reporting requirements would be established for grenadiers, and grenadiers would be closed to “directed fishing.” A closure to “directed fishing” means that targeting grenadiers would no longer be allowed. Further, MRAs of grenadiers as an incidental catch species would be established limiting grenadier catch. These measures are all in sharp contrast to the status quo conditions and would improve catch estimation, thereby helping to reduce scientific uncertainty, as well as preventing “unmanaged target fishing” of grenadiers. Thus, Alternative 2 provides management measures necessary to ameliorate the vulnerability of grenadiers to overfishing as an incidental catch species.

In contrast to Alternative 1, Alternative 2 prevents “unmanaged target fishing” of grenadiers and prevents a “directed fishery” from being developed as well. Were a market for grenadiers to be developed, Alternative 2 would allow a “small amount” of grenadier to be retained and marketed; however, establishing a formal directed fishery would require an FMP amendment. Alternative 2 would also prevent use of grenadier incidental catch as a basis species for retention of other groundfish, thereby eliminating the potential discard waste of grenadiers post-delivery.

### *Potential Effects on Groundfish*

Alternative 2 would place grenadiers in the FMPs as “ecosystem component” species. As has been discussed above, directed fishing for grenadiers would not be allowed, recordkeeping and reporting would

be required, and conservation and management measures to reduce incidental catch of grenadiers would be applied. Given limited interaction information, it is difficult to discern any direct effects of this alternative on other groundfish species; however, the enhanced recordkeeping and reporting requirements may lead to improvements in interaction information over time. Further, Alternative 2 formalizes management of grenadiers and provides for conservation and management of grenadiers should concerns about effects of grenadier removals on other groundfish species arise in the future.

While little is presently known about the interactions of grenadiers with other groundfish species, Alternative 2 may improve the level of scientific knowledge through, at a minimum, recording of their harvest and/or placing limits on their harvests. Thus, Alternative 2 does provide the precautionary management structure needed to sustainably manage the grenadier stock to potentially promote its sustainability and the sustainability of other groundfish species with which grenadier may have important ecological interactions.

#### *Potential Effects on the Ecosystem*

Under Alternative 2 grenadier would be included in the FMP as an “ecosystem component,” species. NMFS established the ecosystem component category to encourage ecosystem approaches to management and to incorporate ecosystem considerations (74 FR 3179, January 16, 2009). Alternative 2 provides management measures necessary for precautionary management of this ecologically important species, as an “ecosystem component” with limited incidental catch. These measures are all in sharp contrast to the status quo conditions and would provide for ecosystem approaches to management via improving grenadier catch estimation, thereby helping to reduce scientific uncertainty, as well as limiting grenadier harvest in recognition of their important ecological role.

#### *Potential Cumulative Effects*

Under Alternative 2, increased TAC in target fisheries where grenadiers are caught incidentally and the resulting increase in grenadier incidental catch would be monitored via recordkeeping and reporting requirements. Thus, Alternative 2 provides management structure necessary to monitor grenadier removals under changing future conditions. Similarly, Alternative 2 offers a management structure under which information can be collected to improve understanding of stock structure thereby improving understanding of the potential effects of future climate change on stock structure.

### **Alternative 3: Grenadiers in the FMP as “in the Fishery”**

#### *Potential Effects on Grenadiers*

Alternative 3 would place grenadiers in the FMP as “in the fishery,” with all of the associated, recordkeeping and reporting, stock assessment, harvest specifications, and conservation and management measures afforded to all other groundfish species in the BSAI and GOA. A directed fishery could develop if the Council recommended a TAC above the amount needed for incidental catch in other fisheries. In addition, The Council would need to describe and identify grenadier Essential Fish Habitat (EFH) in the FMP.

Alternative 3 would expand the record keeping and reporting requirements of Alternative 2 by incorporating grenadiers into the annual harvest specifications process. Alternative 3 also provides a

formal structure under which a “directed fishery” for grenadiers could be allowed with all the associated management structure required under the Magnuson-Stevens Act to prevent overfishing. Further, Alternative 3 addresses the recommendation of stock assessment authors who have recommended that management measures appropriate for target species (such as Annual Catch Limits (ACLs) and Accountability Measures (AMs)) should also be applied to grenadiers because of the similarities in vulnerability scores between target stocks and giant grenadier (Ormseth and Spencer 2009, 2011). Thus, Alternative 3 provides management measures necessary to ameliorate the vulnerability of grenadiers to overfishing as either incidental catch or in a “directed fishery.”

Under Alternative 3, no directed fishery would be allowed and the grenadier basis species Maximum Retainable Amount (MRA) would be zero, with a 35 percent MRA as an incidental catch species. Alternative 3 does allow a directed fishery to be opened through the specifications process with amendment of the MRAs in regulations. The additional harvest of groundfish that could occur under MRAs in a grenadier “directed fishery” would not have a significant impact on groundfish stocks, because the harvest is conducted within the MRA limits and is subtracted from the annual TAC specified for each groundfish species group. A separate MRA for grenadiers would allow “topping off” with other groundfish species up to the MRA; however, the Council could choose to have a separate TAC for grenadier, but not have a separate MRA for them. Any grenadiers caught in excess of the MRA would have to be discarded. This policy decision is discussed under chapter 2.

In contrast to Alternatives 1 and 2, Alternative 3 provides the management structure needed to potentially promote sustainable harvest of grenadiers in a future “directed fishery.” However, the implications for other groundfish stocks of establishing a grenadier “directed fishery” differ between the GOA and the BSAI.

#### *Potential Effects on Groundfish*

At present, the OY cap established in the GOA FMP is substantially greater than the total of all GOA TACs. Thus, placing grenadier “in the fishery” in the GOA does not require “funding” of grenadier TAC via reductions in TACs of any other groundfish species. Further, since the present and past harvests of grenadiers taken incidentally are well below the current ABCs calculated for grenadiers, there would be no effects (either adverse or beneficial) on the stock biomass, fishing mortality, spatial or temporal distribution, or changes in prey availability for groundfish target species in the GOA.

In contrast to the potential effects of Alternative 3 in the GOA, the BSAI FMP specifies a total OY cap of 2 million mt. The total of all BSAI groundfish TACs may not exceed this 2 million mt cap. Thus, placing BSAI grenadiers “in the fishery” means that grenadier incidental catch would have to be “funded” from reduced TAC of other BSAI groundfish species. The actual reduction in TAC that may occur in other BSAI groundfish target fisheries to “fund” grenadiers is unknown. However, the RIR has analyzed hypothetical examples and the results of those analyses are provided in the summary of the RIR, below. Alternative 3 also provides a formal structure under which a “directed fishery” for grenadiers could be allowed with all the associated management structure required under the MSRA to prevent overfishing. Thus, Alternative 3 provides management measures necessary for precautionary management of this ecologically important species, either with limited incidental catch, or if a “directed fishery” is eventually developed.

#### *Potential Effects on Ecosystem*

Alternative 3 would expand the record keeping and reporting requirements of Alternative 2 by incorporating grenadiers into the annual harvest specifications process. Alternative 3 also provides a formal structure under which a “directed fishery” for grenadiers could be allowed with all the associated

management structure required under the MSRA to prevent overfishing. Thus, alternative 3 provides management measures necessary to precautionary management of this ecologically important species, either with limited incidental catch, or if a “directed fishery” is eventually developed.

#### *Potential Cumulative Effects*

Under Alternative 3, increased TAC in target fisheries where grenadiers are caught incidentally and the resulting increase in grenadier incidental catch would be monitored via recordkeeping and reporting requirements. Thus, Alternative 3 provides management structure necessary to monitor grenadier removals under changing future conditions. Similarly, Alternative 3 offers a management structure under which information can be collected to improve understanding of stock structure thereby improving understanding of the potential effects of future climate change on stock structure.

### **Regulatory Impact Review and Initial Regulatory Flexibility Analysis**

#### **Alternative 1: The status quo**

Since the present and past harvests of grenadiers taken incidentally are well below the current ABCs calculated for grenadiers, and there is presently no market value for Alaska grenadiers, there would be no significant short term effects (either adverse or beneficial), under Alternative 1, on the stock biomass, fishing mortality, spatial or temporal distribution, or changes in prey availability for grenadier and groundfish target species in either the BSAI or GOA. Thus, there would be no significant short term changes in groundfish harvesting operations and no significant short term changes in the socioeconomic conditions in the commercial groundfish fisheries in the two areas. However, were conditions to change, grenadier could be targeted and there would be no required recordkeeping and reporting. Alternative 1 also allows the retention of grenadiers for use as a basis species in retaining other groundfish; however, grenadier can then be discarded at the shoreside plant level, as there is no market for grenadier at present.

Alternative 1 would allow future revenue increases via unmanaged targeted fishing of grenadiers. However, Alternative 1 provides none of the management structure needed to ameliorate the risk of overfishing nor to manage the grenadier stock to promote its sustainability and the sustainability of other species with which grenadier may have important ecological interactions.

#### **Alternative 2: Grenadiers in the Groundfish FMPs as “Ecosystem Component” species.**

Under Alternative 2, the present and past harvests of grenadiers taken incidentally are well below the current ABCs calculated for grenadiers. Thus, there would be no significant effects (either adverse or beneficial) on the stock biomass, fishing mortality, spatial or temporal distribution, or changes in prey availability for grenadier and groundfish target species in either the BSAI or GOA. There would be no significant (either beneficial or adverse) socioeconomic effects on those who harvest grenadiers or other groundfish targets in either the BSAI or GOA.

Alternatives 2 will impose new recordkeeping and reporting requirements on the groundfish fishing industry, as well as additional fisheries management processes; however, given the small relative amount of grenadier incidental catch these requirements will have *de-minimus* effects on fishery participants and NMFS.

In contrast to Alternative 1, Alternative 2 prevents targeting of grenadiers and prevents a “directed fishery” from being developed as well. Alternative 2 would allow management structure needed to ameliorate the risk of overfishing and to sustainably manage the grenadier stock. Were a market for

grenadiers to be developed, Alternative 2 would allow a “small amount” of grenadier to be retained and marketed; however, establishing a formal directed fishery would require further regulatory action. Alternative 2 would also prevent use of grenadier incidental catch as a basis species for retention of other groundfish. Thus, while Alternative 2 does not allow unlimited grenadier harvests and associated revenue, it does provide the management structure needed to ameliorate the risk of overfishing and to sustainably manage the grenadier stock to potentially promote its sustainability and the sustainability of other species with which grenadier may have important ecological interactions.

### **Alternative 3: Grenadiers in the Groundfish FMPs as “in the Fishery”**

Alternative 3 could allow retention, subject to potential MRA restrictions (see Section 2), and marketing of incidentally caught grenadier. In contrast to Alternative 2, were a market to develop, a “directed fishery” could be allowed as part of the annual TAC specifications process without further FMP amendment. Thus, Alternative 3 provides the management structure needed to ameliorate the risk of overfishing and to sustainably manage the grenadier stock to potentially promote its sustainable harvest in a future “directed fishery” as well as promoting the sustainability of other species with which grenadier may have important ecological interactions.

At present, the OY cap established in the GOA FMP is substantially greater than the total of all GOA TACs. Thus, placing grenadier “in the fishery” in the GOA does not require “funding” of grenadier TAC via reductions in TACs of any other groundfish species. There would be no significant (either beneficial or adverse) socioeconomic effects on those who harvest grenadiers or other groundfish targets in the GOA.

In contrast to the potential effects of Alternative 3 in the GOA, placing grenadiers “in the fishery” in the BSAI FMP may have adverse effects on fishery total revenue in the short term. The BSAI FMP specifies a total OY cap of 2 million mt. The total of all BSAI groundfish TACs may not exceed this 2 million mt cap. Thus, placing BSAI grenadiers “in the fishery” means that grenadier incidental catch would have to be “funded” from reduced TAC of other, presently valuable, BSAI groundfish species.

The actual amount of reduction in TAC that may occur in other BSAI groundfish target fisheries with grenadiers “in the fishery” in the BSAI are unknown and would be determined in the annual harvest specifications process. However, to put the potential impacts in perspective, consider that if the grenadier TAC in the BSAI were set at, for example, the estimated mean 2003 through 2013 incidental catch level of 5,294 mt, the cumulative TACs for other groundfish species would be reduced by as little as 0.26 percent.

The RIR analyzes funding of grenadier TAC from target species/species groups having the highest incidental catch proportions. The highest proportions of incidental catch occur in the Greenland turbot, sablefish, other flatfish, and halibut target species/species groups. Note; however, that the halibut target fishery would not be subject to TAC reductions via the annual specifications process. Thus, the proportion of incidental BSAI grenadier catch that occurs in the halibut fishery would have to be made up elsewhere. This analysis shows that a substantial amount of revenue could be lost with proportional “funding” of BSAI grenadier TAC via BSAI sablefish TAC reductions. These impacts range from \$7.3 million (19.9% of target total) to \$17.1 million (46.9% of target total), while the potential impacts to the Greenland turbot target fishery range from \$800,000 (11% of target total) to \$2.0 million (25.9% of target total).

The hypothetical revenue impacts in the other flatfish target fishery range from \$500,000 (2.5% of target total) to \$1.1 million (5.9% of target total) with the remaining fisheries having lesser impacts especially when considered as a percent of fishery total revenue. Note that with substantially larger TACs in the

Pacific cod, rockfish, and other species target species/species groups the percentage of total fishery revenue potentially lost is less than one percent in each example. Another consideration is that “funding” of BSAI grenadier TAC via reductions in the TACs of target fisheries that have the highest proportions of BSAI grenadier incidental catch will likely reduce BSAI grenadier incidental catch as well. However, due to incomplete reporting of BSAI grenadier catch, at present, it is not possible to estimate the potential magnitude of the effect.

A further consideration is the fact that the 2 million mt TAC cap in the BSAI is not always reached. For example, in the period from 2008 through 2010, BSAI pollock TACs decreased considerably and the average annual grenadier catch of approximately 5,300 mt would have been easily “funded” within the OY cap. Thus, in three of the past ten years, grenadier catch in the BSAI could have been “funded” with either no reduction in the TACs of other BSAI groundfish species, or with less than two tenths of a percent reduction in other TACs. The period of lower than normal BSAI groundfish TACs between 2008 and 2010 appears to be somewhat anomalous. Total BSAI TAC has fallen below 2 million mt in only two other years (1992 and 1993; by 145 and 3380 tons, respectively)<sup>1</sup>, since implementation in the early 1980’s. Nonetheless, were future variability in groundfish stocks to result in total BSAI TACs significantly lower than 2 million mt tons then, were a market for grenadier products to develop, retention of incidental catch and/or directed fishing of grenadier in the BSAI could improve optimal yield from the BSAI fishery in times of decreased stock abundance of other groundfish species, all else equal. Thus, placing grenadiers “in the fishery” in the BSAI may offer the potential for improved future benefits to the nation.

It is important to recognize that these hypothetical impacts would be spread across all Federal groundfish participants, including BSAI Community Development Quota (CDQ) entities, via the allocations made to sectors in the TAC specifications process. Thus, the impacts of funding a grenadier TAC, if any, would be borne by all harvesting platforms in an affected sector and gear type, further ameliorating potential impacts. These hypothetical examples show that the likely potential economic impacts of having grenadiers “in the fishery” in the BSAI are not significant in comparison to the overall value of the BSAI groundfish fishery.

As with Alternatives 2, Alternative 3 will impose new recordkeeping and reporting requirements on the groundfish fishing industry, as well as additional fisheries management processes; however, given the small relative amount of grenadier incidental catch these reporting requirements will have *de-minimus* effects on fishery participants. Similarly, grenadier stock assessments are presently being conducted and the additional burden on NMFS of new grenadier management measures will have *de-minimus* impacts.

### Effects on Net Benefits to the Nation

Under Alternative 1, the no action alternative, grenadiers would continue as non-FMP species without any harvest limitations or recordkeeping and reporting requirements. Since the present and past harvests of grenadiers taken incidentally are well below the current ABCs calculated for grenadiers, there would be no significant effects (either adverse or beneficial) on the stock biomass, fishing mortality, spatial or temporal distribution, or changes in prey availability for grenadier and groundfish target species in either the BSAI or GOA. Thus, there would be no significant short term change in groundfish harvesting operations and no significant short term changes in the socioeconomic conditions in the commercial groundfish fisheries in the two areas.

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<sup>1</sup> Data Available at: <http://alaskafisheries.noaa.gov/sustainablefisheries>

Alternative 1 would allow unlimited targeting of grenadier without any formal management structure in place to prevent overfishing. Thus, while Alternative 1 provides the possibility of allowing future revenue increases via unmanaged targeted fishing of grenadiers it provides none of the management structure needed to ameliorate the risk of overfishing nor to sustainably manage the grenadier stock to promote its sustainability and the sustainability of other species with which grenadier may have important ecological interactions. Thus while Alternative 1 appears to have no short term adverse effects on net national benefits it does nothing to mitigate risks of non-management of grenadier stocks.

Net benefits are not expected to decrease, in the near term, under Alternative 2. Alternative 2 does not affect current fishery revenue, as grenadiers are not currently marketable. However, Alternative 2 does not allow a directed fishery to develop without further regulatory action, thus potentially constraining future revenue potential should a market develop for grenadiers. Alternative 2 does provide enhancements to species monitoring and management that, while not quantifiable, are considered to be beneficial. Alternative 2 also ameliorates the risks of non-management of grenadiers that would continue under the status quo.

Under Alternative 3, grenadiers are defined as “in the fishery,” with all of the associated management structure required under the MSRA. Grenadier would be assessed under the calculation of OY. Both the BSAI FMP and statute constrains TAC at 2 million metric tons in the BSAI. The GOA OY cap far exceeds the sum of all GOA TACs and is nonbinding. However, in order to establish a grenadier TAC in the BSAI annual harvest specifications, in most years it would require the Council and NMFS to reduce TAC of some other BSAI groundfish species (or group of groundfish species) to ensure the 2 million mt TAC is not exceeded. Given that grenadier is currently valueless, this will decrease groundfish revenue in the short run unless a market for grenadier can be established. However, given the large biomass of grenadier it is possible that, if a market is developed, grenadier catch could be taken in years when the BSAI TAC for all other non-grenadier species is less than 2 million metric tons, thus contributing to additional harvest opportunities under those conditions. Similar to Alternative 2, Alternative 3 also ameliorates the risks of non-management of grenadiers that would continue under the status quo, and extends management to include the potential for a “directed fishery” to develop.

#### **Initial Regulatory Flexibility Analysis:**

The Initial Regulatory Flexibility Analysis (IRFA) addresses the statutory requirement of the Regulatory Flexibility Act of 1980, as amended by the Small Business Fairness Act of 1996, and by the final rule implementing new size standards for finfish fishing effective July 22, 2013. These acts require an analysis of the numbers of small entities directly regulated by regulatory actions subject to the notice and comment provisions of the Administrative Procedures Act.

Earnings from all fisheries in and off Alaska for 2012 were estimated for trawl catcher/processors and catcher vessels, and non-trawl catcher/processors and catcher vessels that participated in the BSAI and GOA groundfish fisheries. Table 6.1, of the IRFA provides the numbers of BSAI and GOA small entities that would be directly regulated by this action. These small entities had total gross revenue from all fisheries off Alaska of less than \$19 million in 2011 and were not cooperative affiliated, to the best of our knowledge. In the GOA, there were a total of 688 small catcher vessels and 5 small catcher/processors, for a combined total of 693 small GOA entities in 2012. The majority of these (561) are Catcher Vessels in the hook-and-line (HAL) gear type sector. In the BSAI, there were 76 small catcher vessels and 5 small catcher/processors, for a total of 81 small BSAI entities in 2012. The combined total for all of the EEZ groundfish fisheries is 725 small catcher vessels and 10 small catcher/processors, or 735 small groundfish vessels, directly regulated by this action, in 2012. In addition, the six CDQ groups qualify as directly regulated small entities under this action.

The action alternatives would impose additional recordkeeping and reporting requirements on fishery participants. These requirements include recording grenadier catch using a new species code and require no additional skills. Given the small amount of grenadier incidental catch, relative to groundfish catch, these recordkeeping and reporting requirements are found to have *de-minimus* impacts on fishery participants.

## Organization of the Document

This document is an Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA). The EA/RIR/IRFA provides assessments of the environmental impacts of an action and its reasonable alternatives (the EA), the economic benefits and costs of the action alternatives, as well as their distribution (the RIR), and the impacts of the action on directly regulated small entities (the IRFA). The purpose and need for the proposed action and the problem statement adopted by the Council are presented in Section 1, along with the history of the action. A description of the alternatives and options considered are presented in Section 2. Background information on grenadier biology, stocks, and catch history are presented in Sections 3.1, 3.2, and 3.3, respectively. The environmental impacts of the proposed action alternatives and options are presented in Sections 3.4 through 3.7. The Regulatory Impact Review (Section 4) discusses the socioeconomic impacts of the action, and the Initial Regulatory Flexibility Analysis (Section 5) evaluates the impact of the action on small entities. Section 6 reviews the proposed action with respect to the BSAI and GOA groundfish FMPs, the Magnuson-Stevens Act requirements. Section 7 lists the preparers and agencies and persons consulted, and Section 8 provides references for the literature cited.



December 3, 2013

Mr. Eric Olson, Chair  
North Pacific Fishery Management Council  
605 W. Fourth Avenue, Suite 306  
Anchorage, AK 99501-2252

Dr. James Balsiger, Regional Administrator  
NOAA Fisheries, Alaska Region  
709 West Ninth Street  
Juneau, AK 99802-1668

**RE: Agenda Item C-4, Grenadier Management**

Dear Mr. Olson, Dr. Balsiger, and Council members:

The National Marine Fisheries Service (NMFS) and North Pacific Fishery Management Council (NPFMC) must take action to manage the harvest and bycatch of the deep-sea grenadiers (family *Macrouridae*). The discard of tens of millions of pounds of grenadiers each year in the groundfish fisheries in Alaska is a shameful waste. We commend you for moving forward with an effort to include grenadiers in the Bering Sea/Aleutian Islands (BSAI) and Gulf of Alaska (GOA) Groundfish Fishery Management Plans (FMP) and urge you to pick **Alternative 3** from the EA/RIR/IRFA, which would include the grenadier complex “in the fishery” of the BSAI and GOA FMPs.<sup>1</sup>

The law explicitly requires NMFS to prevent overfishing by implementing conservation and management measures for fisheries. *See, e.g.*, 16 U.S.C. §§ 1801(a)(6) & 1851(a)(1). There is no exception to this rule for grenadiers, and the catch of grenadiers clearly requires active management. Annual discards of up to 46 million pounds (21,000 mt) of grenadiers occurred in the groundfish fisheries between 1997-2010.<sup>2</sup> In some years the bycatch of grenadiers exceeds the total harvest of sablefish and Greenland turbot. This bycatch currently is unregulated, and management is long overdue.

The Council should recommend, and NMFS implement, all management measures necessary to conserve and manage grenadiers. Given the substantial bycatch, potential for personal use and sale, and the possibility of overfishing, Annual Catch Limits, Optimum Yield calculations, and Essential Fish Habitat designations are necessary. Further, some grenadier catch, although likely a small amount, has been bought, processed, and sold.<sup>2</sup> Grenadiers clearly satisfy the guidelines” established by NMFS pursuant to National Standard 1 for management “in the fishery.” *See* 74 Fed. Reg. 3178, 3204-05 (Jan. 16, 2009) (stating that non-target species would be “in the fishery” if they “are retained for sale or personal use” or “either determined to be subject to overfishing, approaching overfished, or overfished, or could become so”).

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<sup>1</sup> NMFS, Environmental Assessment/ Regulatory Impact Review/ Initial Regulatory Flexibility Analysis For Amendment 100 to the Fishery and Management Plan for Groundfish of the Bering Sea and Aleutian Islands, and Amendment 91 to the Fishery and Management Plan for Groundfish of the Gulf of Alaska: Management of Grenadiers (Family Macrouridae) EA/RIR/IRFA for Proposed Amendments to the Fishery Management Plans for Groundfish of the Bering Sea and Aleutian Islands Management Area and Gulf of Alaska Inclusion of Grenadiers (Family Macrouridae) In the Fishery Management Plans for Groundfish of the Bering Sea and Aleutian Islands and Gulf of Alaska, Initial Review Draft (November 27, 2013).

While at least seven species of grenadiers live in the deep waters off Alaska, three species: giant grenadier (*Albatrossia pectoralis*), Pacific grenadier (*Coryphaenoides acrolepis*) and popeye grenadier (*Coryphaenoides cinereus*) are caught in significant amounts by the groundfish fisheries. The bulk of the grenadier bycatch is comprised of giant grenadiers,<sup>2</sup> which are at least “moderately” vulnerable to overfishing.<sup>3</sup> Giant grenadiers are long lived and late to mature, which makes them particularly susceptible to overfishing. In addition, the groundfish fisheries disproportionately catch female fish; nearly all giant grenadier bycatch is comprised of females.<sup>4</sup> In the North Atlantic, two species of grenadiers, the roundnose grenadier *Coryphaenoides rupestris*, and the onion-eye grenadier, *Macrourus berglax* have declined severely as a result of both directed fisheries and bycatch, enough that the species could qualify as endangered.<sup>5</sup>

We should also remember that yesterday’s “trash fish” may be tomorrow’s market superstar. Arrowtooth flounder and skates, considered “trash” not too long ago, now support valuable targeted fisheries. Pacific grenadier caught off California are marketed as “Pacific Roughy” and “Black Snapper” and have been described as “mild, flaky, and delicious.”<sup>6</sup> While giant grenadier have a high water content, treatment in a brine results in a firmer fillet product.<sup>7</sup> Giant grenadier livers and roe have also been suggested as a valuable food source due to the high vitamin and fat content.<sup>8</sup> Collagen extracted from the skins of the related New Zealand hoki (*Macruronus novaezelandiae*) are being used in the manufacture of carbon nano-fibers for an array of products.<sup>9</sup> There is ample evidence that the grenadier resource in Alaska may become more desirable to fishery entrepreneurs.

For ease of management, we support managing grenadiers as a stock complex with biological reference points for giant grenadier serving as a proxy for the grenadier complex. Future amendments to describe and designate Essential Fish Habitat for the grenadier complex could also take the same approach.

The Council will have an opportunity to consider grenadier management during each Annual Groundfish Harvest Specifications process. An appropriate grenadier TAC will provide an incentive to reduce grenadier bycatch and make better use of bycatch that cannot be avoided. Setting a grenadier TAC below current bycatch levels may reduce the economic impact to other

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<sup>2</sup> Clausen, D.M., and C.J. Rodgeveiler. 2010. Assessment of Grenadier Stocks in the Gulf of Alaska, Eastern Bering Sea, and Aleutian Islands. NPFMC Gulf of Alaska, Bering Sea, and Aleutian Islands SAFE.

<sup>3</sup> Ormseth, O. A. and P. D. Spencer. 2009. Alaska Groundfish Vulnerability Analysis in the Gulf of Alaska, Eastern Bering Sea and Aleutian Islands. In Stock assessment and fishery evaluation. report for the groundfish resources of the Gulf of Alaska, and Bering Sea/Aleutian Islands.

<sup>4</sup> Clausen, D.M., and C.J. Rodgeveiler. 2010. Assessment of Grenadier Stocks in the Gulf of Alaska, Eastern Bering Sea, and Aleutian Islands. NPFMC Gulf of Alaska, Bering Sea, and Aleutian Islands SAFE.

<sup>5</sup> Devine, J. A., K. D. Baker, and R. L. Haedrich. 2006. Deep-sea fishes qualify as endangered. Nature 439: p. 29.

<sup>6</sup> <http://brainfoodblog.wordpress.com/tag/pacific-roughy/>.

<sup>7</sup> Crapo, C., B. Himelbloom, R. Pfutzenreuter, and C. Lee. 1999b. Texture modification processes for giant grenadier (*Albatrossia pectoralis*) fillets. Journal of Aquatic Food Product Technology 8(4): 27- 41.

<sup>8</sup> Novikov, N. P. 1970. Biology of *Chalinura pectoralis* in the North Pacific. In Soviet fisheries investigations in the Northeast Pacific, Part V, P. A. Moiseev (ed.), p. 304-331.

<sup>9</sup> [http://www.nzherald.co.nz/business/news/article.cfm?c\\_id=3&objectid=11156645](http://www.nzherald.co.nz/business/news/article.cfm?c_id=3&objectid=11156645).

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fisheries and induce changes in behavior or gear modifications in the fisheries where grenadier bycatch is a problem.

We urge NMFS and the NPFMC to chose **Alternative 3** to address grenadier bycatch and better manage Alaska's groundfish fisheries.

Sincerely,

A handwritten signature in black ink, appearing to read "Susan J. Murray". The signature is fluid and cursive, with a large, sweeping "M" at the end.

Susan Murray,  
Deputy Vice President, Pacific  
Oceana



**Marine Conservation Alliance**  
*promoting sustainable fisheries to feed the world*



December 3, 2013

Mr. Eric Olson, Chairman  
North Pacific Fishery Management Council  
605 West 4th, Suite 306  
Anchorage, Alaska 99501-2252

RE: Agenda Item C-4. Initial Review of Grenadier Management

Dear Chairman Olson,

Thank you for the opportunity to comment on Agenda item C-4, Initial Review of Grenadier Management. On behalf of the Freezer Longline Coalition, the Fishing Vessel Owners Association, the Marine Conservation Alliance, and the Petersburg Vessel Owners Association, we submit these comments and accompanying analysis. We appreciate the efforts of Council and NMFS staff in assembling the draft Environmental Assessment and for bringing very important research forward regarding grenadier stock status in the Gulf of Alaska, the Bering Sea, and the Aleutian Islands.

In this letter we have provided a summary of our recommendations and supporting rationale, along with a more detailed piece of analysis which explores existing policy guidance and the available science. We hope you find our comments to be useful and constructive.

Our recommendation is that the Council place Giant grenadier in both the BSAI and GOA Groundfish FMPs and classify them as "Ecosystem Component" (EC) species, the purpose of which would be to serve as a monitoring function. Classification as EC species would mean they would not be placed on the TAC sheet. We do not recommend placing Popeye or Pacific Grenadier in either the BSAI or GOA Groundfish FMP at this time as these stocks are largely outside the reach of existing fisheries.

Policy guidance relevant to the placement of stocks within an FMP essentially guides us toward a two-part question. The first question to ask is, "which stocks are in need of conservation and management?" The second question – if a stock is believed to be in need of conservation and management – is how to classify those stocks within an FMP. The National Standard 1 Guidelines provides two classifications of species within an FMP: 1) "in the fishery", and 2) "Ecosystem Component" species. The basic difference between the two is that stocks classified as "in the fishery" are targeted, or otherwise may need an

Annual Catch Limit to prevent overfishing of the stock. An “Ecosystem Component” classification is one which allows a Council to manage a species for ecological reasons. These types of stocks are not at risk of experiencing overfishing (and therefore Annual Catch Limit specifications are not necessary), but placement of these species in an FMP may be desirable for ecosystem-related reasons.

Available information shows that grenadier catch levels are a small fraction of the OFL in both the GOA and BSAI management areas. In the GOA, catch levels have averaged around 14% of the OFL, while in the BSAI catch levels have averaged around 6% of the OFL. In addition, abundance estimates indicate a healthy and stable stock status. From an ecological perspective, Giant grenadier are estimated to be the most abundant stock across a large area of the continental slope, meaning they likely play an important ecological role in areas of the GOA and BSAI.

Future catch levels of grenadier are likely to remain stable and perhaps even decrease for reasons outlined in the attached analysis. Giant grenadier marketing efforts have been met with repeated failure and there is nothing on the horizon indicating that Giant grenadier can be processed in a way that is palatable and sold in a manner that is economically viable.

Because grenadier catch levels are a small fraction of the OFL and catch levels are unlikely to increase at any point in the near future, classifying grenadiers as “in the fishery” would be inappropriate. There is simply nothing gained in a conservation sense by doing so, but there are likely to be negative economic implications (especially in the BSAI) and negative management implications due to increased management complexity. Classifying them as “in the fishery” would require that they be placed on the TAC sheet. In the BSAI this would cause clear economic harm due to the presence of the 2 million ton cap and the need to reduce catches of target species in order to make room for accounting of grenadier catches.

Classifying Giant grenadiers as “ecosystem component” species may make some sense due to their apparently important ecological role on the continental slope. While this role is not well understood, and the ecological effect of fishery removals of Giant grenadier is also not well understood, an EC classification would assist in monitoring efforts which could help advance this understanding.

The attached analysis provides further detail and justification for our recommendations. We look forward to discussing this matter in more detail at the December 2013 Council meeting.

Sincerely,

Robert Alverson



Executive Director, Fishing Vessel Owners  
Association

Brian Lynch



Executive Director, Petersburg Vessel Owners  
Association

Merrick Burden



Executive Director, Marine Conservation Alliance

Chad See



Executive Director, Freezer Longline Coalition

## Introduction

In this analysis we have combined available scientific information with existing policy guidance to derive a recommendation regarding the management of three species of grenadier in the Gulf of Alaska and Bering Sea/Aleutian Islands management areas. We find that the most appropriate approach is to place Giant grenadier in both the BSAI and GOA Groundfish FMPs and classify them as “Ecosystem Component” species. We envision this classification as primarily serving a monitoring role in order to advance scientific objectives. Even though we make this recommendation, we believe that it would be reasonable for one to conclude that grenadiers be left out of the Groundfish FMPs entirely because it is not clear that conservation and management measures are necessary given the size of the OFL, the abundance of grenadiers, and the unlikely event of Giant grenadier markets developing in the foreseeable future.

In this analysis we have summarized relevant portions of existing policy guidance. To a large extent, the most appropriate pieces of policy guidance are found in the Magnuson-Stevens Act and the existing National Standard 1 Guidelines. We then summarize the relevant scientific information regarding fishery removals, stock status and trends, overfishing levels, and ecological information. This information is complimented with information regarding past efforts at selling Giant grenadier, the future potential for developing grenadier markets, and the possibility of future targeting activity.

A review of the grenadier stock assessment will lead one to conclude that A) the population of Giant grenadiers is healthy and stable, and may have been increasing over the past couple of decades, B) catch of Giant grenadiers has been far below the estimated OFL, and C) Giant grenadiers are an abundant species on the slope and are situated toward the top of the food chain. Available information on Pacific and Popeye grenadier indicates that these species are not encountered by active fisheries to any appreciable degree – both Pacific and Popeye grenadier are generally found beyond the depths at which fisheries operate. Furthermore, Popeye grenadier are too small to be caught by existing longline gear.

Catch of grenadiers has remained far below the OFL for decades and there is nothing indicating that catch will approach the OFL in the future. Food science research indicates that Giant grenadier are an undesirable species to the human palate and prior attempts at selling Giant grenadier on the market have been met with failure. Therefore, the prospect of a Giant grenadier market developing with a corresponding target fishery appears remote at this time. Furthermore, classifying grenadiers as “in the fishery” within the Bering Sea would implicate the 2 million metric ton cap, resulting in negative economic impacts without a corresponding conservation benefit.

Available information simply does not support classification of grenadiers as “in the fishery” in either the BSAI or GOA management areas. Available information indicates that the debate is whether they should be left out of the FMP entirely, or classified as Ecosystem Component stocks in order to monitor these species. While we believe sound arguments exist for either outcome, we support classification of Giant grenadiers as Ecosystem Component stocks because of their abundance along the continental slope, the

fact that fishery removals are on the order of several thousand tons, and because monitoring of Giant grenadier will further scientific objectives.

### **Policy Guidance**

The MSA provides helpful context when considering whether to place a stock within an FMP. In the broadest sense, the MSA states that a Council must develop a Fishery Management Plan “*for each fishery under its authority that requires conservation and management*”. The question therefore is what would constitute a conservation and management need?

The Final Rule implementing the National Standard 1 Guidelines provides helpful context in this regard. The guidelines describe factors which include, but are not necessarily limited to: A) whether targeting of a stock occurs, B) whether overfishing is a concern, C) whether an overfished status exists, and D) whether the species plays a role in the ecosystem which would justify conservation measures for reasons other than an overfishing or overfished standard.

If a Council determines that a stock should be placed within an FMP the National Standard 1 Guidelines outline two possible classifications for that stock. These classifications are 1) “in the fishery” and 2) “ecosystem component” stocks. We’ve summarized the difference between the two classifications below:

- In the fishery: This includes stocks that are A) target species, B) non-target stocks that are retained for sale or personal use, and C) non-target stocks for which there is an overfishing concern, or for which an overfished status may exist.
- Ecosystem component: This includes stocks which are not targeted and for which overfishing or overfished status is not a concern and which are generally not retained or sold. These stocks may play an important role in the ecosystem and conservation considerations for them may not be well defined by an overfishing or overfished standard<sup>1</sup>.

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<sup>1</sup> In developing the ecosystem component (EC) category, NMFS indicated that it was intending to encourage ecosystem approaches to management. The EC category provides guidance for Councils which may wish to manage a species for ecosystem reasons, yet may find that establishing ACLs for these stocks is unnecessary.

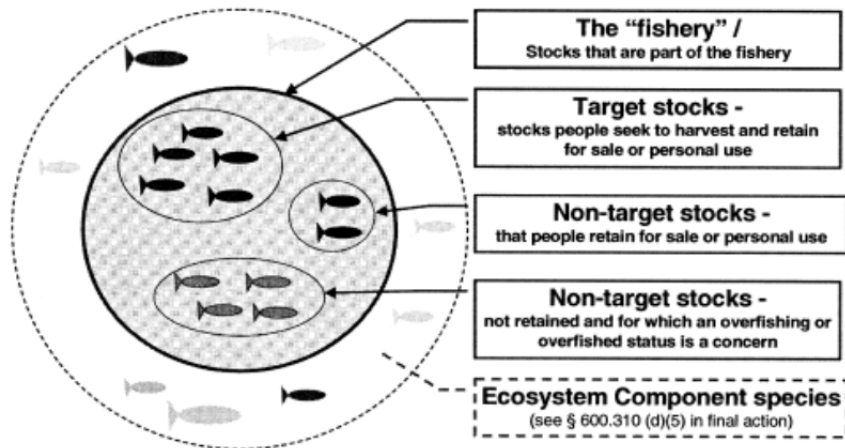


Figure 1 Description of FMP Categories (source: NS 1 Guidelines FR)

The classification system within the National Standard 1 Guidelines is helpful, however there is frequent confusion regarding the level of retention which would shift a species between an EC classification and an “in the fishery” classification. This confusion appears to exist – at least in part – because a species may be classified within the EC category even if some retention occurs. The question then is what level, or what type, of retention would shift a species from an EC classification to an “in the fishery” classification? In our view, the distinguishing factor ought to be one of intent. In other words, is retention the result of some incidental activity, or did a fishing vessel intend to fish in a way that would result in there being some retention of this non-target species? The bullets below outline some scenarios which we believe help to distinguish between the types of limited retention that may result in an EC classification versus an “in the fishery” classification:

- Some types of non-target species retention may change fishing behavior. Some types of non-target species retention can have an impact on fishing behavior, which can then lead to impacts which affect the Council’s desired management outcomes. In these cases, an “in the fishery” designation may be appropriate. A couple of examples are:
  - A non-target species could be retained because the total bundle of fish caught during a trip (target and non-target) collectively justifies fishing activity and the non-target stocks in this bundle are an important component that contributes to economically viable fishing activity.
  - A non-target stock could be retained as the result of “topping off” activity where an extra set is made, or tow duration is extended in time or space, to ‘top off’ with desirable species which are not the principle target. These types of scenarios mean that some retention of non-target species will have an impact on fishing behavior, and this may be of interest to the Council as it considers the management goals it has specified for the fishery.
- Some types of non-target species retention may be purely incidental to targeting activity. Other types of non-target species retention is purely incidental to target fishing activity. Retention in

this case would not influence fishing behavior, and management of non-target species would not tend to influence the Council's management goals (discards being an exception). In this type of scenario the overall fishery management goals the Council has specified for the fishery would tend to be unaffected. In this instance, an EC classification may be more appropriate<sup>2</sup>.

Other factors that ought to be considered include the role of a species in the ecosystem and the level of catch that is occurring. In other words, we recommend that a two part question be asked—does the species play an important role in the ecosystem? If so, is catch large enough that fishing activity may be having an impact on the food-web via catch of this species? The factors that may lead one to conclude that there is an ecosystem-related reason for considering a species as an EC is not immediately clear from the guidelines, however we can imagine several reasons why classifying as an EC makes sense, which include but are not limited to:

- Prey species: A key prey species may be important to the status and productivity of other species in the marine food web
- Predator species: A key predator may be in a position of causing rippling effects through the food web if their abundance changes
- A large component of biomass: A species might not be a key predator or prey, but by its very abundance it constitutes an important piece of the marine food web

### **Grenadier Life History and its Role in the Slope Ecosystem**

Grenadiers tend to be long-lived species that inhabit the relatively deep reaches of the continental slope. Of the three species being considered for placement in the GOA and BSAI groundfish FMPs, Giant grenadier are estimated to live up to 56 years<sup>3</sup>, Pacific grenadier are estimated to live up to 73 years<sup>4</sup>, and Popeye grenadier are estimated to live up to 10 years<sup>5</sup>.

Grenadiers are believed to make up a significant portion of the biomass on the slope. Giant grenadiers in particular are considered the dominant species (in terms of total biomass) at depths of 400 to 1,000 m and are therefore likely to play an important ecological role in this area. Pacific and Popeye grenadiers appear to be more abundant at depths that are deeper than those inhabited by Giant grenadier and also

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<sup>2</sup> In the case of Giant grenadiers in the North Pacific, some exploratory activity has occurred in the past which would be considered target activity. We believe that periodic exploratory activity should be expected as part of fishing activity, and indeed we believe it should be encouraged in many instances, however periodic exploratory activity should not lead one to conclude that a species should be classified as "in the fishery". The type of target activity that should lead one to consider classifying a stock as "in the fishery" should be a sustained target activity that exists over time and is likely to continue in the future.

<sup>3</sup> Burton, E.J., 1999. Radiometric age determination of the Giant grenadier (*Albatrossia pectoralis*) using 210Pb: 226Ra disequilibria. MS thesis, San Francisco State University

<sup>4</sup> Andrews, A.H., G.M. Cailliet and K.H. Coale, 1999. Age and growth of the Pacific grenadier (*Coryphaenoides acrolepis*) with age estimate validation using an improved radiometric ageing technique. Can. J. Fish. Aquat. Sci. 56:1339-1350.

<sup>5</sup> Fadeev, N.S., 2005. Guide to biology and fisheries of fishes of the North Pacific Ocean. Vladivostok, TINRO-Center. 366 p.

generally beyond the depths of fishing activity. Furthermore, Popeye grenadier appear too small to be caught by longline gear to any appreciable degree.

### Grenadier Stock Status and Catch

Current grenadier biomass estimates suggest a robust and stable stock. In fact, available data tends to demonstrate an increasing trend in biomass, especially if the 1999 biomass estimate is included<sup>6</sup>.

Furthermore, available information indicates that overfishing is not occurring and that the stock is not overfished – this being the case without any current measures for conservation and management. The table below summarizes information on the estimated “overfishing level” and the average catch over the 2006 – 2012 time period. On average, estimated catch has been around 6% of the OFL in the Bering Sea and roughly 14% of the OFL in the GOA.

Stock	OFL	'06-'12 average catch	Avg. catch as a % of OFL
GOA Grenadiers	46,635	6,367	13.7%
BSAI Grenadiers	89,878	5,607	6.2%

Note: while there is some uncertainty regarding current and future catch estimates due to recent the changes in the observer program, even a doubling of the catch estimate as a result of these new observer data would result in catch rates that are a small portion of the OFL

The Grenadier biomass estimates are likely biased low. All of the biomass estimates are derived from longline and trawl surveys conducted in both GOA and BSAI at depths shallower than 1,000 m and no adjustment or correction is made to include the portion of the population dwelling below this depth in the total biomass estimate. This means that the current biomass estimate should be considered a minimum estimate, and the impact of the current catch levels in both areas is likely less than is currently being assessed.

Indication that the stock is under-assessed is derived from information showing an increase in the male component in the samples at progressively increasing depth. Based on these data, it is reasonable to assume that some level of sexual disaggregation of the population is occurring and that a significant number of males may not be susceptible to capture in the surveys because they reside at depths below survey depths. Table 1-9 of the December 2012 GOA Grenadier Assessment (Gulf of Alaska and Bering Sea/Aleutian Islands SAFE) shows the male proportion in the survey samples increasing by at least 10% between the 200 m-300 m and 800 m-1,000 m depth strata for the 2006-2012 surveys. Assuming a true 50:50 male:female population sex ratio and not accounting for the male component at depths greater than 1,000 m, the GOA Grenadier biomass estimate could be underestimated by over 45% in GOA and 51% in BSAI. As the following table shows, even if the sex ratio is heavily weighted toward females (as is the case for some species of flatfish) the biomass estimate in the GOA could still be underestimated by 1.3% at 20% males to 27% at 40% males and 4% to 51% in the BSAI, respectively. This is further supported on page 702 of the 2012 Grenadier Assessment, *“In the longline survey sex distributions, there was a trend toward an increased number of males in progressively deeper strata, but even at the*

<sup>6</sup> Table 1-4 of the December, 2012 GOA Grenadier Assessment, Gulf of Alaska and Bering Sea/Aleutian Islands SAFE

*deepest stratum of 800-1,000 m, males were only 6-13% of the catch in the GOA, 7-31% in the eastern AI, and 5-8% in the EBS (Table 1-9). These results imply that much of the male population may reside in depths >1,000 that are not covered by the survey, at least during the summer period when the survey is occurring."*

In the table below we have outlined some approximations of grenadier biomass, OFL, and ABC based on the current assessment and alternative assumptions regarding the true proportion of males in the grenadier population. As assumptions regarding the proportion of males in the population increases, the total estimate of grenadier biomass increases. This is because the majority of males (and also some females) appear to live at depths that are not surveyed.

**Table 1 Biomass, OFL, and ABC Estimates Based on Several Possible Scenarios of Male Grenadier Abundance**

<b>GOA</b>								
		% > Current Biomass			Avg % Males Observer	Avg. GOA Catch	Catch As	Catch As
	Biomass	Est.	OFL	ABC	'07-'12	'06-'12	% OFL	% ABC
<b>&lt;1,000m 2012-13</b>	597,884		46,635	34,976	18.7%	6,367	13.7%	18.2%
<b>Tot Biomass w/males=20%*</b>	605,759	1.3%	47,249	35,437	20%**	6,367	13.5%	18.0%
<b>Tot Biomass w/males=30%*</b>	674,052	12.7%	52,576	39,432	30%**	6,367	12.1%	16.1%
<b>Tot Biomass w/males=40%*</b>	759,700	27.1%	59,257	44,442	40%**	6,367	10.7%	14.3%
<b>Tot Biomass w/males=50%*</b>	870,282	45.6%	67,882	50,912	50%**	6,367	9.4%	12.5%
<b>BSAI</b>								
		% > Current Biomass			Avg % Males Observer	Avg. BSAI Catch	Catch As	Catch As
	Biomass	Est.	OFL	ABC	'07-'12	'06-'12	% OFL	% ABC
<b>&lt;1,000m 2012-13</b>	1,152,284		89,878	67,409	16.1%	5,607	6.2%	8.3%
<b>Tot Biomass w/males=20%*</b>	1,199,047	4.1%	93,526	70,144	20%**	5,607	6.0%	8.0%
<b>Tot Biomass w/males=30%*</b>	1,338,309	16.1%	104,388	78,291	30%**	5,607	5.4%	7.2%
<b>Tot Biomass w/males=40%*</b>	1,514,171	31.4%	118,105	88,579	40%**	5,607	4.7%	6.3%
<b>Tot Biomass w/males=50%*</b>	1,743,244	51.3%	135,973	101,980	50%**	5,607	4.1%	5.5%
<b>*Tot. Biomass all depths</b>								
<b>**Assumed % Males In Tot. Pop.</b>								

Naturally, one may be inclined to point out that current catch levels are likely to be comprised of females if females do tend to inhabit shallower depths than males. In some cases a high proportion of females in the catch may be cause for concern; however available data does not appear to indicate that there is reason for concern in this case. Catch levels are a small fraction of the total OFL and are so small that it seems unlikely that there is a possibility of overharvesting the female portion of the population. Secondly, if excessive harvest of females was occurring, we would expect to see some evidence in the available data: the proportion of males may begin to increase at shallower depths, the overall catch rate would be decreasing, the survey index of biomass in the shallower depths where females are found would be decreasing, or some combination thereof. None of those phenomena appears to be occurring.

#### **Grenadier Catch Rates and their Correlation with Sablefish Efforts**

Grenadier catch rates have remained low relative to the OFL for many years. The catch that does occur is correlated to a fairly high degree with the sablefish longline catches. In other words, inter-annual changes in grenadier catch can be explained – to a large degree – by changes in sablefish longline catch and effort. To demonstrate this point, we regressed grenadier catch on sablefish catch and discovered a high degree of explanatory power between the two in both management areas, as shown in the table below. This means that as sablefish catches increase, grenadier catches should be expected to increase and vice versa.

This information is useful as supporting empirical evidence showing that grenadier catch is incidental to other types of fishing activity and is not the result of targeting activity. Of course, sablefish catch doesn't explain all of the variation in the catch of grenadier. Other contributing forces are undoubtedly the relatively deep-water longline and trawl turbot fishery as well as variations in grenadier abundance, among others.

**Table 2 Linear Correlation between Sablefish and Grenadier Catch in the GOA and BSAI (2003 to 2012)**

	GOA Grenadier Catch	BSAI Grenadier Catch
GOA Sablefish Catch	0.74	
BSAI Sablefish Catch		0.72

Note: R square values were 0.62 for the GOA and 0.53 in the BSAI

### Marketing Efforts

In a June 2012 NPFMC discussion paper addressing grenadier fisheries in the BSAI and GOA<sup>7</sup>, the authors comment that “*there may be potential for future development of a targeted fishery for Giant grenadier.*” They note that there have been “*experimental attempts to market the fish, and there has been food technology research to develop marketable products from this species.*” While true, efforts to market these species have largely been unsuccessful and there is little evidence to suggest that anyone is actively targeting or topping-off the species in either the BSAI or GOA for the purposes of sale or personal use.

One member company of the Freezer Longline Coalition that participates in the BSAI sablefish and turbot fisheries has sometimes opted to retain limited amounts of grenadier. The company sought to market H&G grenadier in domestic and international markets. However, despite their efforts, they have never succeeded in developing a viable market for the fish. They have had no sales of H&G grenadier for nearly two years, and have since stopped retaining even limited quantities of grenadier bycatch. Reasons the company cited for the lack of a market for the species included the poor taste and texture of the fish, and the difficulty of catching grenadier that were large enough in size to attract even some interest from potential buyers.

<sup>7</sup> *Inclusion of Grenadiers in the Fishery Management Plans For the Bering Sea and Aleutian Islands and/or the Gulf of Alaska*, by Tom Pearson, Sustainable Fisheries, Alaska Region, NMFS; Dave Clausen, AFSC; Jane DiCosimo, NPFMC; June 2012

Research conducted on grenadier fisheries suggests that the company's experience with Giant grenadier is consistent with others fishing in Alaskan waters and elsewhere. The Monterey Bay Aquarium's Seafood Watch report on grenadier<sup>8</sup> notes that "*Giant grenadier has been considered a valuable food species because of its presumed abundance and the high vitamin and fat content of its liver and eggs. Nevertheless, this species has not received favorable reviews for human consumption. When tested by a panel of judges, Giant grenadier received low scores for flakiness, chewiness, hardness, and fibrousness, and high scores only for moistness* (Matsui et al. 1990)." The report goes on to note that in the early years of the grenadier fishery Japanese fleets caught grenadier for use in surimi. However, while Pacific grenadier produced good surimi, Giant grenadier did not and soon other species replaced grenadier in the Japanese surimi market. Today, fish surimi production worldwide is predominantly derived from Alaskan pollock and other species, with little, if any production from grenadier species.<sup>9</sup>

Worldwide, several species identified as grenadiers are, or have been successfully harvested for commercial sale. However, it's important to point out that several of these species are vastly different in a biological sense from Giant grenadier (some of them are Merlucciidae while Giant grenadier are Macrouridae). Others have noticeably different qualities that make them more viable on the commercial market. Pacific grenadier has been marketed and sold on the West Coast, off of California (though landings there are small, totaling just over 14 tons in 2012 at \$0.10 per pound). Likewise, there is a strong commercial fishery in Australia and New Zealand for Blue grenadier, also known as hake. These species differ from Giant grenadier in that they are known to have a taste, color and texture that is much more appealing for human consumption than Giant grenadier. Other harvested species identified as grenadiers, but which are distinct from Giant grenadiers, include roundnose grenadier (North Atlantic), Patagonian grenadier (South America) and roughnose grenadier (North Atlantic), amongst others. At this point in time a future fishery for Giant grenadier should only be considered a hypothetical scenario, and one which would require technological advancements in order to create a product that is desirable to the human palate.

## The Future

As we consider the future environment that will influence fishing activity in the North Pacific and impact the corresponding levels of grenadier catch, it is helpful to consider a few points:

- We believe it is unlikely that a market for Giant grenadier will develop in the foreseeable future. Such a development would require an innovation in food science technology to create a product that is appealing to the human palate. We are unaware of any imminent breakthroughs in such technology and therefore the prospect of a target fishery seems hypothetical at best.
- The Council is considering measures to deal with whale depredation issues in the GOA. Should the Council elect to allow pot gear useage in the GOA sablefish fishery, we should expect

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<sup>8</sup> *Seafood Watch Seafood Report: Grenadier, West Coast Region*; by Kelsey Abbott, on behalf of Monterey Bay Aquarium; updated March 17, 2006

<sup>9</sup> Aside from Alaskan pollock, other species cited by Monterey Bay Aquarium as used in fish surimi include Atka mackerel, barracuda, blue whiting, cod, hoki, mackerel, Pacific whiting, sardine, striped mullet and threadfin bream. See [http://www.montereybayaquarium.org/cr/SeafoodWatch/web/sfw\\_factsheet.aspx?fid=17](http://www.montereybayaquarium.org/cr/SeafoodWatch/web/sfw_factsheet.aspx?fid=17)

grenadier catch rates to decline there. Bering Sea observer data indicates that pot gear catches far fewer grenadier than longline gear.

Together, these issues indicate that the direction of grenadier catch levels in the GOA and BSAI should remain relatively stable, and perhaps even decline in the foreseeable future. As indicated previously, existing catch levels are a small fraction of the OFL. This provides additional rationale for not classifying grenadiers as “in the fishery”.

### **Concluding Remarks**

When we combine the best available scientific information and policy guidance on the content of Fishery Management Plans, we believe that designating grenadiers as “in the fishery” would be inappropriate. It is not apparent that classifying them as such would result in any conservation outcome, but it would clearly have negative impacts, both economic and managerial.

Available information shows that grenadiers are not subject to overfishing and are not overfished; the biomass of grenadiers has generally been increasing over the past couple of decades; targeting of grenadiers does not currently take place and what limited retention has taken place is best described as “exploratory” in nature as companies explore market possibilities. To date these market exploration activities can only be considered a failure and the prospect of a Giant grenadier market developing in the near future is best described as a hypothetical scenario.

There may be reasons for placing grenadiers in the FMP so that their status and role in the ecosystem can be monitored more accurately than they are now. Information suggests that grenadiers play an important role in the slope ecosystem due to their abundance there and – to the naked eye – catch volumes could be large enough to warrant some monitoring of these effects, even though catch rates are far below the OFL.

For these reasons, and others listed above, we believe it would be reasonable to leave grenadiers outside both the BSAI and GOA groundfish FMPs entirely. However, we recommend that Giant grenadiers be placed in the GOA and BSAI Groundfish FMPs and classified as “Ecosystem Component” species due to their apparent ecological importance on the continental slope. We envision the purpose for classifying them in this way is to primarily serve as a monitoring function and would not lead to the establishment of Annual Catch Limits. We do not believe the information supports the placement of Pacific or Popeye grenadier within either FMP as the available information indicates these species are largely outside the reach of existing fishing activity.



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**GF 13-013

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**Agenda Date:** 12/9/2013

**Agenda Number:** C-5

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

Discussion paper on directed fishing for Gulf of Alaska octopus and EGOA skates fishery

**ESTIMATED TIME:**

10 hours (all Groundfish Specifications items)

**ACTION REQUIRED:**

**BACKGROUND:**

In June 2013, the Council requested a discussion paper on the potential for a directed octopus fishery in the Gulf of Alaska (GOA) in 2014. The Council had also previously requested information for consideration of opening a directed fishery for skates in the EGOA. A combined discussion paper addressing both issues is attached. This discussion paper focuses upon the biology and life-history traits of octopus and skate species, catch in federal waters as well as state waters, and the process by which the Council could consider recommending directed fisheries for either octopus and skates. The Council requested that the GOA Plan Team consider area apportionment of the ABC for octopus as a step towards allowing a directed fishery. The GOA Plan Team comments are referenced in this paper and contained under agenda **Item C-6**. The Council will receive this report and take further action as needed.

# Gulf of Alaska Skate and Octopus Directed Fishery Considerations

Council staff discussion paper  
November 2013

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## 1 Introduction

In June 2013, the Council requested a discussion paper on the potential for a directed octopus fishery in the Gulf of Alaska (GOA) in 2014. The Council had also previously requested information for consideration of opening a directed fishery for skates in the EGOA. Per this request, information is assembled below in order to best inform the Council of the available stock assessment and management information as well as the process by which the Council could consider recommending a directed octopus fishery in the GOA. The Council will receive the GOA Plan Team comments in December and take further action at that time as needed.

## 2 Stock assessment overview

### *Skates:*

In the Gulf of Alaska (GOA), the most common skate species are two *Raja* species, the big skate *R. binoculata* and the longnose skate *R. rhina*, and three *Bathyraja* species, the Aleutian skate, *B. aleutica*, the Bering skate *B. interrupta*, and the Alaska skate *B. parmifera*. In the GOA separate specifications are established for big skates and longnose skates with species-specific gulf-wide OFLs, and species and area-specific ABCs. *Bathyraja* skates are managed as a complex under a single gulfwide OFL and ABC.

### *Octopus:*

At least seven species of octopus are found in the GOA. While the species composition of the natural community and the commercial harvest are not well documented, research indicates that the Giant Pacific octopus *Enteroctopus dofleini* is the most abundant species in shelf waters and comprises the majority of the catch in commercial fisheries (Connors et al., 2012). Octopus are currently grouped into a single assemblage and managed as a complex.

### 2.1 Life History and Stock Structure

#### *Skates:*

The following section has been excerpted from the 2011 GOA skate stock assessment (Ormseth, 2011). This represents the last ‘full’ assessment for GOA skate species due to the government shut-down in October 2013.

Skate life cycles are similar to sharks, with relatively low fecundity, slow growth to large body sizes, and dependence of population stability on high survival rates of a few well developed

offspring (Moyle and Cech 1996). Sharks and skates in general have been classified as “equilibrium” life history strategists, with very low intrinsic rates of population increase implying that sustainable harvest is possible only at very low to moderate fishing mortality rates (King and McFarlane 2003). Within this general equilibrium life history strategy, there can still be considerable variability between skate species in terms of life history parameters (Walker and Hislop 1998). While smaller-sized species have been observed to be somewhat more productive, large skate species with late maturation (11+ years) are most vulnerable to heavy fishing pressure (Walker and Hislop 1998; Frisk et al 2001; Frisk et al 2002). The most extreme cases of overexploitation have been reported in the North Atlantic, where the now ironically named common skate *Dipturus batis* has been extirpated from the Irish Sea (Brander 1981) and much of the North Sea (Walker and Hislop 1998). The mixture of life history traits between smaller and larger skate species has led to apparent population stability for the aggregated “skate” group in many areas where fisheries occur, and this combined with the common practice of managing skate species within aggregate complexes has masked the decline of individual skate species in European fisheries (Dulvy et al 2000). Similarly, in the Atlantic off New England, declines in barndoor skate abundance were concurrent with an increase in the biomass of skates as a group (Sosebee 1998).

Several recent studies have explored the effects of fishing on a variety of skate species in order to determine which life history traits might indicate the most effective management measures for each species. While full age-structured modeling is difficult for many of these data-poor species, Leslie matrix models parameterized with information on fecundity, age/size at maturity, and longevity have been applied to identify the life stages most important to population stability. Major life stages include the egg, juvenile, and adult stages (summarized here based on Frisk et al 2002). All skate species are oviparous (egg-laying), investing considerably more energy per large, well-protected embryo than commercially exploited groundfish. The large, leathery egg cases incubate for extended periods (months to a year) in benthic habitats, exposed to some level of predation and physical damage, until the fully formed juveniles hatch. The juvenile stage lasts from hatching through maturity, several years to over a decade depending on the species. The reproductive adult stage may last several more years to decades depending on the species.

Age and size at maturity and adult size/longevity appear to be more important predictors of resilience to fishing pressure than fecundity or egg survival in the skate populations studied to date. Frisk et al (2002) estimated that although annual fecundity per female may be on the order of less than 50 eggs per year (extremely low compared with teleost groundfish), there is relatively high survival of eggs due to the high parental investment, and therefore egg survival did not appear to be the most important life history stage contributing to population stability under fishing pressure. Juvenile survival appears to be most important to population stability for most North Sea species studied (Walker and Hilsop 1998), and for the small and intermediate sized skates from New England (Frisk et al 2002). For the large and long-lived barndoor skates, adult survival was the most important contributor to population stability (Frisk et al 2002). In all cases, skate species with the largest adult body sizes (and the empirically related large size/age at maturity, Frisk et al 2001) were least resilient to high fishing mortality rates. This is most often attributed to the long juvenile stage during which relatively large yet immature skates are exposed to fishing mortality, and also explains the mechanism for the shift in species composition to smaller skate species in heavily fished areas. Comparisons of length frequencies for surveyed North Sea skates from the mid- and late-1900s led Walker and Hilsop (1998, p. 399) to the conclusion that “all the breeding females, and a large majority of the juveniles, of *Dipturus batis*, *R. fullonica* and *R. clavata* have disappeared, whilst the other species have lost only the very largest individuals.” Although juvenile and adult survival may have different importance by skate species, all studies found that one metric, adult size, reflected their overall sensitivity to fishing.

After modeling several New England skate populations, Frisk et al (2002, p. 582) found “a significant negative, nonlinear association between species total allowable mortality, and species maximum size.”

There are clear implications of these results for sustainable management of skates in Alaska. After an extensive review of population information for many elasmobranch species, Frisk et al ((2001, p. 980) recommended that precautionary management be implemented especially for the conservation of large species:

“(i) size based fishery limits should be implemented for species with either a large size at maturation or late maturation, (ii) large species (>100 cm) should be monitored with increased interest and conservative fishing limits implemented, (iii) adult stocks should be maintained, as has been recommended for other equilibrium strategists (Winemiller and Rose 1992).”

#### Life history and stock structure (Alaska-specific)

Information on fecundity in North Pacific skate species is extremely limited. There are one to seven embryos per egg case in locally occurring *Raja* species (Eschmeyer et al 1983), but little is known about frequency of breeding or egg deposition for any of the local species. Similarly, information related to breeding or spawning habitat, egg survival, hatching success, or other early life history characteristics is extremely sparse for Gulf of Alaska skates (although current research is addressing these issues for Alaska skates in the Eastern Bering sea; J. Hoff, AFSC, pers. comm.; see also the 2009 BSAI skate SAFE, Ormseth and Matta 2009).

Slightly more is known about juvenile and adult life stages for Gulf of Alaska skates. In terms of maximum adult size, the *Raja* species are larger than the *Bathyraja* species found in the area. The big skate, *Raja binoculata*, is the largest skate in the Gulf of Alaska, with maximum sizes observed over 200 cm in the directed fishery in 2003. Observed sizes for the longnose skate, *Raja rhina*, are somewhat smaller at about 165-170 cm. Therefore, the Gulf of Alaska *Raja* species are in the same size range as the large Atlantic species, i.e., the common skate *Dipturus batis* and the barndoor skate *Dipturus laevis*, which historically had estimated maximum sizes of 237 cm and 180 cm, respectively (Walker and Hislop 1998, Frisk et al 2002). The maximum observed lengths for *Bathyraja* species from bottom trawl surveys of the GOA range from 86-154 cm.

Zeiner and Wolf (1993) determined age at maturity and maximum age for big and longnose skates from Monterey Bay, CA. The maximum age of CA big skates was 11-12 years, with maturity occurring at 8-11 years; estimates of maximum age for CA longnose skates were 12-13 years, with maturity occurring at 6-9 years. McFarlane and King (2006) completed a study of age, growth, and maturation of big and longnose skates in the waters off British Columbia (BC), finding maximum ages of 26 years for both species, much older than the estimates of Zeiner and Wolf. Age at 50% maturity occurs at 6-8 years in BC big skates, and at 7-10 years in BC longnose skates. However, these parameter values may not apply to Alaskan stocks. The AFSC Age and Growth Program has recently reported a maximum observed age of 25 years for the longnose skate in the GOA, significantly higher than that found by Zeiner and Wolf but close to that observed by McFarlane and King (Gburski et al 2007). In the same study, the maximum observed age for GOA big skates was 15 years, closer to Zeiner and Wolf's results for California big skates.

Some additional information was provided during the Plan Team meeting in November regarding the potential biological concerns with a directed skate fishery in the EGOA. There remains considerable uncertainty in estimation of life-history parameters such as natural mortality. There is also uncertainty in

population structure and movement. A recent CIE review also noted that there is some evidence that the use of  $M$  as a proxy for  $F_{OFL}$  may not apply to long-lived, late-maturing species.

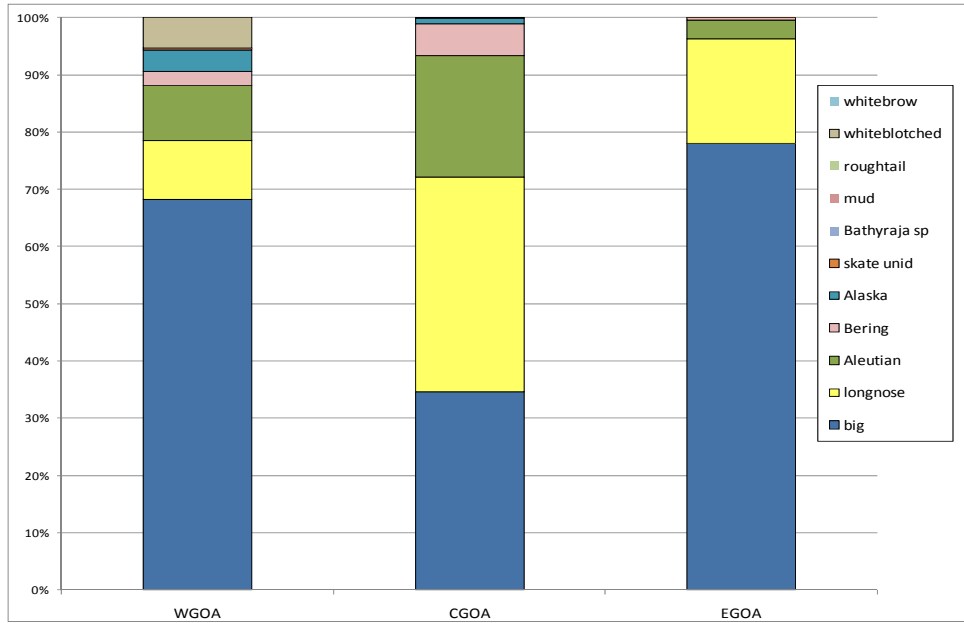


Figure 1 2011 Survey biomass by skate species by management area.

Big skates comprise the majority of the 2011 biomass in the EGOA with longnose skates as the next largest component (Figure 1). During the Plan Team meeting, the stock assessment author noted the size composition differences among GOA regulatory areas for big and longnose skates (Figure 2). Big skates in the EGOA in particular tend to be smaller and are likely immature.

Previous skate stock assessments have recommended area-specific ABCs and OFLs for big and longnose skates noting that these species display sensitive life history traits (large size, late maturity, and low fecundity), and retention of skates is extremely localized (Ormseth and Matta, 2009). However the Plan Team and SSC have yet to recommend area-specific OFLs. In continuing to recommend GOA-wide OFLs for big and longnose skates the SSC concurred with the GOA Plan Team's rationale "that a single OFL provides adequate precaution given the bycatch-only status of the current catches." (SSC minutes 2009).

The Team requested that for September 2014 the authors provide the stock structure template for skate species in the GOA and any other information that would assist in determining whether there is a conservation concern under current harvest levels. More information is included in the incidental catch section of this report.

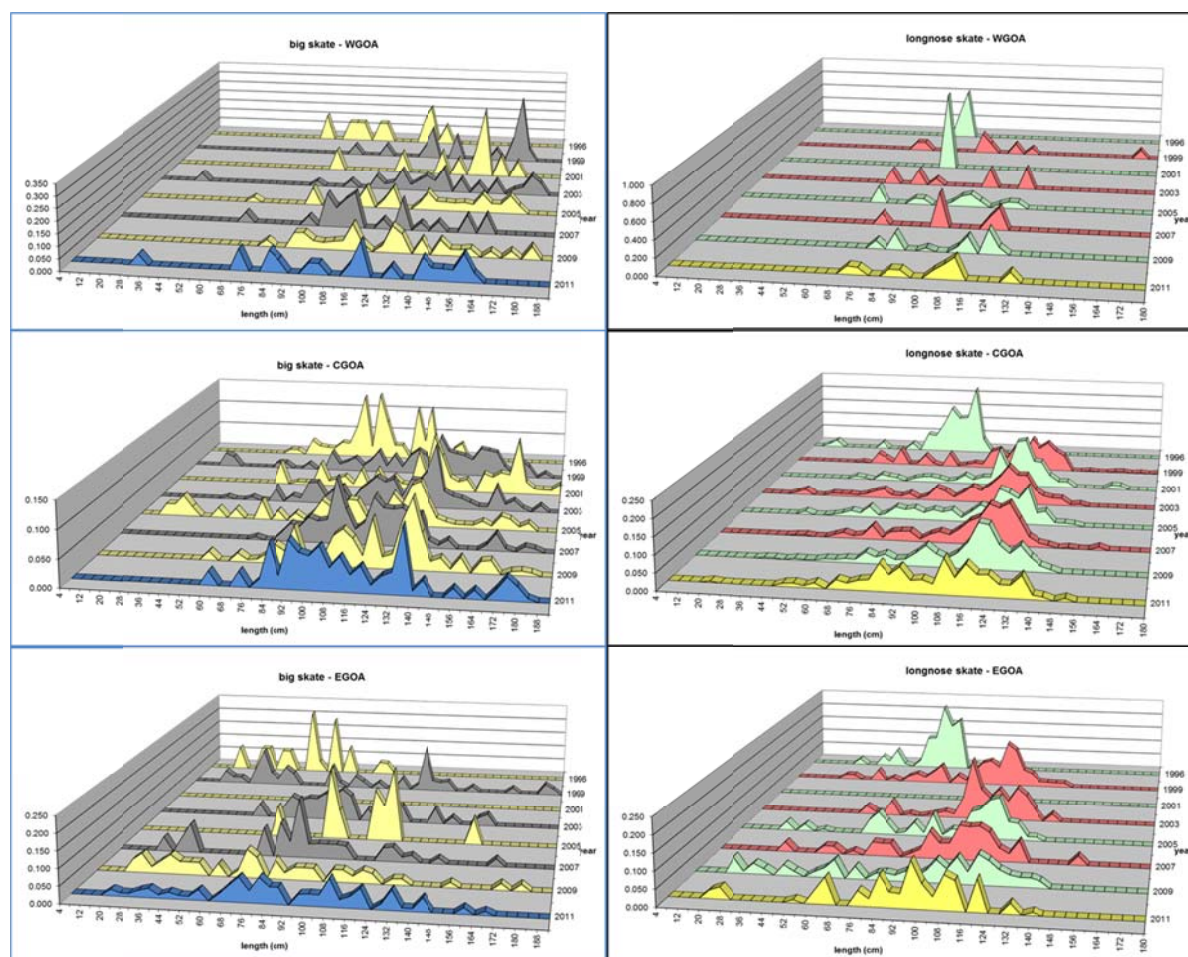


Figure 2 Length-frequency of big and longnose skates by regulatory area from survey data (Ormseth, pers. Comm.)

#### *Octopus:*

The following section has been excerpted from the 2012 GOA Octopus stock assessment (Connors et al., 2012):

In general, octopuses are fast growing with a life span generally less than 5 years. Life histories of seven of the eight species in the Gulf of Alaska are largely unknown. *Enteroctopus dofleini* has been studied extensively in Alaskan, Japanese and Canadian waters and its life history will be reviewed here; generalities on the life histories of the other seven species will be inferred from what is known about other members of the genus.

*Enteroctopus dofleini* within the Gulf of Alaska have been found to mature between 10 to 20 kg with 50% maturity values of 13.7 kg (95% CI 12.5-15.5 kg) for females and 14.5 kg (95% CI = 12.5-16.3 kg) for males (Conrath and Connors, in press). *Enteroctopus dofleini* are problematic to age due to soft chalky statoliths (Robinson and Hartwick 1986). Therefore the determination of age at maturity is difficult for this species. In Japan, this species is estimated to mature at 1.5 to 3 years and at similar but smaller size ranges (Kanamaru and Yamashita 1967, Mottet 1975). Within the Gulf of Alaska this species has a protracted reproductive cycle with a peak in spawning in the winter to early spring months. Due to differences in the timing of peak gonad development between males and females it is likely that females have the capability to store

sperm. This phenomenon has been documented in an aquarium study of octopus in Alaska (Jared Gutheridge pers com) and British Columbia (Gabe 1975). Fecundity for this species ranges from 40,000 to 240,000 eggs per female with an average fecundity of 106,800 eggs per female. Fecundity is significantly and positively related to the size of the female. The fecundity of *E. dofleini* within this region is higher than that reported for other regions. The fecundity of this species in Japanese waters has been estimated at 30,000 to 100,000 eggs per female (Kanamaru 1964, Mottet 1975, Sato 1996). Gabe (1975) estimated a female in captivity in British Columbia laid 35,000 eggs. Hatchlings are approximately 3.5 mm. Mottet (1975) estimated survival to 6 mm at 4% while survival to 10 mm was estimated to be 1%; mortality at the 1 to 2 year stage is also estimated to be high (Hartwick, 1983). Since the highest mortality occurs during the larval stage, it is probable that ocean conditions have a large impact on numbers of *E. dofleini* in the GOA and large fluctuations in numbers of *E. dofleini* should be expected.

*Enteroctopus dofleini* is found throughout the northern Pacific Ocean from northern Japanese waters, throughout the Aleutian Islands, the Bering Sea and the Gulf of Alaska and as far south down the Pacific coast as southern California (Kubodera, 1991). The stock structure and phylogenetic relationships of this species throughout its range have not been well studied. Three sub-species have been identified based on large geographic ranges and morphological characteristics including *E. dofleini dofleini* (far western North Pacific), *E. dofleini apollyon* (waters near Japan, Bering Sea, Gulf of Alaska), and *E. dofleini martini* (eastern part of their range, Pickford 1964). A recent genetic study (Toussaint et al. 2012) indicate the presence of a cryptic species of *E. dofleini* in Prince William Sound, Alaska and raises questions about the stock structure of this species. There is little information available about the migration and movements of this species in Alaska waters. Kanamaru (1964) proposed that *E. dofleini* move to deeper waters to mate during July through October and then move to shallower waters to spawn during October through January in waters off of the coast of Hokkaido, Japan. Studies of movement in British Columbia (Hartwick et al. 1984) and south central Alaska (Scheel and Bisson 2012) found no evidence of a seasonal or directed migration for this species, but longer term tagging studies may be necessary to obtain a complete understanding of the migratory patterns of this species. Additional genetic and/or tagging studies are needed to clarify the stock structure of this species in Alaska waters.

*Octopus californicus* is a medium-sized octopus with a maximum total length of approximately 40 cm. Very little is known about this species of octopus. It is collected between 100 to 1,000 m depth in Alaska and has been reported in even deeper waters off the coast of California (Smith and Mackenzie 1948). It is believed to spawn 100 to 500 eggs. Hatchlings are likely benthic; hatchling size is unknown. The female likely broods the eggs and dies after hatching.

*Octopus rubescens* has been reported from Prince William Sound in the central GOA, but has not been verified in survey collections. *Octopus rubescens* appears to have a two year life cycle with egg laying occurring in July through September and hatching occurring 5 to 10 months later in February through March. Females of this species are terminal spawners estimated to lay approximately 3,000 eggs (Dorsey 1976). *Octopus rubescens* has a planktonic larval stage.

*Octopus sp. A* is a small-sized species with a maximum total length < 10 cm. This species has only recently been identified in the GOA and its full taxonomy has not been determined. *Octopus sp. A* is likely a terminal spawner with a life-span of 12 to 18 months. The eggs of *Octopus sp. A* are likely much larger than those of *O. rubescens*, as they appear to have larger benthic larvae. Females of *Octopus sp. A* lay between 80 to 90 eggs that take up to six months or more to hatch.

*Benthoctopus leioderma* is a medium sized species; its maximum total length is approximately 60 cm. Its life span is unknown. It occurs from 250 to 1400 m and is found throughout the shelf break region. It is a common octopus and often occurs in the same areas where *E. dofleini* are found. The eggs are brooded by the female but mating and spawning times are unknown. Members of this genus in the North Pacific Ocean have been found to attach their eggs to hard substrate under rock ledges and crevices (Voight and Grehan 2000). *Benthoctopus* tend to have small numbers of eggs (<200) that develop into benthic hatchlings.

*Opisthoteuthis californiana* is a cirrate octopus; it has fins and cirri (on the arms). It is common in the GOA but is not likely to be confused with *E. dofleini*. It is found from 300 to 1,100 m and is likely common over the abyssal plain. *Opisthoteuthis californiana* in the northwestern Bering Sea have been found to have a protracted spawning period with multiple small batch spawning events. Potential fecundity of this species was found to range from 1,200 to 2,400 oocytes (Laptikhovsky 1999). There is evidence that *Opisthoteuthis species* in the Atlantic undergo ‘continuous spawning’ with a single, extended period of egg maturation and a protracted period of spawning (Villanueva 1992). Other details of its life history remain unknown.

*Japetella diaphana* is a small pelagic octopus. Little is known about members of this family. In Hawaiian waters gravid females are found near 1,000 m depth and brooding females near 800 m depth. Hatchlings have been observed to be about 3 mm mantle length (Young 2008). This is not a common octopus in the GOA and not likely to be confused with *E. dofleini*.

*Vampyroteuthis infernalis* is a cirrate octopus. It is not common in the GOA and is easily distinguishable from other species of octopus by its black coloration. Very little is known about its reproduction or early life history. An 8 mm ML hatchling with yolk was captured near the Hawaiian Islands indicating an egg size of around 8 mm for this species (Young and Vecchione 1999).

In summary, there are at least seven species of octopus present in the GOA, and the species composition both of natural communities and commercial harvest is unknown. At depths less than 200 meters, *E. dofleini* appears to have the highest biomass, but the abundances of *Octopus sp. A* and *B. leioderma* are also very high. The greatest difference in species composition between the Bering Sea Aleutian Islands (BSAI) and the GOA is the presence of *O. californicus* and the small *Octopus sp. A*.

The GOA trawl surveys produce estimates of biomass for octopus, but these estimates are highly variable and may not reflect the same size octopus caught by industry (Connors et al., 2012). Octopus are taken in trawl, longline and pot fisheries in the GOA with the highest catch rates from the Pacific cod pot fisheries in the central and western GOA. A portion of the catch is retained or sold for human consumption or bait.

Data are currently insufficient to support a model-based assessment for GOA octopus. The SSC has determined that GOA octopus are in Tier 6 due to inadequate data to reliably estimate biological parameters for Tier 5. There are no historical records of directed fishing for octopus, thus catch estimates are for incidental catch in groundfish fisheries (Connors et al., 2012). This complicates the ability to set an average catch-based OFL and ABC. A modified Tier 6 approach has been considered using the maximum incidental catch from 1997-2006 to set the OFL with  $ABC = 75\%$  of the OFL. However since 2010 the GOA PT and the SSC have recommended using an average of the last three survey biomass estimates and applying a Tier 5 calculation to obtain an OFL. This modified Tier 6 approach includes a conservative estimate of natural mortality of 0.53 and a minimum biomass estimate using the average of the last three surveys. Using a Tier 5-like calculation of OFL, average minimum  $B \times M$  ( $3,662 \text{ t} \times 0.53 = 1,941 \text{ t}$ ) and the ABC equal to  $0.75 \times \text{OFL}$  (1,455 t) is estimated. 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 OFL and ABC for the complex have been managed gulf-wide.

The stock assessment author currently does not recommend a directed fishery without further information being available on an appropriate index for octopus. However the author has indicated that a small experimental fishery which would provide more biological information and further develop octopus-specific index survey gear could be useful. The GOA Plan Team did not comment on the extent to which a directed fishery would be recommended, but did note that should a directed fishery be considered that the ABC should be apportioned by area and consideration given to appropriate size restrictions. The GOA Plan Team area apportionment recommendation approach is listed in section 3.

### **3 Catch and in-season management**

#### **3.1 Incidental catch information**

##### *Skates:*

Catches of big and longnose skates by management area and target fishery as reported in the 2013 assessment are given in Table 1 through Table 4. Considered GOA-wide, incidental catch of big skates is highest in the arrowtooth flounder target, the Pacific cod target and the IFQ halibut fisheries. For longnose skates GOA-wide, the IFQ halibut fishery has the highest catches followed by Pacific cod target and arrowtooth flounder target. Reported catches in the IFQ halibut fishery are notably higher in 2013 than the estimates indicated in previous years. 2013 is the first year that observer coverage included the IFQ halibut fishery under the restructured program.

Table 1 Time series of ABC, OFL and catch (t) for skates, beginning in 2004 when they were first managed outside of the 'other species' category. Outlined cells in bold indicate years/areas where the catch exceeded the ABC. 2013 catch data are incomplete; retrieved September 18, and EGOA catches include statistical areas 649 and 659.

	ABC			OFL	estimated skate catch			management method
	W	C	E		W	C	E	
<b>2004</b>		4,435 3,709		<b>10,859</b>		1,569 1,451		big/longnose CGOA o.skates GW, big/longnose W/E
<b>2005</b>	727	2,463	809	5,332	26	811	67	big (ABC by area)
	66	1,972	780	3,757	37	993	173	longnose (ABC by area)
		1,327		1,769		719		other skates gulfwide
<b>2006</b>	695	2,250	599	4,726	72	1,268	359	big (ABC by area)
	65	1,969	861	3,860	57	679	240	longnose (ABC by area)
		1,617		2,156		1,402		other skates gulfwide
<b>2007</b>	695	2,250	599	4,726	69	1,517	9	big (ABC by area)
	65	1,969	861	3,860	76	966	335	longnose (ABC by area)
		1,617		2,156		1,241		other skates gulfwide
<b>2008</b>	632	2,065	633	4,439	132	1,241	48	big (ABC by area)
	78	2,041	768	3,849	34	965	115	longnose (ABC by area)
		2,104		2,806		1,403		other skates gulfwide
<b>2009</b>	632	2,065	633	4,439	73	1,827	128	big (ABC by area)
	78	2,041	768	3,849	77	1,037	277	longnose (ABC by area)
		2,104		2,806		1,341		other skates gulfwide
<b>2010</b>	598	2,049	681	4,438	146	<b>2,220</b>	172	big (ABC by area)
	81	2,009	762	3,803	104	843	181	longnose (ABC by area)
		2,093		2,791		1,488		other skates gulfwide
<b>2011</b>	598	2,049	681	4,438	94	<b>2,075</b>	126	big (ABC by area)
	81	2,009	762	3,803	62	863	106	longnose (ABC by area)
		2,093		2,791		1,211		other skates gulfwide
<b>2012</b>	469	1,793	1,505	5,023	66	<b>1,894</b>	59	big (ABC by area)
	70	1,879	676	3,500	38	771	104	longnose (ABC by area)
		2,030		2,706		1,228		other skates gulfwide
<b>2013*</b>	469	1,793	1,505	5,023	83	<b>1,853</b>	<b>167</b>	big (ABC by area)
	70	1,879	676	3,500	43	995	<b>724</b>	longnose (ABC by area)
		2,030		2,706		1,572		other skates gulfwide

Table 2 Catches (t) of Big skates in the GOA by target fishery, 2003-2013. Data are from the Alaska Regional Office Catch Accounting System. The 2013 data are incomplete; retrieved September 18, 2013. ATF = arrowtooth flounder, FHS = flathead sole.

<b>big skate</b>											
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013*</b>
ATF		140	225	163	299	219	433	478	812	677	918
Pacific cod		331	222	417	537	586	550	940	919	755	548
IFQ halibut		24	37	577	11	36	90	43	132	38	298
rex sole		31	49	99	74	70	264	172	106	140	145
pollock		1	2	23	38	22	34	47	93	48	127
shallow flat		237	251	350	608	413	535	707	190	288	44
FHS		38	21	30	23	66	53	112	31	57	15
sablefish		6	24	9	6	3	5	11	3	3	5
rockfish		16	19	4	0	4	4	14	8	13	2
other		376	56	27	0	2	60	14	1	0	1
deep flat		4	0	0	0	0	0	1	1	0	0
<b>GOA total</b>		<b>1,204</b>	<b>904</b>	<b>1,699</b>	<b>1,595</b>	<b>1,421</b>	<b>2,028</b>	<b>2,539</b>	<b>2,295</b>	<b>2,020</b>	<b>2,103</b>

Table 3 Catches (t) of Longnose skates in the GOA by target fishery, 2003-2013. Data are from the Alaska Regional Office Catch Accounting System. The 2013 data are incomplete; retrieved September 18, 2013. ATF = arrowtooth flounder, FHS = flathead sole.

<b>longnose skate</b>											
	<b>2003</b>	<b>2004</b>	<b>2005</b>	<b>2006</b>	<b>2007</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013*</b>
IFQ halibut	1	35	106	197	394	109	379	115	171	88	904
Pacific cod	10	83	139	165	306	361	325	425	346	329	347
ATF	14	63	373	135	165	212	152	166	238	181	212
sablefish	16	121	113	306	264	123	79	98	77	111	152
rex sole	0	13	19	29	24	36	82	52	44	45	54
shallow flat	3	26	278	97	168	227	239	173	78	65	45
pollock	0	0	5	13	27	24	35	10	35	9	22
rockfish	1	32	20	21	17	12	17	12	25	23	18
FHS	9	7	11	11	13	11	24	30	17	60	8
other	0	155	137	2	0	0	61	47	0	0	1
deep flat	0	3	1	0	0	0	0	1	0	0	0
<b>GOA total</b>	<b>53</b>	<b>539</b>	<b>1,202</b>	<b>976</b>	<b>1,377</b>	<b>1,114</b>	<b>1,392</b>	<b>1,129</b>	<b>1,032</b>	<b>912</b>	<b>1,762</b>

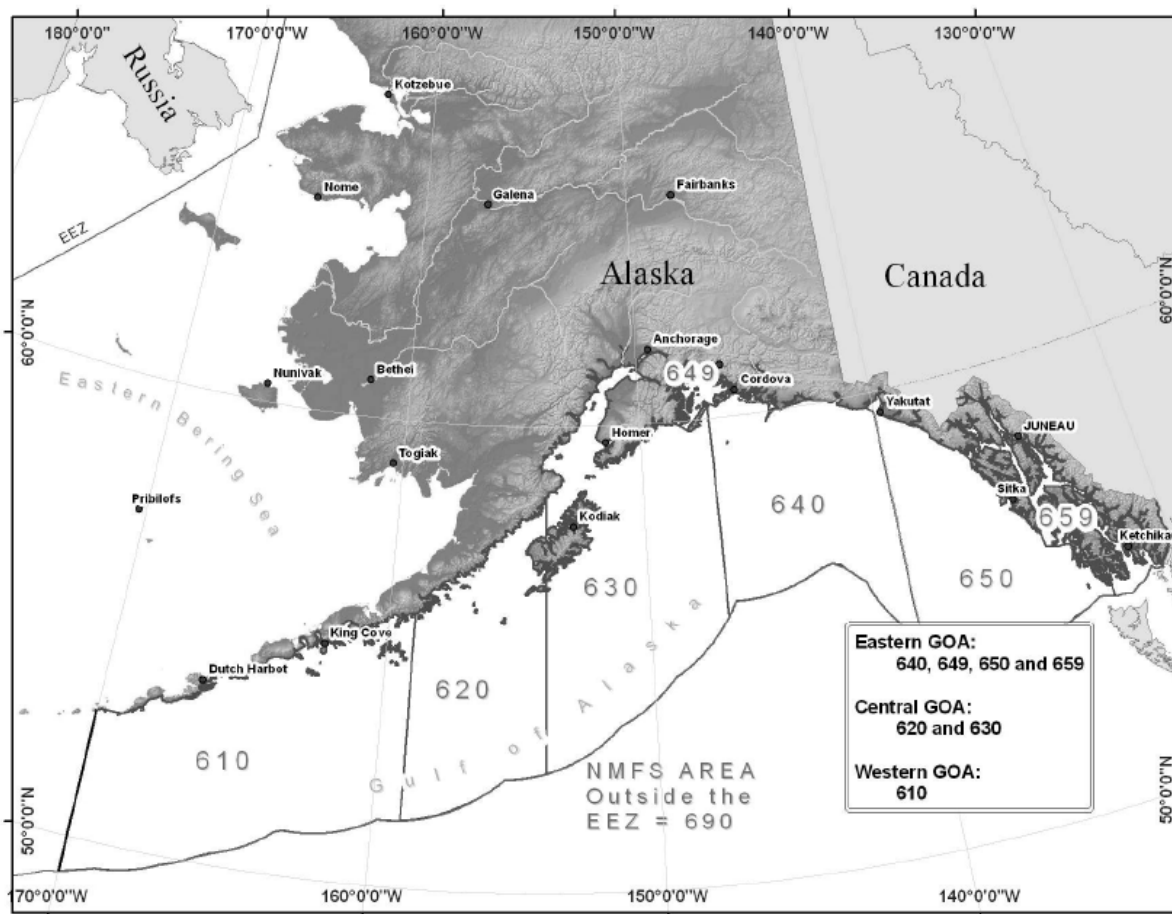


Figure 3 GOA management areas. Note that EGOA includes 649 and 659.

One issue that has been raised to the GOA Plan Team by NMFS RO staff this year is the relative catch in EGOA areas 649 (Prince William Sound) and 659 (Southeast; Figure 3). Currently, skates are a federally managed species. In state waters, federal fisheries catches are included in the Catch Accounting System (CAS) but do not currently accrue towards the federal TAC. This issue is reflected in the GOA Plan Team report as a general issue for multiple stocks, but given the increase in catch estimation in 2013 (presumably under increased observations on federally fishing smaller vessels) this is of particular note for skates. Incidental catch in 2013 by target and management area, including areas 649 and 659, is shown in Table 4. While the ABC has been exceeded in the central GOA for big skates for multiple years (Table 1), when 649/659 catches are included in estimates for EGOA the ABC for longnose is also exceeded. This raises concerns about the potential for directed fishing on skates in the EGOA.

Retention rates have been fairly high in recent years indicating that skates are being retained and processed as bycatch in other directed fisheries (Table 5).

Table 4 Incidentally caught skate species in 2013 by target and management area in GOA.

**Longnose skate**

	bot_pol	P cod	shal_flat	IFQ halibut	rockfish	FHS	other	pel_pol	sablefish	ATF	rex
610	0	12	0	61	0	1	0	0	7	0	1
620	13	54	14	106	5	0	0	4	4	12	42
630	8	221	49	241	18	7	1	0	171	209	11
640	0	15	0	181	0	0	0	0	73	0	0
649	0	70	0	8	0	0	0	0	0	0	0
650	0	0	0	86	0	0	0	0	39	0	0
659	0	2	0	277	0	0	0	0	4	0	0
Grand Total	21	374	64	960	23	8	1	4	299	221	54

**Big skate**

	bot_pol	P cod	shal_flat	IFQ halibut	rockfish	FHS	other	pel_pol	sablefish	ATF	rex
610	1	32	0	70	0	6	0	0	2	0	1
620	62	135	19	148	1	0	0	11	0	65	115
630	141	337	95	137	0	8	1	0	2	879	30
640	0	16	0	25	0	0	0	0	2	0	0
649	0	29	0	5	0	0	0	0	0	0	0
650	0	0	0	27	0	0	0	0	2	0	0
659	0	1	0	89	0	0	0	0	0	0	0
Grand Total	204	550	113	501	2	15	1	11	8	944	145

Table 5 Retention rates of skates since 2007 in GOA. Data are from the Alaska Regional Office discard and retention reports. 2013 data are incomplete; retrieved October 28.

	other skates	big skate	longnose skate
2007	27%	46%	28%
2008	17%	70%	64%
2009	18%	76%	51%
2010	15%	72%	64%
2011	19%	81%	65%
2012	13%	93%	74%
2013*	1%	68%	36%

**Octopus:**

Catch specifications and catch in recent years are shown below. As noted the incidental catch is primarily in the Pacific cod pot fisheries in the western and central GOA.

Year	OFL	ABC	TAC	Catch
2011	1,272	954	954	917
2012	1,941	1,455	1,455	421
2013 (through 9/18)	1,941	1,455	1,455	214

In 2012, 23% of the catch was discarded while in 2013 to date 56% has been discarded. Discard mortality rate estimation analyses are underway by the stock assessment author but are not currently employed in management thus mortality is assumed to be 100% for purposes of accrual against the TAC.

Table 6 Estimated state and federal catch (t) of all octopus species combined, by target fishery. Catch for 1997-2002 estimated from blend data. Catch for 2003-2013 data from AK region catch accounting. \*Data for 2013 are as of September 18, 2013; catch figures for flatfish targets have been revised to include the IFQ Halibut fishery.

Year	Target Fishery						Total
	Pacific cod	Pollock	Flatfish*	Rockfish	Sablefish	Other	
1997	193.8	0.7	1.3	2.3	22.4		232
1998	99.7	3.5	4.3	0.8	0.3		112
1999	163.2	0	2.4	0.5	0.2		166
2000	153.5	-	0.7	0.2	0.5		156
2001	72.1	0.2	0.8	0	2		88
2002	265.4	0	17.2	0.7	1		298
2003	188.9	-	17.2	0.6	2.9	0.1	210
2004	249.8	0.0	2.8	0.4	0.1	16.5	270
2005	138.6	0.1	8.7	0.2	0.2	1.7	149
2006	151.0	3.4	10.7	0.5	0.3	0.2	166
2007	242.0	1.5	12.1	0.1	1.8	-	257
2008	326.0	0.0	9.5	2.9	0.2	0.1	339
2009	296.7	0.1	10.4	1.2	2.3	0.9	312
2010	265.2	0.8	16.6	3.7	1.1	41.9	329
2011	859.6	2.3	53.2	0.9	0.8	1.1	918
2012	413.9	0.4	4.6	0.9	0.8	-	421
2013*	122.9	0.2	75.6	1.4	13.5	0.0	214

Per Council request, the GOA Plan Team discussed how to apportion octopus across management areas. The Team considered two different approaches, incidental catch by region (Table 7) or survey biomass by region (Table 8). The Team recommended that should a directed fishery be considered that the ABC should be apportioned by area. The Team recommended an apportionment based on the average biomass proportions from most recent 3 survey years: Western 35%, Central 63%, East 2%.

Table 7 Distribution of Octopus catch data for GOA regions, 2003 – 2013 (\*2013 data through Sept, 2013).

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013*
Western	69%	69%	39%	23%	25%	37%	45%	43%	61%	42%	32%
Central	29%	30%	61%	77%	75%	63%	55%	57%	38%	58%	58%
Eastern	1.1%	0.2%	0.0%	0.3%	0.1%	0.0%	0.2%	0.1%	0.3%	0.0%	9.2%
Total											
Catch (t)	210	270	149	166	257	339	312	329	918	421	214

Table 8 Estimated biomass from three most recent AFSC trawl surveys.

	Western	Central	Eastern
2009 Survey Biomass	46%	52%	1.9%
2011 Survey Biomass	25%	73%	1.6%
2013 Survey Biomass	35%	61%	4.5%
3 Survey Average	35%	63%	2.4%

### 3.2 State waters catch

#### *Skates:*

A state fishery existed in Prince William Sound for Big and Longnose skates in 2009 and 2010. The following description of the fishery and fisheries management was provided by the ADF&G regarding that fishery:

The Prince William Sound (PWS) directed skate fishery, targeting big *Raja binoculata* and longnose *Raja rhina* skates, began in 2009 following receipt of a \$50K capital budget increment. Fisheries occurred in 2009 and 2010 and were managed under a commissioner's permit described in regulation 5 AAC 28.083. The permit stipulated species, season, fishing area, logbooks, catch reporting, prior notice of departure and landing, and accommodation of a department observer. In 2010, the permit also stipulated a big skate trip limit of 2,500 lb per two-day period due to overharvest in 2009. Harvest levels for the fishery were set for the PWS Inside and Outside districts (Figure 4).

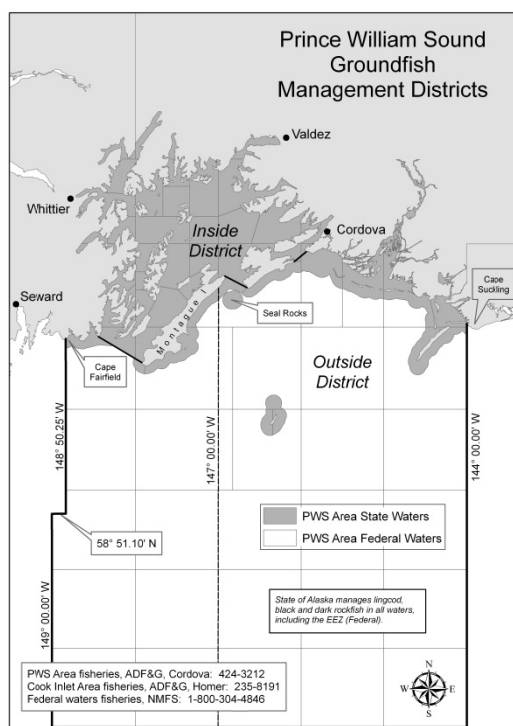


Figure 4 State of Alaska Prince William Sound groundfish fishing districts

Using estimates of skate abundance derived from PWS Inside District trawl survey data and applying a harvest rate for longnose skate of 0.034% and 0.045% in 2009 and 2010 respectively (identical to federal BSAI rates and refers to most recent 5-year average). For big skate, the lower 0.034% harvest rate from 2009 was used for both years, due to overharvesting in 2009. Applying described harvest rates resulted in Inside District guideline harvest levels (GHL) of 20,000 lb and 100,000 lb (110K in 2010) for big and longnose skates respectively. Lacking survey data for the Outside District, big and longnose skate GHLs were set at 30,000 lb and 150,000 (155K in 2010) based upon a fishing area approximately 50% larger than the Inside District. Total skate harvest including bycatch is shown in Table 9.

Table 9 Total skate harvest in PWS directed skate fishery (includes bycatch)

Year	Skate Species	Inside District GHL (lb)	Inside District Harvest	Inside District Remaining	Outside District GHL (lb)	Outside District Harvest	Outside District Remaining
2009	Big	20,000	47,220	-27,220	30,000	82,793	-52,793
	Longnose	100,000	68,828	31,172	150,000	59,538	90,462
2010	Big	20,000	20,382	-382	30,000	6,190	23,810
	Longnose	110,000	68,681	41,319	155,000	9,257	145,743

Table 10 Catch abundance and results of selected species and species groups from observed longline sets during the PWS pilot program directed skate fishery.

Year	District	Big Skate		Longnose Skate		Other skate		Pacific Halibut		Rockfish		Other species	
		Ret	Disc	Ret	Disc	Ret	Disc	Ret	Disc	Ret	Disc	Ret	Disc
2009	Inside	0	567	777	7	0	182	0	598	49	0	1,012	319
	Outside	138	3	34	0	0	135	0	361	0	0	86	60
	<b>2009 Total</b>	<b>138</b>	<b>570</b>	<b>811</b>	<b>7</b>	<b>0</b>	<b>317</b>	<b>0</b>	<b>959</b>	<b>49</b>	<b>0</b>	<b>1,098</b>	<b>379</b>
2010	Inside	295	623	1,340	27	0	785	203	1,653	241	1	1,770	1,345
	Outside	194	391	382	6	0	93	0	572	0	0	500	398
	<b>2010 Total</b>	<b>489</b>	<b>1,014</b>	<b>1,722</b>	<b>33</b>	<b>0</b>	<b>878</b>	<b>203</b>	<b>2,225</b>	<b>241</b>	<b>1</b>	<b>2,270</b>	<b>1,743</b>
<b>Fishery Totals</b>		<b>627</b>	<b>1,584</b>	<b>2,533</b>	<b>40</b>	<b>0</b>	<b>1,195</b>	<b>203</b>	<b>3,184</b>	<b>290</b>	<b>1</b>	<b>3,368</b>	<b>2,122</b>

Note: Ret=Retained; Disc=Discarded

The decision to not fish in 2011 involved consideration of the lack of comprehensive stock assessment data, relative catch and composition of skate species, bycatch, other skate harvest opportunities, and cost of management. Stock assessment limitations were twofold. The trawl survey, designed to assess Tanner crab, occurred only in PWS Inside District waters deeper than 50 fathoms. Big skates are known to inhabit shallower waters. The disparate GHs for big and longnose skates were possibly attributable to the lack of survey data from shallower waters in the Inside District and the absence of survey data from predominantly shallow waters of the Outside District. Catch per unit effort declined slightly between years for big skate from 0.99 lb/hook to 0.79 lb/hook and for longnose skate from 0.66 lb/hook to 0.58 lb/hook. Catch composition differed between skate species with big skate catches comprised predominately of immature females and longnose skate catches comprised of mature males and females.

Although the observed abundance of each skate species was approximately equal, the biomass of big skates was greater. As a result, big skate GHs in 2009, and trip limits in 2010, were quickly attained which resulted in high discards of big skate while trying to target longnose skates. Although skate discard mortality rates are unknown, there were observations of skate and halibut jaws being cut to release fish. Among observed sets in both years, halibut bycatch abundance exceeded the catch of either skate species and the catch ratio of halibut to both skate species combined was 0.7.

Other skate harvest opportunities were a factor in 2010 when vessels permitted to target Pacific cod in the federal EGOA opted to do so and with a skate bycatch allowance of 20% were able to retain more big skates than could be retained in the directed state waters fishery under trip limits. Also in 2010, the federal CGOA big skate TAC was achieved under a bycatch-only management regime. This strongly suggests that extant fisheries provide adequate opportunity to harvest skates at sustainable levels even under bycatch-only restrictions. Finally, cost was an important consideration. Given the observed levels of bycatch and the questions surrounding the appropriateness of GHs and catch composition it would be important to continue observer coverage and maintain the close level of contact with the fleet. This is a costly approach and ADF&G lacks the funds for this level of management.

#### *Octopus:*

State fisheries exist in Cook Inlet and Prince William Sound. GHs were established based on historical catches and are as follows: Cook Inlet is GH 35,000 lb (15.3 t); Prince William Sound GH is a range from 0-35,000 lb (15.3 t). The GH was reached in Cook Inlet in 2013, and has been achieved or within

1,000 lbs. of the GHL for the past 7 years. PWS octopus harvest has been minimal since 2002. Catch from Cook Inlet and Prince William Sound fisheries are shown in Table 11.

Table 11 Central Region Octopus Harvest 2002-2013

Year	PWS Area			Cook Inlet Area		
	Vessel	Landings	Harvest	Vessel	Landings	Harvest
2002	c	c	c	11	166	38,522
2003	c	c	c	8	133	30,322
2004	c	c	c	11	127	35,981
2005	c	c	c	9	104	34,977
2006	c	c	c	8	108	30,558
2007				7	85	36,017
2008	c	c	c	8	136	35,325
2009				15	110	37,517
2010	4	24	939	13	107	33,595
2011				15	104	37,606
2012	3	7	105	13	151	34,877
2013	9	50	1,095	15	135	35,731

- 'c' indicate confidential data.
- Data includes nominal amounts of octopus discarded at sea.
- Primary harvest occurs during pot fisheries.
- 2013 numbers are not final.

### 3.3 In-season management issues

Both skates and octopus are currently managed in the GOA on bycatch-only status. Separate area-specific ABCs and TACs are set for big and longnose skates. Thus, should the Council recommend and NMFS approve opening a directed fishery for skates in the EGOA for big and longnose skates, no modification to the current specifications process is needed. Octopus however, is managed under a gulfwide TAC and on bycatch-only status. Should the Council recommend (and NMFS approve) opening a directed fishery for octopus in the upcoming specifications cycle, the following process would need to occur:

1. GOA Plan Team recommended options for area-specific ABC break-outs to be included in the November assessment. (note the Plan Team provided their recommendation for an area apportionment should the SSC and Council decide to apportion octopus to allow for a directed fishery).
2. The November octopus stock assessment would need to include options (or sufficient information to calculate) ABC by area to be recommended by the GOA PT.[Note this information is provided in this paper as well as the introduction to the GOA SAFE report and GOA Plan Team minutes].
3. SSC would need to recommend area-specific ABCs in December. Council would then be able to establish TACs by area. These catch limits would not be effective until February/March absent NMFS revising the final 2013/14 harvest specifications for January 1, 2014. Thus opening a directed fishery would not occur until the 2014/15 harvest specifications are approved.

4. For catch accounting and fish tickets there is only one species code, 870. At least seven species are found in the GOA. The species composition both of the natural community and the commercial harvest is not well documented, but research indicates that the Giant Pacific octopus, *Enteroctopus dofleini*, is the most abundant octopus species in shelf waters and makes up the bulk of octopus catches in commercial fisheries. It may be necessary to have a separate species code for Giant Pacific octopus. This is a regulatory amendment (proposed and final rulemaking) for Table 2a FMP Species Codes and a Catch Accounting System programming change.
5. Species identification guides for industry (vessel and plant operators) may be needed. This would depend on how difficult octopus are to identify. Guides for rockfish and skates have been provided previously. As an alternative, retention of smaller octopus could be prohibited to limit harvest to *E. dofleini* (other species do not grow as large).
6. Maximum retainable amounts would be unchanged (<http://alaskafisheries.noaa.gov/rr/tables/tab110.pdf>). If octopus were to open for directed fishing then retained octopus could be used as a basis species even though the species in the "other species" group are not open for directed fishing. However, if it was decided that octopuses needed to be separate from "other species" in 50 CFR 679, Table 10, then it is a regulatory amendment (proposed and final rulemaking).

The following items apply equally to directed fishing for skates and octopus:

7. An assessment would need to be made if an octopus directed fishery or a skate directed fishery would increase incidental catch of groundfish or other PSC species.
8. An assessment of gear specifications may be needed. The EGOA is closed to trawling so it would be a fixed-gear only fishery. Octopus habitat pots are generally longlined, which is prohibited for crab pots. It is also possible to fish octopus with trawls and tangle hooks, or by scuba diving. Some kind of gear specifications would probably be needed.

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# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**GF 13-029

**Agenda Date:** 12/9/2013

**Agenda Number:** C-6

**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

Adopt final harvest specifications for GOA groundfish

**ESTIMATED TIME:**

10 hours (all Groundfish Specifications items)

**ACTION REQUIRED:**

Review and approve GOA SAFE report (including Ecosystem and Economic SAFEs) and approve final GOA Harvest Specifications for 2014-2015 including:

1. Acceptable Biological Catch (ABC), and annual Total Allowable Catch (TAC)
2. TAC considerations for the State Pacific cod fishery
3. Prohibited Species Catch Limits

**BACKGROUND:**

At this meeting, the Council makes final recommendations on groundfish and bycatch specifications as listed above to manage the 2014 and 2015 Gulf of Alaska (GOA) groundfish fisheries.

### **GOA SAFE Document**

The groundfish Plan Teams met in Seattle November 18-22, 2013 to prepare the final SAFE reports and to review the status of groundfish stocks. The GOA SAFE report forms the basis for the recommended GOA groundfish specifications for the 2014 and 2015 fishing years. Note that there are three volumes to the SAFE report: a stock assessment volume, a fishery evaluation volume ("Economic SAFE"), and an ecosystems considerations volume. The introduction to the GOA SAFE report was mailed to the Council and Advisory Panel November 20th. The full GOA SAFE report, the economic SAFE report and the ecosystem considerations volume were mailed to the SSC. The GOA Plan Team recommended OFLs and ABCs for 2014-2015 are attached as **Item C-6(a)**. The GOA Plan Team minutes are attached as **Item C-6(b)**. The Joint Plan Team minutes are included with the BSAI Plan Team minutes under **Item C-7**. An overview of the GOA SAFE report and ecosystem considerations volume will be provided to you at the meeting.

### **Two year OFL and ABC Determinations**

Amendment 48/48 to the GOA and BSAI Groundfish FMPs, implemented in 2005, removed the requirement for annual assessments of rockfishes, flatfish, and Atka mackerel since new survey data were unavailable in alternating years. Although 2013 is an on-year for the NMFS GOA groundfish trawl survey, only modified assessments for selected species and summaries for the other species were produced as a result of the government shutdown in October 2013. Stock assessments for an abbreviated suite of model runs were required only for Steller sea lion prey species (pollock, Pacific cod, Bering Sea/Aleutian Islands Atka mackerel), and species where a conservation concern has been noted. In such "abbreviated" assessments, authors were not required to include alternative models and were not required to respond to SSC or Team comments, among other things. For all other Tier 1-3 stocks, updated projections from last year using 2013 catch data were required at a minimum, with results presented in executive summaries using the "off-year" format for stocks on biennial assessment cycles. For stocks managed in Tiers 4-6, executive summaries using the "off-year" format for biennial assessment cycles were required. Tier 4-5 Gulf of Alaska assessments

included the 2013 GOA trawl survey datum in their estimates of biomass and harvest recommendations.

This amendment also requires proposed and final specifications for a minimum of two years thus ABC and OFL levels are provided for 2014 and 2015. In the case of stocks managed under Tier 3, 2014 and 2015 ABC and OFL projections are typically based on the output for Scenarios 1 or 2 from the standard projection model using assumed (best estimates) of actual catch levels. For stocks managed under Tiers 4 and 5 the latest survey data (2013) was used. Tier 6 stocks may have alternatives based on updated catch information.

The 2015 ABC and OFL values recommended in next year's SAFE report are likely to differ from this year's projections for 2015 because data from 2013 surveys are anticipated and a re-evaluation on the status of stocks will improve on the current available information for recommendations.

### **ABCs, TACs, and Apportionments**

At this meeting, the Council will establish final catch specifications for the 2014 and 2015 fisheries. The SSC and AP recommendations will be provided to the Council during the meeting. The sum of the preliminary 2014 and 2015 ABCs for target species are 640,675 t (2014), 644,165 t (2015) which are within the FMP-approved optimum yield (OY) of 116,000 - 800,000 t for the Gulf of Alaska. The sum of 2014 and 2015 OFLs are 790,468 t and 808,215 t, respectively. The Team notes that because of halibut bycatch mortality considerations in the high-biomass flatfish fisheries, an overall OY for 2014 will be considerably under this upper limit. For perspective, the sum of the 2013 TACs was 436,255 t, and the sum of the ABCs was 595,920 t.

The sum of the ABCs increased by 8% (+44,755 t) compared with last year. This is primarily driven by projected increases in pollock 53,930 t (+45%), Pacific cod 7,700 t (+10 %), and deep water flatfish 8,346 (+163%). Notable declines were projected in sablefish 450 t (-15%), shallow water flatfish -4,679 t ( -10%), arrowtooth flounder -15,093 (-7%), and flathead sole -7,507 t (-15%). Nearly all rockfish stocks or stock complexes increased (total 12%) with the largest increase from Pacific ocean perch at 2,897 t (+18%) compared to the 2013 ABC.

The abundances of pollock, Pacific cod, Dover sole, flathead sole, northern and southern rock sole, arrowtooth flounder, Pacific ocean perch, rougheye and blackspotted rockfish, northern rockfish, and dusky rockfish are above target stock size. The abundances of sablefish are below target stock size. The target biomass levels for deep-water flatfish (excluding Dover sole), shallow-water flatfish (excluding northern and southern rock sole), rex sole, shortraker rockfish, other rockfish (formerly other slope rockfish), demersal shelf rockfish, thornyhead rockfish, Atka mackerel, skates, sculpins, squid, octopus, and sharks are unknown.

### **TAC Considerations for State Pacific Cod Fishery**

Since 1997, the Council has reduced the GOA Pacific cod TAC to account for removals of not more than 25% of the Federal P. cod TAC from the state parallel fisheries. The relative percentage in the Central GOA was increased by the Board of Fisheries in March 2005 from 24.25 in 2004 to 25% while the relative percentage in the Eastern GOA was increased to 25% in 2010. In 2013 the relative percentage in the Western GOA was increased to 30%. Using the area apportionments of the 2014 and 2015 Pacific cod ABC recommended by the Plan Team, the Federal TAC for P. cod would be adjusted as shown in the attached table.

### **Prohibited Species Catch Limits**

In the GOA, Prohibited Species Catch (PSC) limits are established for halibut by fishery and gear, and Chinook salmon (for the Pollock fishery only). Chinook salmon PSC limits are fixed at 25,000 fish and allocated by area and season. Since 1995, total halibut PSC limits for all fisheries and gear types have totaled 2,300 t. This cap was reduced from 2,750 t after the sablefish IFQ fishery was exempted from the halibut PSC requirements in 1995.

The FMP authorizes the Council to exempt specific gear from the halibut PSC limits. NMFS, after consultation with the Council, has exempted pot gear, jig gear, and the sablefish IFQ hook-and-line gear fishery categories from the non-trawl halibut limit since 1995. The Council recommended, and NMFS approved, these exemptions because (1) the pot gear fisheries have low annual halibut bycatch mortality; (2) IFQ program regulations prohibit discard of halibut if any halibut IFQ permit holder on board a catcher vessel holds unused halibut IFQ (§ 679.7(f)(11)); (3) sablefish IFQ fishermen typically hold halibut IFQ permits and are therefore required to retain the halibut they catch while fishing sablefish IFQ; and (4) NMFS estimates negligible halibut mortality for the jig gear fisheries. NMFS estimates that halibut mortality is negligible in the jig gear fisheries given the small amount of groundfish harvested by jig gear, the selective nature of jig gear, and the high survival rates of halibut caught and released with jig gear.

The Secretary of Commerce approved Amendment 95 on November 29, 2013. The FMP amendment provides the Council with the authority during the annual harvest specification process to reduce the GOA halibut PSC limits for the 1) groundfish trawl gear sector and 2) groundfish catcher vessel (CV) hook-and-line gear sector by 15%. These proposed reductions are expected to be in effect in time for the final 2014/2015 harvest specifications. The proposed reductions would be phased in over three years: 7% in year 1, 5% in year 2 (12%), and 3% in year 3 (15%).

The proposed reduction for the catcher processor (CP) hook-and-line gear would be 7% which would be implemented in one step in year 1. This action would result in a new cap of 1,848 mt (in 2014), 1,759 mt (in 2015), and 1,705 mt (in 2016 and later years) for the trawl sector. The new hook-and-line halibut PSC limit may change annually, based on the GOA Pacific cod split formula. Based on 2013 Pacific cod TACs in the Western and Central GOA the hook-and-line CP sector would fish under a 115 mt halibut PSC limit. The hook-and-line CV sector PSC limit would be 154 mt (in 2014), 146 mt (in 2015), and 141 mt (in 2016 and beyond). Note that these limits do not account for the BOF action recently to increase the state waters Pacific cod TAC proportion in the western GOA from 25% to 30% beginning in 2014. Revised halibut PSC limits for the Hook and Line sector which account for this increase will be available at the Council meeting. Amendment 95 would reduce the demersal shelf rockfish fishery halibut bycatch limit from 10 mt to 9 mt. The Council intends that year 1 would occur in 2014 and that all reductions would occur by 2016. To meet that target implementation date, NMFS published the proposed rule (78 FR 57106) on September 17, 2013. The comment period ended on October 17, 2013.

**Plan Team recommended 2014 Gulf of Alaska Pacific cod ABCs, and resulting TACs and state Guideline Harvest Levels (GHLs) (t).**

Specifications	Western	Central	Eastern	Total
ABC	32,745	53,100	2,655	88,500
State GHL	9,824	13,275	664	23,763
(%)	30	25	25	25
Federal TAC	22,922	39,825	1,991	64,736

**Plan Team recommended 2015 Gulf of Alaska Pacific cod ABCs, and resulting TACs and state Guideline Harvest Levels (GHLs) (t).**

Specifications	Western	Central	Eastern	Total
ABC	31,117	50,460	2,523	84,100
State GHL	9,335	12,615	631	22,581
(%)	30	25	25	25
Federal TAC	21,782	37,845	1,892	61,519

**2013 and 2014 halibut PSC limits, allowances, and apportionments.**

Trawl gear			Hook-and-line gear			
			Other than DSR			DSR
Season	Percent	Amount	Season	Percent	Amount	Season Amount
January 20 - April 1	27.5%	543	January 1 - June 10	86%	250	January 1 - December 31 10
April 1 - July 1	20%	395	June 10 - September 1	2%	5	
July 1 - September 1	30%	592	September 1 - December 31	12%	35	
September 1 - October 1	7.5%	148				
October 1 - December 31	15%	296				
Total		1,973			290	10

Note: The trawl PSC limit is reduced by 27 mt to 1,973 mt from 2,000 mt per Rockfish Program regulatory revisions in 2011.

**2013 and 2014 apportionment of halibut PSC trawl limits between the trawl gear deep-water species fishery and the shallow-water species fishery.**

Season	Shallow-water	Deep-water <sup>1</sup>	Total
January 20 - April 1	444	99	543
April 1 - July 1	99	296	395
July 1 - September 1	197	395	592
September 1 - October 1	148	Any remainder	148
Subtotal January 20 - October 1	888	789	1,677
October 1 - December 31 <sup>2</sup>	n/a	n/a	296
Total	n/a	n/a	1,973

<sup>1</sup> The third season deep-water apportionment of 395 mt is reduced by 191.4 mt for the Rockfish Program Halibut PSC allocation.

**2013 apportionments of the “other hook-and-line fisheries” annual Halibut PSC allowance between the hook-and-line gear catcher vessel and catcher/processor sectors. (Values are in metric tons)**

“Other than DSR” Allowance	Hook-and-Line Sector	Percent of annual amount	Sector annual amount	Season	Seasonal Percentage	Sector Seasonal Amount
290	Catcher Vessel	57.3%	166	January 1 - June 10	86%	143
				June 10 - September 1	2%	3
				September 1 - December 31	12%	20
	Catcher Processor	42.7%	124	January 1 - June 10	86%	107
				June 10 - September 1	2%	2
				September 1 - December 31	12%	15

Catch toward PSC limits in 2013 for halibut as well as newly established limits for Chinook salmon are provided below (through November 30, 2013):

<b>2013 GOA Prohibited Species Catch (through November 30, 2013)</b>			
<b>Trawl Salmon in numbers</b>	<b>Limit</b>	<b>Count</b>	<b>Remaining</b>
Non-Chinook Salmon	n/a	5,444	n/a
Chinook Salmon	n/a	24,229	n/a
Chinook Salmon, Pollock Fisheries	25,000	13,535	11,465
Western	6,684	2,203	4,481
Central	18,316	11,332	6,984
<b>Halibut in metric tons</b>	<b>Limit</b>	<b>PSC</b>	<b>Remaining</b>
<b>Other than DSR Hook-and-Line Fisheries</b>	<b>290</b>	<b>149</b>	<b>141</b>
Catcher Processor	123	34	89
Catcher Vessel	166	115	51
<b>Trawl Fishery</b>	<b>1,973</b>	<b>1,220</b>	<b>753</b>
Deep-water Fisheries	789	490	299
Shallow-water Fisheries	888	558	330
Both Fisheries October 1 - December 31	296	172	124

**November GOA Plan Team Proposed OFL and ABC Recommendations (metric tons) for 2014-2015 (Page 1)**

Species	Area	2013				2014		2015	
		OFL	ABC	TAC	Catch	OFL	ABC	OFL	ABC
Pollock	W (61)		28,072	28,072	7,700		36,070		40,254
	C (62)		51,443	51,443	52,863		81,784		91,272
	C (63)		27,372	27,372	29,743		39,756		44,367
	WYAK		3,385	3,385	2,940		4,741		5,291
	Subtotal	150,817	110,272	110,272	93,246	211,998	162,351	248,384	181,184
	EYAK/SEO	14,366	10,774	10,774	-	16,833	12,625	16,833	12,625
	Total	165,183	121,046	121,046	93,246	228,831	174,976	265,217	193,809
Pacific Cod	W		28,280	21,210	17,179		32,745		31,117
	C		49,288	36,966	29,044		53,100		50,460
	E		3,232	2,424	419		2,655		2,523
	Total	97,200	80,800	60,600	46,642	107,300	88,500	101,800	84,100
Sablefish	W		1,750	1,750	1,383		1,480		1,338
	C		5,540	5,540	5,118		4,681		4,230
	WYAK		2,030	2,030	2,082		1,716		1,551
	SEO		3,190	3,190	3,242		2,695		2,435
	Total	14,780	12,510	12,510	11,825	12,500	10,572	11,300	9,554
Shallow-Water Flatfish	W		19,489	13,250	154		20,376		18,728
	C		20,168	18,000	5,068		17,813		16,372
	WYAK		4,647	4,647	1		2,039		1,875
	EYAK/SEO		1,180	1,180	2		577		530
	Total	55,680	45,484	37,077	5,225	50,007	40,805	46,207	37,505
Deep-Water Flatfish	W		176	176	21		302		300
	C		2,308	2,308	196		3,727		3,680
	WYAK		1,581	1,581	4		5,532		5,462
	EYAK/SEO		1,061	1,061	4		3,911		3,861
	Total	6,834	5,126	5,126	225	16,159	13,472	15,955	13,303
Rex Sole	W		1,300	1,300	98		1,270		1,245
	C		6,376	6,376	3,475		6,231		6,106
	WYAK		832	832	-		813		796
	EYAK/SEO		1,052	1,052	-		1,027		1,008
	Total	12,492	9,560	9,560	3,573	12,207	9,341	11,963	9,155
Arrowtooth Flounder	W		27,181	14,500	836		31,142		30,217
	C		141,527	75,000	18,632		115,612		112,178
	WYAK		20,917	6,900	52		37,232		36,126
	EYAK/SEO		20,826	6,900	76		11,372		11,035
	Total	247,196	210,451	103,300	19,596	229,248	195,358	222,160	189,556
Flathead Sole	W		15,729	8,650	582		12,730		12,661
	C		26,563	15,400	2,045		24,805		24,670
	WYAK		4,686	4,686	-		3,525		3,506
	EYAK/SEO		1,760	1,760	-		171		170
	Total	61,036	48,738	30,496	2,627	50,664	41,231	50,376	41,007

Sources: 2013 OFLs, ABCs, and TACs are from harvest specifications adopted by the Council in December 2012; 2013 catches through November 9, 2013 from AKR Catch Accounting

**Proposed November GOA Plan Team OFL and ABC Recommendations (metric tons) for 2014-2015 (Page 2)**

Species	Area	2013				2014		2015	
		OFL	ABC	TAC	Catch	OFL	ABC	OFL	ABC
Pacific Ocean Perch	W		2,040	2,040	445		2,086		2,135
	C		10,926	10,926	10,908		13,323		13,637
	WYAK		1,641	1,641	1,537		2,772		2,838
	W/C/WYAK	16,838			12,890	21,016		21,515	
	SEO	2,081	1,805	1,805	-	1,303	1,128	1,334	1,154
	E(subtotal)				1,537				
	Total	18,919	16,412	16,412	12,890	22,319	19,309	22,849	19,764
Northern Rockfish	W		2,008	2,008	2,169		1,305		1,229
	C		3,122	3,122	2,521		4,017		3,781
	E		-	-	-		-		-
	Total	6,124	5,130	5,130	4,690	6,349	5,322	5,978	5,010
Shortraker Rockfish	W		104	104	40		92		92
	C		452	452	477		397		397
	E		525	525	267		834		834
	Total	1,441	1,081	1,081	784	1,764	1,323	1,764	1,323
Dusky Rockfish	W		377	377	216		317		295
	C		3,533	3,533	2,918		3,584		3,318
	WYAK		495	495	3		1,384		1,277
	EYAK/SEO		295	295	8		201		191
	Total	5,746	4,700	4,700	3,145	6,708	5,486	6,213	5,081
Rougheye and Blackspotted Rockfish	W		81	81	20		82		83
	C		856	856	415		864		877
	E		295	295	200		298		302
	Total	1,482	1,232	1,232	635	1,497	1,244	1,518	1,262
Demersal shell rockfish	Total	487	303	303	217	438	274	438	274
Thonyhead Rockfish	W		150	150	298		235		235
	C		766	766	530		875		875
	E		749	749	308		731		731
	Total	2,220	1,665	1,665	1,136	2,454	1,841	2,454	1,841
Other Rockfish (Other slope)	W		44	44	196				
	C		606	606	462				
	W/C						1,031		1,031
	WYAK		230	230	70		580		580
	EYAK/SEO		3,165	200	62		2,470		2,470
	Total	5,305	4,045	1,080	790	5,347	4,081	5,347	4,081
Atka mackerel	Total	6,200	4,700	2,000	1,244	6,200	4,700	6,200	4,700
Big Skate	W		469	469	111		589		589
	C		1,793	1,793	2,147		1,532		1,532
	E		1,505	1,505	71		1,641		1,641
	Total	5,023	3,767	3,767	2,329	5,016	3,762	5,016	3,762
Longnose Skate	W		70	70	79		107		107
	C		1,879	1,879	1,176		1,935		1,935
	E		676	676	395		834		834
	Total	3,500	2,625	2,625	1,650	3,835	2,876	3,835	2,876
Other Skates	Total	2,706	2,030	2,030	1,611	2,652	1,989	2,652	1,989
Sculpins	GOA-wide	7,614	5,884	5,884	1,433	7,448	5,569	7,448	5,569
Sharks	GOA-wide	8,037	6,028	6,028	2,083	7,986	5,989	7,986	5,989
Squids	GOA-wide	1,530	1,148	1,148	322	1,530	1,148	1,530	1,148
Octopuses	GOA-wide	1,941	1,455	1,455	315	2,009	1,507	2,009	1,507
Total		738,676	595,920	436,255	218,233	790,468	640,675	808,215	644,165

Sources: 2013 OFLs, ABCs, and TACs are from harvest specifications adopted by the Council in December 2012; 2013 catches through November 9, 2013 from AKR Catch Accounting.

## Minutes of the Gulf of Alaska Groundfish Plan Team

North Pacific Fishery Management Council  
605 W 4th Avenue, Suite 306  
Anchorage, AK 99501

Alaska Fishery Science Center, Seattle WA  
November 18-22, 2013

Diana Stram	NPFMC (co-chair)	Jim Ianelli	AFSC REFM (co-chair)
Sandra Lowe	AFSC REFM	Paul Spencer	AFSC REFM
Chris Lunsford	AFSC ABL	Leslie Slater	USFWS
Jon Heifetz	AFSC ABL	Nancy Friday	AFSC NMML
Mike Dalton	AFSC REFM	Craig Faunce*	AFSC FMA
Kristen Green	ADF&G	Jan Rumble	ADF&G
Obren Davis	NMFS AKRO	Mark Stichert	ADF&G
		Ian Stewart	IPHC

\*absent

### Ecosystem Chapter Review

Stephani Zador presented pertinent indices and hot topics to the Team. A new Gulf of Alaska ecosystem assessment was delayed in order to capitalize on the results of the synthesis stage of the GOAIERP and is planned for 2014. In 2014, a summary of the previous year's pertinent indices will be included in the annual presentation. This should alleviate confusion that is caused by the presentation combining information from the present year and the past year when current year indices are not always available.

The North Pacific climate is currently in a neutral ENSO stage. There were three hot topics for this year. There were few reports of "mushy" halibut syndrome in 2013 compared to 2012 implying that foraging conditions were good for halibut this year. There was a large pulse of larval/age-0 walleye pollock found along the south side of the Alaska Peninsula indicating a strong 2013 year class. There was a record high pink salmon harvest (and record high numbers) in 2013 (219 million fish) which could indicate favorable environmental conditions in the past two years while these pink salmon were at sea.

Water temperature in the GOA was similar to 2011 exhibiting a cool temperature pattern with a deeper thermocline and cooler surface waters. The NMFS GOA bottom trawl survey encountered shorttraker rockfish in shallower depths. Greater numbers of poachers were found in the central Gulf than in past years despite slight changes in mean water temperature. Sponges and anemones were caught in 50% of bottom trawl tows and are more abundant in the western Gulf. Gorgonians were common everywhere, but more prevalent in the eastern Gulf. Jellyfish abundance was high but variable in the central and eastern Gulf. Echinoderms were consistently captured in about 50% on the trawls. During this survey, a new time series was initiated to collect data on pH, dissolved oxygen, salinity, and turbidity. A study using data collected in Icy Strait in Southeast Alaska found that recruitment of age-0 to age-3 sablefish was correlated to sea surface temperature and chlorophyll levels during those recruitment years. Based on measurements of sea surface temperature and chlorophyll in 2013, sablefish recruitment in Southeast is predicted to be above average in 2013. Researchers are working on the spatial and temporal distribution of euphausiids as a potential indicator of prey availability and biomass of lower trophic levels. One topic being investigated is the potential correlation of correlation of the abundance of euphausiids with walleye pollock recruitment/abundance. This is because data on euphausiid abundance from 2011 and 2013 have

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been processed and there are differences between years. Data from 2003 and 2005 is planned to be added to this analysis.

## Pollock

### *2013 GOA summer acoustic-trawl survey results*

Darin Jones presented a summary of the 2013 GOA summer acoustic-trawl survey results for walleye pollock. Most of the biomass was on the shelf (i.e., the areas outside of bays and gullies) and in Shelikof Strait, with 55% of the shelf biomass located in INPFC strata 630 (Kodiak). The biomass was largely concentrated in INPFC areas 620 (Chirikof) and 630. With the exception of Area 649 (Prince William Sound), each of the INPFC subareas had large numbers of age 1 pollock, particularly area 630. The distance between transects in the shelf locations was increased to 25 nmi apart from the 20 nmi spacing used in previous surveys; this change was made in order to complete the 2013 summer survey in the allotted time. The estimates of biomass from this survey are based upon acoustic backscatter data that does not include the nominal ½ m nearest to the ocean bottom. This survey is not directly used in the 2013 assessment and is provided for informational purposes. A summer acoustic-trawl survey is expected to be conducted in 2015.

### *Assessment model results*

The assessment model is largely an update of the 2012 assessment with some minor changes to respond to CIE reviewer comments. The 1992 and 1993 Biosonics acoustic survey estimates were removed because they were based on different acoustic sampling methodology, and the remaining estimates for this survey were assigned a CV of 20%. In addition, the ADFG survey length composition data was removed and the survey age composition data were given additional weight.

The 2013 Shelikof Strait acoustic survey biomass estimate is 2.7 times larger than the biomass estimate for 2012, and is the largest biomass estimate since 1985. In addition, the GOA biomass estimate from the 2013 AFSC bottom trawl survey is the largest in the time series, and is a 43% increase from the 2011 estimate. Higher variability was observed for the 2013 AFSC bottom trawl survey estimate (CV= 23%) relative to previous years, which likely reflects the 1/3 reduction in survey tows. The estimated abundance of age 1 fish from the combined Shumagin and Shelikof acoustic surveys show a positive relationship to age 1 recruitment as estimated from the assessment model, and offers potential for improved forecasting of recruitment strengths.

The 2012 year class (observed as 1 year-olds in 2013) is estimated to be the strongest since the 1978 year class. Two options were presented for computing reference points and harvest projections: Model 1 includes the point estimate of the 2012 year class as estimated in the assessment model, and Model 1A sets the 2012 year class to the average of post-1977 recruitment. In both of these models, the  $B_{40\%}$  reference point excludes the 2012 year class. Although Model 1 can be viewed as somewhat inconsistent in how the uncertainty of recently observed year classes is addressed between the calculation of  $B_{40\%}$  and the harvest projections, it does follow the approach used in previous assessment. Furthermore, it is not clear that setting the recent year classes equal to average recruitment values for harvest projections would satisfactorily address this uncertainty. In addition, the 2012 year class has been observed as being strong in several surveys, and appears to be well distributed throughout the Gulf of Alaska. Thus, the Plan Team agrees with the authors' recommendation of Model 1 which includes the 2012 year class.

**The Team recommends considering the results from the Plan Team stock-recruitment working group when determining which year classes to use when computing reference points.**

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*Southeast Alaska pollock*

The ABC and OFL recommendations for southeast Alaska are based on Tier 5 methods applied to trawl survey biomass estimates. A random effects model was applied to the survey biomass time series, and was found to give satisfactory results. The Team agrees with the author that the random effects model be used to compute biomass for Tier 5 ABC and OFL calculations.

**Pacific cod**

Teresa A'mar presented the Pacific cod assessment stock. The 2013 assessment is an update that uses 2013 data with the 2012 model, which is the 2011 model with the <27cm length data omitted.

The 2013 assessment compared: i) a model configuration with estimated age-0 recruits for 1977-2011 (and sets the 2012-13 age-0 recruits to the average level of age-0 recruitment) and ii) a model configuration with estimated age-0 recruits 1977-2009 and sets age-0 recruits for 2010-13 to the median age-0 recruitment. The 2011 year-class estimate for model configuration i) was "higher than the average level and highly uncertain" and Teresa indicated there is little information on age-2 fish in the 2013 data. Therefore, Teresa recommended model configuration ii) as the preferred model. The Team agreed with this recommendation. The Team noted that a comparison of likelihood components showed relatively small differences between the two model configurations, suggesting that estimation of the 2 additional recruitment parameters in model configuration i) is not warranted.

**The Team does not recommend setting recruitment to its average level as a general procedure for avoiding anomalous recruitment deviations at the end of a time series. A better approach is to use the optional multiplier for  $\sigma_r$  in Stock Synthesis, which provides a rough diagnostic for recruitment strength, and allows some uncertainty in recruitment to be projected forward.**

**The Team recommends continuing work on the September 2013 recommendations:**

- **Using empirical weight-at-age without estimating growth parameters,**
- **Exploring fewer fishery/survey selectivity blocks; different fishery and survey selectivity curves,**
- **Working with ADFG to examine (age, length, maturity) data from the GHL fishery.**

**In addition, the Team recommends including plots of likelihood profiles over a population scale parameter.**

**In an effort to incorporate all of the survey data, the Team recommends analyzing the spatial distribution of smaller cod. Additionally, the Team recommends trying alternatives to the current truncation threshold being set at 27cm. This includes a) omitting length data and constructing a bin for age-1 fish, b) smoothing data in the <27cm group outside the model, c) examining correlations between age-1 and recruitment, and d) investigating a smaller value for effective sample size for age-1 (with a larger effective sample size for the remaining age classes) so that additional uncertainty in the survey estimates for age-1 can be accounted for within the same likelihood for the entire survey age composition time series.**

**Arrowtooth flounder**

Ingrid Spies presented the arrowtooth flounder (ATF) assessment. The 2013 NMFS GOA trawl survey biomass and length data were added to the model. In addition, catch for 2011 was updated, and catch for 2012 and 2013 was added. Fishery length data was updated for 2011 and fishery length data from 2012 and 2013 were added to the model. No new age data were available. Total biomass (age 3+) has been increasing over time, with a slight downturn the last several years. The highest fishery CPUE is in the central GOA, which is also the area with the highest proportion of ATF biomass. The assessment also

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shows a slight shift in biomass to the West Yakutat area. With respect to catch and retention, the author noted that the percent of ATF retained has been increasing over time, as industry has more successfully addressed ATF's mushy flesh syndrome.

**The Team recommends that the author consider examining how estimating catchability affects the model.** In addition, the author is encouraged to examine inclusion of age 1+ fish in the model, versus using only ages 3+. This suggested change would incorporate additional data about size at age for these younger fish.

**The Team also recommends incorporating new maturity data into the model, following the methodology currently used in the northern and dusky rockfish assessments.**

**The Team recommends completing an executive summary for 2014 rather than a full assessment, unless new maturity data becomes available or if substantial model changes are adopted.**

**The Team requests the author complete the stock structure template for review in September.**

### **Flathead sole**

Carey McGilliard presented the flathead sole assessment. Substantial progress was made on many previous Plan Team and SSC recommendations. In addition to the author's recommended model, alternative models were evaluated with and without natural mortality estimated within the model and with and without estimation of early recruitment deviations. The transition from the previous assessment model was presented at the September meeting and was included in the stock assessment but was not presented.

The assessment model produced slightly lower estimates of spawning stock biomass relative to the 2011 assessment.

Natural mortality was estimated in an alternative model; the estimated value was approximately 50% larger than the fixed value for natural mortality (0.2) in the author's recommended model and in previous assessment models. Additionally, there was a constraint placed on fishery selectivity to prevent low selectivity at older ages at older ages in the recommended model (with fixed natural mortality), but the constraint was found to be unnecessary when natural mortality was estimated.

There was some discussion about whether the large age-3 estimate in the terminal year was a function of recent (and therefore poorly informed) recruitments.

The Team endorses the use of the author's preferred model (Model 0) for setting catch limits for 2014.

**The Team agreed with the author and recommends that the next assessment should include exploration of natural mortality and survey catchability.** This effort might also include how selectivity is treated, and potentially place a prior on natural mortality based on maximum observed age. Additional model development should include estimation of a stock-specific ageing error matrix and exploration of strong patterns exhibited in early recruitment deviations.

**The survey averaging working group will continue to explore apportionment methods and the authors may consider incorporating their recommendations for apportionment contingent on the findings of this group.**

### **Deepwater flatfish**

Carey McGilliard presented the deepwater flatfish assessment. Greenland turbot and deepsea sole analyses are based on average catch (Tier 6 calculations). Catches for both of these species have been far below the ABC levels. Dover sole was managed under Tier 5 specifications in 2011 and 2012, based on

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the recommendation of the previous author and Plan Team and SSC. For 2013, Dover sole was assessed as a Tier 3a stock.

A full description of the transition from the previous Dover sole stock assessment model to Stock Synthesis was presented at the September 2013 meeting and therefore not repeated. An attachment was provided in the SAFE chapter to document this work.

Many previous GPT and SSC suggestions were addressed in developing the final 2013 model. Data inputs were extended to include newly available observations, and to account for a number of logical inconsistencies in previous analyses (e.g., treatment of incomplete depth coverage in some survey years). Catch data were extended back to 1978. Random effects averaging was applied to each survey stratum and then aggregated to create a “full depth-coverage” survey time-series. Interpolated index predictions were disconnected from the biological data collected in those years. The “shallow survey” length and age data were treated as a separate time-series, with independently estimated selectivity parameters. The shallow surveys are treated separately because Dover sole exhibit ontogenetic movements, and older, larger fish are observed in deeper waters. Maturity curves were investigated, and an interim approach was developed pending collection of new data. Years with very sparse fishery data were excluded. The Plan Team agreed with the changes and improvements made to address these issues.

In addition to the author’s recommended model, three alternative models were presented. These encompassed treatment of early recruitment, and the exclusion of the 1984 and 1987 survey estimates.

There was some discussion of the dome-shaped selectivity for the fishery. The dome-shaped selectivity occurred only for lengths somewhat greater than the largest lengths observed. Although preliminary model evaluation indicated an improvement in fit, the need for these additional parameters may be worth investigating in future assessments.

There was some evidence of trade-off between fitting male and female size data. The model fit to conditional age-at-length appeared to be reasonable with no strong patterns in lack of fit.

The Plan Team endorsed the use of Model 0, the author’s recommended model, for setting catch limits.

Following a clarification of the reasons for the large increase in the OFL/ABC between the Tier 5 and Tier 3a calculations, the Plan Team suggested that for the next assessment “effective catchability” be calculated (for the survey; as a product of selectivity and catchability for some well-represented age range) to compare with the Tier 5 calculations. This would help address the question of the proportion of the population that is observed by the survey. Fishery selectivity should be considered as a function of depth.

The apportionment for Dover sole is based on the biomass distribution from the most recent survey observation for apportionment. Greenland turbot and deepsea sole are apportioned based on the distribution of the most recent catch. There was considerable discussion about standardizing apportionment methodologies among species and whether survey averaging over several years would be an improvement over using only the most recent survey. Precise biomass estimates might be a rationale for this, but there was a 22% CV for Gulf-wide Dover sole survey biomass in 2013.

**The Team recommended that the random effects survey averaging approach be explored for potential application to the apportionment calculations for this stock assessment.**

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Based on suggestions from the author, **the Team recommended that the next assessment include additional investigation of catchability, and natural mortality (perhaps not assuming a fixed value).**

**The Team requests the author complete the stock structure template for review in September.**

**The Team also recommended that the items listed for future research by the author be pursued.**

### **Shallow water flatfish and northern/southern rocksole**

The Team reviewed the executive summary shallow water flatfish assessment. Teresa A'mar presented the assessment of the northern/southern rock sole model results. For the Tier 5 species in the SWF complex, the Team noted that the survey biomass estimates of butter sole and yellowfin sole had declined. Some noted that the biomass seems to be trending toward the WGOA from the historical concentration in the CGOA. It was unclear whether spatial patterns in the survey were consistent with what has been observed in the fishery.

**The Team recommends a full assessment for the Tier 5 contribution to the SWF complex including in-depth consideration of relative catch by fishery and survey biomass estimates by area.**

For northern and southern rocksole models, the Team discussed recommendations compiled in September as presented by the author. These include:

- Work with fishery observer program on U/N/S rock sole catch recalculation
- Continue with SS models for U, N, and S
- Investigate empirical growth (weight-at-age)
- Investigate data weighting
- Investigate methods to address (male) M
- Investigate methods for calculating ABCs based on U, N, and S model estimates

The Team notes that estimation of natural mortality is a lower priority than other considerations to be evaluated.

**The Team recommends that the author provide a suite of models and discussion points for Team review in September and an updated full assessment in November.** Prioritization should be given to evaluation of empirical weights at age followed by species and sex ratio assumptions, in particular as it relates to catch.

**The Team further recommends the author look at the ADF&G survey data as an alternate data source.** The author should also consider a realistic estimate of catch in the current year for calculating the ABC as estimating catch = ABC for these species does not seem reasonable when observed catches are far below this consistently.

**The Team recommends the authors complete the stock structure template for northern and southern rock sole for September and provide additional information as requested above regarding the relative biomass and catch of the other species in the complex.**

### **Rex Sole**

This year an executive summary of the rex sole assessment was presented due to the government shutdown. The author updated the assessment by running the single-species projection model using parameter values from the accepted 2011 assessment model, together with updated catch information for 2011–2013, to predict adult biomass for rex sole in 2014 and 2015. The assessment model biomass estimates (age 3+) decreased from 86,684 t in 2013 to 84,702 t in 2014 and a continuing decrease into 2015 is expected. The model estimate of female spawning biomass in 2014 is 52,807 t, which is greater

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than  $B_{35\%}$  (19,434 t). The 2013 trawl survey information was not incorporated into this executive summary assessment. However, a preliminary examination of the survey results indicates that total survey biomass for rex sole increased by 6% from 95,134 t in 2011 to 100,978 t in 2013. Most of this increase occurred in the Southeast region. The 2014 area apportionments are based on the 2011 survey biomass results. The Team discussed that the 2013 survey results could have been used for apportionment but accepted what the author presented for this year.

The Team agrees with using the hybrid Tier 3a/Tier 5 approach as has been done in previous years and endorses the author's recommended ABC and OFL.

**The survey averaging working group will continue to explore apportionment methods and the authors may consider incorporating their recommendations for apportionment contingent on the findings of this group.**

### General rockfish:

The Team discussed the practice in age-structured GOA rockfish assessments of not including the length composition data from the most recent trawl survey in the assessment model. In general, the length composition from the most recent survey would be expected to contain information on the relative strengths of cohorts currently in the population. **For the GOA age-structured rockfish assessments, if length composition data are withheld, the Team recommends exploratory model runs to test sensitivity. This should include any year of fishery or survey length composition data which could serve as a proxy for the age composition, not simply the most recent survey year.**

### Pacific ocean perch

Pete Hulson presented the 2013 Pacific ocean perch assessment. The 2013 assessment is a full assessment but only updates the 2011 model with 2013 data. Due to the government shutdown, alternative models were not explored. The 2013 bottom trawl survey biomass estimate is the largest in the time series and the variance is second smallest (CV = 16%). A large haul in the West Yakutat (WYAK) area had a major influence on the ABC apportionment.

The large survey biomass estimate for 2013 caused an increase in the estimated 2006 Age-2 recruitment, with a very wide uncertainty interval. Previously, the Team has recommended using length data from the most recent survey. However, due to time constraints the 2013 assessment has applied the same modeling methodology as used in the 2011 assessment. **The Team recommends additional analyses with the survey length data for 2014 to evaluate effects on the 2006 recruitment estimate. Other contributing factors to the large uncertainty estimate for 2006 recruitment could be related to sample size specified of age data (max at 100).**

The recommended ABC for 2014 in WYAK is an increase of almost 70% relative to the 2013 ABC, based on the apportionment formula for this stock. This increase disproportionately benefits a small area based on a single large survey haul. The Team discussed stability of the apportionment formula and considered changes in apportionment rules to reflect biological factors including productivity of the stock. The current apportionment formula is based on the "4-6-9" weighted average of the most recent three surveys. These weights are based on a statistical model, and not the biological characteristics of the stock. An alternative formula for survey averaging based on a random effects model was discussed, but this approach would also be statistical, and not based explicitly on biological factors. The random effects model could potentially make apportionment more sensitive to new survey results. One idea was to work productivity into a constraint on process error based, for example, on a surplus production sub-model. Another suggested approach was based on separating adults and young instead of using a biomass average. **The survey averaging working group will continue to explore apportionment methods and**

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**the authors may consider incorporating their recommendations for apportionment contingent on the findings of this group.**

### **Northern rockfish**

Pete Hulson presented the northern rockfish assessment. The 2013 assessment is a full assessment but only updates the 2011 model with 2013 data.

Due to the government shutdown alternative models were not explored. The 2013 biomass estimate was higher than the 2011 estimate, but had large uncertainty (CV = 60%). The model does not fit the 2013 survey estimate well, likely due to the large uncertainty associated with it, which is common in northern rockfish. The Team discussed alternative methods of fitting models to unreliable estimates of biomass and suggested investigating alternative approaches to constructing the trawl survey biomass index.

The Team agreed with the authors' recommendations and recommends a 2014 ABC of 5,324 t and OFL of 6,349 t.

### **Shortraker rockfish**

Because of the Government shutdown, an enhanced executive summary format was provided for shortraker rockfish that incorporated new 2013 trawl survey biomass estimates for determining ABC and apportionment. Shortraker rockfish are a Tier 5 species for specifications, and the ABC is based on the average biomass from the three most recent surveys. There was a 22% increase in biomass for shortraker relative to the last full assessment. This is because a low 2007 biomass estimate drops out of the 3-year survey estimate leaving two large estimates (2011 and 2013) and a moderate estimate (2009). Catches were updated for 2012 and 2013. Reported shortraker catch has gone down in all fisheries except halibut and in most regions except the central Gulf. The majority of shortraker catch is still taken in the sablefish fishery. The authors identified the need to examine the implications of the observer restructuring and its effects on shortraker catch estimation.

Apportionment is based on a 4:6:9 weighting of biomass of last three biomass estimates. Shifts in distribution for shortraker are evident in the 2013 survey, and result in apportionment of the ABC with decreases in the western and central Gulfs and an increase in the eastern Gulf. Two random effects model results were presented for discussion; 1) a model fit to the total GOA summed biomass estimates and 2) a model fit by region and then summed over all areas. The model fit by region seemed to incorporate the high uncertainty estimates better than the model fit to the summed total.

The Team discussed the differences in the bottom trawl survey time series including differences in gear type, changes in tow length, changes in survey timing, etc. The time series has been standardized since 1996. Analyses underway indicate that CPUE changes with trawl duration and that the magnitude and direction of these changes vary by species.

**The Team recommends that the random effects survey averaging approach be explored for future apportionment calculations. The Team also recommends the author provide an executive summary for the 2014 assessment as no new data will be available, and to include any outstanding Team or SSC recommendations with the summary.**

The Team agrees with the author's recommendations for future research priorities.

### **Dusky rockfish**

Dusky rockfish are assessed with full assessments in odd years to coincide with Gulf of Alaska bottom trawl survey years. Due to the government shutdown, this year's assessment consists of updating the data to include the 2013 GOA trawl survey, updated catch data, updated fishery length composition data, and survey length composition data. The 2013 GOA trawl survey biomass estimate increased 19% from the

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2011 estimate, with a CV of 36%. The modeled proportion of the fishery catch for the ages close to the age-plus group are consistently higher than the observed data. A presentation on the computation of the ageing error matrix suggests that this effect is likely caused by the ageing error matrix not accounting for the multiple ages within the plus group.

**The Team recommends exploration of extending the modeled ages beyond the plus group in the data in order to improve the fits to the age composition data.**

The area apportionments were computed using the status quo method of a weighted average of the most recent three trawl surveys, and showed a higher proportion this year in the West Yakutat area due to a large estimate of survey biomass in this region.

**In order to evaluate the relative precision of area-specific biomass estimates, the Team recommends that the authors include the survey CVs by region when presenting apportionment estimates.**

This stock is a good candidate for applying a random effects model to compute apportionments, as it would consider the interannual variation in the uncertainty of subarea survey biomass estimates. The survey averaging workgroup plans to conduct additional research on computing apportionments, and should specifically evaluate survey apportionment methodologies for dusky rockfish.

### **Rougheye and blackspotted rockfish complex**

Kalei Shotwell provided a summary and updated projection model for rougheye and blackspotted rockfish. A large amount of new and updated data are available for this stock complex including 1) fishery catch, size, and age data, 2) new trawl survey biomass and age data, and 3) fully revised longline survey estimates for the time series of RPWs and length frequencies. New biological data on growth are also available, including size-at-age and aging error data to update conversion and error matrices, as well as new weight-at-age data.

Overall catch is relatively stable, and only about 47% of the GOA ABC is caught annually. The rougheye and blackspotted complex is in Tier 3a and the Plan Team recommends an ABC of 1,244 t and OFL of 1,497 t for 2014 which are slight increases over 2013. The projection model shows the 2014 biomass remaining stable resulting in similar ABC and OFL projections for 2014 and 2015. Biomass estimates from the 2013 survey were not included in the projection model but provided to the Team as reference. The combined biomass estimate from the 2013 survey was at an all-time low for the time series with the largest decline occurring in the central GOA.

**The Team recommends a full stock assessment with updated assessment and projection model results for 2014. The Team also recommends further exploration into the effects of reduced trawl survey effort in relation to the all-time low biomass recorded in 2013.**

### **Thornyhead rockfish**

Kalei Shotwell presented the thornyhead stock assessment. This is a Tier 5 species. Because of the government shutdown, an enhanced executive summary format was provided that incorporated new 2013 trawl survey biomass estimates for determining ABC and apportionment. As with previous assessments, the most recent year biomass estimate is used to calculate these values.

In 2013, the trawl survey biomass estimate increased 11% compared to 2011 but only depths less than 700 m were sampled. This estimate was, therefore, inflated to account for the lack of sampling in the deep strata following the methods described in the 2011 assessment. The Gulf-wide catch of thornyheads increased 49% from 2012, but still was only 63% of the ABC. The majority of the increase occurred in the western Gulf and central Gulf and this increase caused an overage in the western Gulf of over 133 t.

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There was a 30% decrease in thornyhead catch in rockfish fisheries which was likely due to the western Gulf of Alaska Pacific ocean perch rockfish fishery closure in 2013, and a 58% increase of catch in the sablefish fishery. It is unknown if this increase may be a consequence of catch estimation from the new observer restructuring coverage on the sablefish fleet.

For information purposes, Pete Hulson presented two alternative biomass estimates using the random effects model. The first alternative fit the trawl survey biomass for the entire GOA. The second alternative fit biomass time series broken up by strata (1-500 m, 501-700 m, and 701-1,000 m) and region (EGOA, CGOA, WGOA) and then summed the stratum- and region-specific estimates to obtain GOA-wide biomass estimates. The results from the random effects model broken up by strata and region seems more reasonable because it accounts for missing strata in the years in which the trawl survey only covered the shallower strata.

The 2014 ABC is 1,841 t, an increase from 1,665 t in 2013. This includes an 85 t increase to the western GOA, due to a shift in survey biomass to this region. The 2014 OFL is 2,454 t.

**The Team recommends the author explore the longline survey as an alternative or additional index to the trawl survey and to consider impacts of the trawl survey sampling fewer stations and restricting depth to shallower than 700m in recent surveys.**

**The Team also recommends further exploration of the random effects model for estimating thornyhead biomass.**

**Finally, the Team recommends the author provide an executive summary for the 2014 assessment as no new data will be available, and to include any outstanding Team or SSC recommendations with the summary.**

## **Other rockfish**

An enhanced executive summary was produced this year due to the government shut-down.

This year the species composition of Other Rockfish was updated to include the seven demersal shelf rockfish (DSR) species when occurring outside of NMFS Area 650 (East Yakutat/Southeast Outside). The DSR stock complex comprises seven species (copper, rosethorn, quillback, China, tiger, canary, and yelloweye rockfish), and applies only to those seven species occurring in Area 650. Catches of these seven species outside of Area 650 (Areas 610-640) have been accounted for in the AKRO CAS in the Other Rockfish category, but have not been included in the assessment. An appendix was presented in the stock assessment evaluating the inclusion of these DSR species in the Other Rockfish assessment. However, due to the government shut down and abbreviated timeline for work, the “split fractions” for the Eastern Gulf of Alaska (EGOA) have not been updated to include these seven species. These “split fractions” are calculated by the Resource Assessment and Conservation Engineering (RACE) division at the Alaska Fisheries Science Center as part of trawl survey biomass estimation procedures. This computation is used to account for Amendment 41 that prohibited trawling east of 140° W longitude in the EGOA. Thus, for 2014, the authors only included these species in the Central GOA (CGOA) and Western GOA (WGOA).

Biomass estimates were updated to include the 2013 GOA trawl survey and Tier 4 (sharpchin) and Tier 5 calculations were updated to incorporate the new survey biomass estimates. The average of the sum of the component species of the Other Rockfish complex for the last three surveys (2009, 2011, and 2013) was used to estimate exploitable biomass and determine the recommended ABCs and OFLs. The average biomass estimates for Other Rockfish are down slightly overall, and more uncertain than the 2011 estimates for the major species (i.e. higher CVs in 2013). Of the major species, the greatest change was

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observed for silvergray rockfish which was down significantly from 2011 which was the highest on record. Harlequin biomass was over 2 times higher than the 2011 biomass estimate.

The ABC and OFL calculations for Other Rockfish remain the same, but some life history parameters have been updated: natural mortality for darkblotched, widow, and sharpchin rockfish were updated, and growth parameters for sharpchin rockfish were updated. Further, the seven DSR species were added to the calculations. The ABCs and OFLs for each individual species was calculated and summed for the complex ABC and OFL. The 2014 ABC and OFL increased slightly relative to 2013,

The fishery catches of Other Rockfish are dominated by harlequin rockfish. The ABC for Other Rockfish has been exceeded in the WGOA consistently since 2009. During this period, harlequin rockfish comprised an average of 77% of the Other Rockfish catch in the WGOA. The estimated survey biomass for harlequin rockfish is substantially lower than the other species in the Other Rockfish complex. Harlequin rockfish are caught in only 7% of survey hauls on average in the CGOA, and 4% of hauls in the WGOA. This is in contrast to the fishery where harlequin is the primary Other Rockfish species caught. However, harlequin is not a target species and is usually caught with dusky or northern rockfish or Pacific ocean perch. Harlequin rockfish inhabit high relief and rocky substrates. Because of their habitat preferences for untrawlable areas, it is likely that survey biomass estimates are underestimated for harlequin rockfish and the fishery catches are not likely a conservation concern. As such, the assessment authors propose combining the Other Rockfish ABC for the WGOA and CGOA. It was noted that changes in fishing practices are not likely to occur because of a combined western-central ABC, and there is currently no market for Other Rockfish. This proposal will help to reduce waste and avoid unnecessary placement of Other Rockfish on PSC status.

**The Plan Team supports the authors' proposal for combining the Other Rockfish ABC for WGOA and CGOA. The Plan Team recommends continued monitoring and an emphasis on research on trawlable and untrawlable habitat.**

## **Atka Mackerel**

Sandra Lowe presented the assessment for Atka mackerel. This stock is in Tier 6 as biomass estimates are unreliable from the trawl survey. Age data continues to indicate the dominance of the 2006 and 2007 age classes which comprise the majority of the GOA stock and are also prevalent in the Aleutian Islands stock. No changes were made to the assessment methodology. The Team made no additional recommendations for the author for the next assessment cycle.

## **Demersal shelf rockfish**

Kristen Green, ADF&G, presented the Demersal Shelf Rockfish (DSR) assessment. The DSR assessment historically has incorporated density data for yelloweye rockfish from submersible surveys. Submersible estimates are no longer possible, but remotely operated vehicle (ROV) surveys are now being conducted. The first ROV survey was conducted in 2012 in the Central Southeast Outside (CSEO) region. The Southern Southeast Outside region (SSEO) was surveyed in 2013 but results are not yet available. The East Yakutat (EYKT) and Northern Southeast Outside (NSEO) regions are planned to be surveyed in 2014 which would result in ROV data available for all DSR management areas in 2014.

For this year, catch information, habitat area (for CSEO), and average weights for yelloweye rockfish from the fishery were updated. Yelloweye rockfish density was derived from available survey data for all management areas including the most recent ROV estimate from 2012 in CSEO. Changes in average weight computations resulted in small decreases in the biomass estimates in the SSEO and EYKT areas. The Northern Southeast Outside (NSEO) area remained the same as no new fishery weights were available in 2013. There was a relatively large decrease in biomass in the CSEO due to a decrease in average weight as well as a decrease in the most recent 2012 density estimate (4,051 to 3,247 t).

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Two options were presented for calculating DSR biomass for 2014. The historical methodology uses the most recent survey derived yelloweye rockfish density estimates to calculate the total available DSR biomass. The point estimate used is derived from the lower 90% confidence interval of the density estimate. An alternative option was provided based on the Team's recommendation in September to apply a random walk time series model using the historical fish density estimates. The biomass estimate based on the random effects model was lower and the estimated projected ABC is substantially different between the historical method (274 t) and the random effects model (206 t).

**The Team commends the authors for providing a random effects model estimate.**

The random effects model should provide a better measure of the uncertainty than the historical method and may be preferred since some of the survey data are at least four years old. The comparability of the ROV density estimates to the submersible estimates is unknown without a vehicle comparison study; however this was impossible. The Team noted abnormal patterns in the random effects confidence intervals for the NSEO region, the area that reflects the biggest differences between approaches. Additionally, further work on the random effects model is warranted to investigate whether region specific density estimates should be treated independently or grouped together. Use of the lower 90% confidence interval for density estimation should also be evaluated with respect to the random effects model output.

The Team noted the preliminary catch for 2013 is quite a bit higher than catch in 2012 (36t). Since full retention of DSR caught in the halibut fishery in this region exists, changes in observer requirements on halibut vessels were not expected to have an effect on catch. Evaluation of observer and catch data in future years may help explain the impact of new observer requirements on halibut vessels on DSR catch estimates.

While the DSR biomass trend overall is fairly flat, the Team discussed a potential concern regarding the decreasing biomass trend in the CSEO, the area where the most recent survey occurred. The Team suggested that an evaluation of catch trends in the CSEO in comparison to other areas may be warranted.

The authors plan to have an age structured model for yelloweye rockfish available for the 2014 stock assessment. The Team agreed that more work on the random effects model for all assessments in general is warranted, and therefore, agrees with the authors' recommendation of using the historical method for calculating biomass and ABC. This equates to a 2014 DSR ABC of 274 t and OFL of 438 t. The Team looks forward to seeing the age structured model results in September 2014.

**For September 2014, the Team recommends the authors present preliminary results of the age structured model if available. Contingent on the working group's efforts on the random effects model, the authors may consider including the results of the random effects model incorporating the new recommendations. The Team also recommends that recreational harvest (16% of the allocation) be footnoted in the catch table of the assessment to reflect the total DSR catch and to help clarify apportionments.**

## **Skates**

Olav Ormseth presented the overview of the skate assessment. An enhanced executive summary, rather than a full assessment, was presented this year due to the 2013 government shutdown. The 2013 survey estimate for big skate was reduced relative to 2011, while the survey biomass estimates for longnose skate and "other skates" increased substantially compared to 2011. The estimate for longnose skates is the highest observed in the 1984-2013 time series. The author described several notable features associated with the big skate biomass assessment, including an almost 50 percent decrease of the big skate biomass in the CGOA, where the majority of the big skate biomass is typically observed.

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Olav also provided an overview of skate bycatch in the different fisheries, and noted a marked increase in incidental catches in the halibut IFQ target fishery. This corresponds with increased catch reporting due to fisheries observer deployment into a previously unobserved fishery. He also noted that the 2013 ABC for CGOA big skates and WGOA longnose skates were exceeded. Finally, Olav discussed issues related to a possible directed fishery for skates.

There was considerable discussion about the inclusion of skate catch in state waters (Areas 649 and 659) in total catch, as well as whether the survey estimates are expanded to Prince William Sound and Southeast inside waters. The additional skate catch data available from expanded observer coverage is a large component of skate catch in the EGOA, and gives rise to potential conservation concerns for skates. The Team also discussed the potential development of skate discard mortality rates, rather than assuming 100 percent mortality.

**The Team requested that the author separate inside state waters catch in the catch tables to give a clearer depiction of the proportion of skates caught between inside and outside waters.** In addition, the author should examine the “survival fraction” methodology used to assess skates that are caught incidentally in the B.C. trawl fisheries.

**The Team recommends the stock assessment author fill out the stock structure template for skates as well as to bring back any additional information regarding conservation concerns for skates by area and catches for the Team’s consideration in September 2014.**

**The Team recommended that the author consider conducting a full assessment for 2014.**

## **Sculpins**

Ingrid Spies presented the sculpin complex assessment. Because of the Government shutdown, an enhanced executive summary format was provided that incorporated new 2013 trawl survey biomass estimates for determining ABC and apportionment. There were no clear trends in species abundance indices, and recent catch (2012-2013) is estimated to be far below the ABC levels. The 2013 aggregate survey biomass for the sculpin complex was slightly lower than the estimate in 2011. The weighted-natural mortality calculation produced a slightly lower value than the value used last year. These inputs produced a minor decrease in OFL and ABC recommendations for 2014-2015. Alternate calculations based on the random effects (RE) method for smoothing survey biomass estimates were provided for comparison. There was some discussion of whether species-specific TAC calculations could be compared with catch estimates, but it appeared that delineating catches to individual species would require substantial additional effort due to a lack of comprehensive species identification.

The Team agrees that the sculpin complex ABC for 2014 be based on the previous method of using a four-year survey average.

**The Team recommends species-specific catch estimates be presented along with species specific ABCs next year.**

**The Team also recommends the author provide an executive summary for the 2014 assessment as no new data will be available but to include any outstanding Team or SSC recommendations with the summary.**

The Team discussed the utility of using the random effects model for estimating survey biomass. Because the survey trend has been relatively flat over time, this approach produces results that are very similar to those from a four-year survey average. The Team discussed the need for a default method recommendation for applying the random effects approach for survey biomass estimation to species

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complexes. At issue is whether to apply this method to the aggregate survey data (which may provide a longer time-series in some cases where speciation was incomplete in early years), or to the individual species and then sum the results. A suggestion was made to explore simultaneous estimation for the individual species, and that this approach might be equally applicable to spatial strata for individual species.

**The Team recommends the survey averaging working group reconvene and provide guidance to authors regarding how to apply the random effects approach to species complexes and to regionally stratified estimates (i.e. Demersal Shelf Rockfish assessment) before the Team endorses the random effects method.**

The Team encourages the author to use the random effects approach, contingent on the survey averaging working group's recommendations.

**The Team made a general recommendation that there should be an investigation into the use of ABC-methods based on survey biomass-weighted  $M$  calculations for species complexes.** This approach appears to respond to declines in less productive species by increasing the target harvest rate for the complex, an undesirable response. An alternative to this biomass-weighted  $M$  approaches may be desirable for the sculpin complex.

## **Shark complex**

The shark stock complex (consisting of spiny dogfish, Pacific sleeper shark, salmon shark and other/unidentified sharks) assessment was presented by Pete Hulson.

Because of the uncertainty surrounding the data quality for these species, they are classified as Tier 6. The 3-year survey average of biomass is used to assess spiny dogfish populations, while all other species have only average catch history data for such estimates. Bottom trawl surveys in 2013 yielded similar biomass results as in 2007 for spiny dogfish. In 2013, sleeper sharks were most abundant around Kodiak, and in general, their numbers have increased slightly in recent years. There were several large hauls of sleeper sharks in southeast Alaska in 2013. The random effects model was presented for spiny dogfish and will be examined further in the next full assessment.

Bycatch in the halibut IFQ fishery appeared to be greater in 2013 than 2012 and may, in part, be a reflection of the new 2013 requirement to have observers aboard these vessels. The majority of spiny dogfish was caught near Kodiak in both 2012 and 2013. 2013 catch data for spiny dogfish (50 t) and sleeper sharks (125 t) was available from state waters in Prince William Sound and southeast Alaska. This harvest is a significant increase from the approximate 1 t that was taken annually in past years and is likely from observer estimates on halibut vessels being included in the Catch Accounting System.

The complex OFL and ABC are the sum of the OFL and ABCs for the individual species, which resulted in: OFL = 7,986 t; ABC = 5,989 t. The Team recognized that halibut bycatch data could be incorporated in the model to improve assessments.

Catch is generally much less than ABC or OFL. Longline surveys (IPHC and AFSC sablefish) indicate a long-term decline in sleeper shark numbers since 2002.

**The Team recommends that the catch information from state waters be incorporated in the model in 2014.**

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## Squid

The Gulf squid assessment was presented by Olav Ormseth. Squids are managed in the Tier 6 category because AFSC trawl surveys do not appear to yield reliable estimates of biomass. Subsequently, there were no changes in harvest recommendations from 2012.

The 2013 catch was 199 t as of September 28, which is higher than the 2012 catch (22 t) but otherwise similar to catches in the years 2007-2013. Catch patterns have not shifted very much in recent years, with the majority of catches occurring in the pollock fishery. The survey biomass estimate for squids in 2013 increased relative to 2011, but is generally similar to past years.

The Team noted that the non-target CIE reviewers criticized the lack of consistency between Tier 6 approaches for squids in the GOA and the BSAI. The resulting OFL for 2014 and 2015 is 1,530 t and the ABC is 1,148.

## Octopus

Liz Conners presented the octopus assessment. The new 2013 bottom trawl survey biomass estimate of octopus was 2,686 t. Ninety percent of the octopus caught in this year's survey were *E. dofleini*. Results from the 2013 trawl survey showed a decrease in biomass from 2011 to 2013. The survey does not catch many octopus in the Eastern GOA. Most of the sampled octopus biomass is in the Central GOA with some in the Western GOA. Overall, 10 % of the survey tows catch octopus.

Octopus harvest from bycatch in other directed fisheries was lower in 2013 than in recent years (214 t). There is probably some discard mortality that was not recorded. Bycatch information collected from the new observer program seems to mirror information collected previously. Fishery catch information was collected mostly from pot gear in shallower waters. Spatial distribution of catch may not reflect the distribution of the species and is most likely correlated with the distribution of the pot cod fishery effort.

A new experiment was conducted on discard mortality. Results indicate that the survival of octopus after capture in the pot fishery was almost 100%. The animals were handled as they would be on the pot boat, held for 24 hours and then released. There were 36 animals that were caught, held, and released. All specimens were in good condition after 24 hours. Additional research could be done that holds the octopus longer so long term effects of capture can be observed.

There were no changes in the assessment methodology. However, the consumption estimates were not included this year and the random effects model was applied to the time series. This approach smoothed the biomass estimates in the time series. The model appeared to perform well following the year to year variation yet smoothing the high and low years.

Two alternative approaches were presented for harvest recommendations; 1) the previous method of using a 3-year survey average to compute biomass, 2) the random effects model applied to the aggregate biomass of the octopus complex. The Team discussed the need for a default method recommendation for applying the random effects approach for survey biomass estimation to species complexes before endorsement of this approach. The author noted that speciation of octopus in the survey didn't occur until 2001 so applying the random effects approach to the complex is necessary if the entire survey biomass time series is to be incorporated. The Team encourages the author to use the random effects approach, contingent on the Working Groups recommendations.

**The Team recommends using the 3-year averaging of survey biomass to estimate OFL and ABC for octopus. This approach results in an OFL of 2,009 t and an ABC of 1,507 t.**

The Council had made a request that the Team present potential methods for determining area apportionment for octopus if directed fisheries were considered. The author provided a comparison of

GOA Plan Team minutes[Type text]

[Type text]

spatial distribution of octopus catch in comparison to survey biomass. Management areas 610, 620, and 630 had the highest biomass and the highest catch. Management areas 640 and 650 had minimal catches and low biomass estimates. Survey biomass estimates appear to be fairly stable across management areas over time. The Team agreed a standardized approach is desirable and supported using the current three survey biomass averaging method for determining apportionment, if it were to be done. The most recent 3-year survey biomass percentages by area are: 35% in the Western, 63% in the Central, and 2% in the Eastern Gulf of Alaska.

The author presented several research priorities for 2014 including deriving a mortality rate estimated from tagging results, updated growth rates for octopus gathered from ongoing studies, and application of a size-structured model for octopus based on comments from the recent non-target CIE.

**The Team recommends the stock assessment author fill out the stock structure template for octopus for the Team's consideration in September 2014.**

### **State Waters catch issue**

The GOA Team acknowledges that estimates of shark and skate catches in federal halibut and federal parallel Pacific cod fisheries in areas 649 (Prince William Sound) and 659 (Southeast Inside) increased in 2013 in part due to observer coverage of federal halibut and smaller longline vessels fishing Pacific cod in these areas. The catch of federally-specified incidental species taken by federal halibut and parallel Pacific cod vessels in areas 649 and 659 is currently not counted against the federal TAC. This is inconsistent with catch accounting practices in other areas.

**The Team recommends that the State discuss how catch of FMP species should be accounted for in state-managed fisheries in state water areas 649 (Prince William Sound) and 659 (Southeast Inside).** Considerations could include separate GHLS where biomass estimates are available or other catch limits. In the absence of any accounting by the State for catch of federal species during state-managed fisheries in these areas, consideration should be given to taking this catch off the federal TAC.

The Team recommends that a review of State managed GHL fisheries and relative bycatch estimates of skates and sharks in these fisheries be conducted for comparison against the bycatch of federal (halibut and parallel Pacific cod) fisheries in Areas 649 and 659.

After further discussion with the Gulf of Alaska Groundfish Plan Team, Council staff, ADF&G, and NMFS staff **it was proposed that the Federal catch accounting system will deduct the catch from areas 649 and 659 from the Federal TACs for federally specified species (50 CFR part 679, Table 2a FMP Groundfish Species) that do not have State GHL fisheries in Areas 649 and 659.** This includes catch during the halibut, parallel, and State waters GHL fisheries for non-GHL species. If further GHL fisheries develop for those species then that catch will not be deducted from the Federal TACs.

The State GHL fisheries in these areas include Southeast Inside (659) – Pacific cod, sablefish, shallow-water flatfish, DSR; and PWS (649) – pollock, Pacific cod, rockfish, and octopus:

Pollock - Prince William Sound (PWS) - GHL accounted for before setting the Federal ABC

Pacific cod

PWS (649) - GHL 25% of Eastern (640, 630) ABC

Southeast Inside (659) - separate GHL not deducted from 650 ABC, assessed by State

Sablefish - Cook Inlet and PWS - GHL adjusted to Central GOA ABC

Southeast Inside (659) - GHL, assessed annually

GOA Plan Team minutes[Type text]

[Type text]

Shallow water flatfish - Southeast Inside (659) for Southeast flatfish (primarily starry flounder, English sole, etc, very little participation)

Rockfish - combined GHL in Cook Inlet and PWS.

Demersal Shelf Rockfish (659) GHL, not assessed with a survey in inside waters

Octopus - Cook Inlet GHL and PWS GHL started in 2012, each 35,000 lb.

The following table has been included following discussions held after the GOA Plan Team meeting. This table summarizes Alaska Region, CAS estimates of skates and sharks catch in Areas 649 and 659.

Area	Species	Average	2013
		2008-2012 total catch (t)	total catch (t)
649	Skates	60	175
	Sharks	4	57
659	Skates	27	514
	Sharks	6	195

### **Stock structure suggestions for 2013**

Octopus, skates, northern and southern rock sole, deepwater flatfish (Dover sole), and arrowtooth flounder

### **Retrospective analyses, ageing error and plus-group treatment in rockfish models**

Pete Hulson presented analyses he's been conducting on treating ageing error and plus group (and the number of total length or age bins to use). The Team commended Pete for the retrospective work on the northern rockfish assessment. This provided a novel approach towards determining which factors contribute the most to retrospective patterns. The Team concurred with his conclusion that changes are likely needed and look forward to seeing the presentation of these investigations in next years' assessment.

The meeting adjourned at 1pm on Friday, November 22<sup>nd</sup>.



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**GF 13-028

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**Agenda Date:** 12/9/2013

**Agenda Number:** C-7

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

Adopt final harvest specifications for BSAI groundfish

**ESTIMATED TIME:**

10 hours (all Groundfish Specification Items)

**ACTION REQUIRED:**

Approve the Bering Sea/Aleutian Islands Stock Assessment and Fishery Evaluation Report and final BSAI groundfish harvest specifications for 2014 and 2015:

1. Overfishing Level, Acceptable Biological Catch, and Total Allowable Catch for all stocks.
2. Prohibited Species Catch (PSC) limits and seasonal apportionments of Pacific halibut, red king crab, Tanner crab, opilio crab, and herring to target fishery categories.

**BACKGROUND:**

At this meeting, the Council will adopt the Bering Sea/Aleutian Islands (BSAI) Groundfish Stock Assessment and Fishery Evaluation (SAFE) Report and final recommendations on groundfish harvest specifications and PSC limits to manage the 2014 and 2015 BSAI groundfish fisheries. Upon publication in the *Federal Register*, the 2014/2015 final harvest specifications will replace harvest specifications adopted last year for the start of the 2014 fisheries.

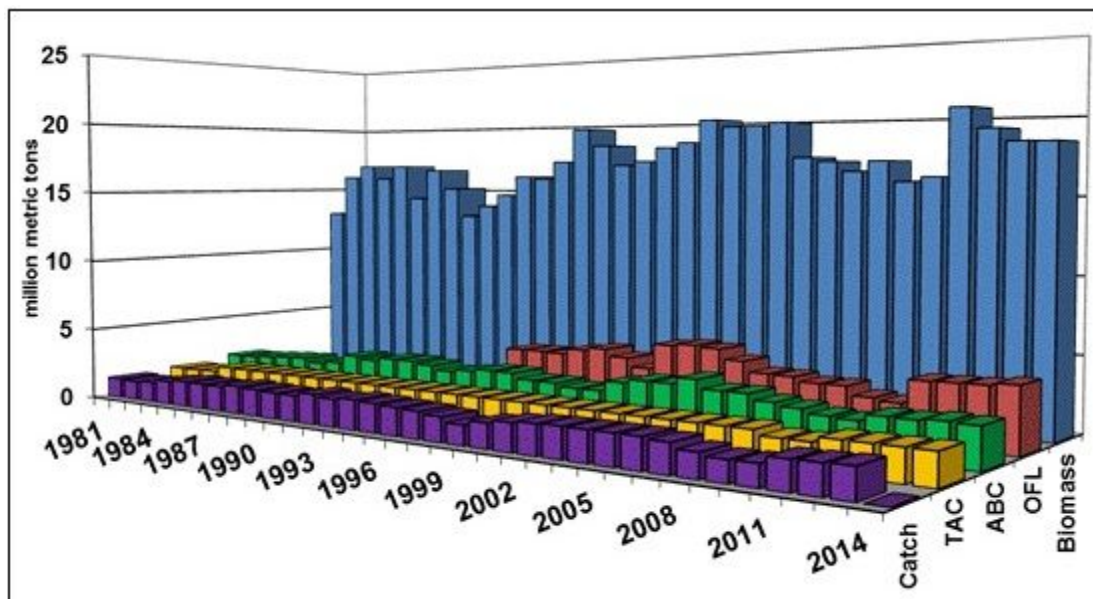
BSAI SAFE Report. The BSAI Groundfish Plan Team met in Seattle on November 18-22, 2013 to prepare the BSAI Groundfish SAFE report. The SAFE report forms the basis for BSAI groundfish harvest specifications for the next two fishing years. The introduction to the BSAI SAFE report was mailed to the Council and Advisory Panel on November 26, 2013; it summarizes the Plan Team recommendations for each stock/complex. The full report, including the Economic SAFE report and Ecosystems Considerations chapter, was distributed to the SSC and is available on the Council website. The Council will review and adopt the full report at this meeting.

The Plan Team's recommendations for final harvest specifications for 2014 and 2015 are attached as **Item C-7(a)**. In October, the Council adopted proposed harvest specifications of OFL and ABC that were based on last year's stock assessments. In this SAFE report, the Plan Team has revised those projections due to the development of new models; collection of new catch, survey, age composition, or size composition data; or use of new methodology for recommending OFLs and ABCs. The November 2013 Joint Team and BSAI Plan Team minutes are attached as **Item C-7(b)**. The SSC and AP recommendations will be provided to the Council during the meeting.

OFLs, ABCs, TACs, and Apportionments. The sums of the recommended ABCs for 2014 and 2015 are 2,574,868 t and 2,476,738 t, respectively. These compare with the sum of the 2013 ABC (2,639,317 t). BSAI catches through November 9, 2013 totaled 1,866,580 t (93 percent of total TACs).

Overall, the status of the BSAI stocks continues to appear favorable. The abundances of EBS pollock, EBS Pacific cod, sablefish; all rockfishes managed under Tier 3 except AI blackspotted/rougheye, and all flatfishes managed under Tiers 1 or 3 are projected to be above  $B_{MSY}$  or the  $B_{MSY}$  proxy of  $B_{35\%}$  in 2014. The abundances of four stocks are projected to be below  $B_{35\%}$  for 2014: AI pollock by about 2 percent, sablefish by about 1 percent, Greenland turbot by about 13 percent, and AI blackspotted/rougheye rockfish by about 7 percent.

The sum of the biomasses for 2014 is nearly the same as reported for 2013, following declines of 5 percent from 2013 to 2012 and 6 percent from 2012 to 2011. Pollock and Pacific cod biomasses were fairly flat at increased levels, after a period of decline. Pollock biomasses have been decreasing, after peaking in 2011. Pacific cod biomass peaked in 2012. Flatfishes are generally increasing. Biomass of Greenland turbot has been increasing due to recent increased recruitment, but is still low. Following recent declines, biomass of Atka mackerel is increasing.



**TAC-setting.** In setting TACs for 2014 and 2015 the Council accounts for guideline harvest levels (GHLs) for groundfish fisheries in state waters. Since 2006 the Council has set its Federal TAC for BSAI Pacific cod to account for a state water Pacific cod fishery in the AI, with a GHL set equal to 3 percent of the BSAI ABC. In 2013 the Alaska Board of Fisheries created a new state water Pacific cod fishery in the Bering Sea (GHL = 3 percent of the BSAI ABC).

Complicating the formula for the GHLs, the SSC has indicated its intent to set separate OFLs and ABCs for EBS Pacific cod and AI Pacific cod in 2014. Therefore the state water fisheries for each of the two areas would be set at 8,103 t, as shown below.

**Pacific cod harvest specifications (tons) for 2014 based on BSAI Plan Team recommendations**

Area	OFL	ABC	GHL (3% of BSAI ABC)	TAC	CDQ	ITAC	ICA	DFA
AI	20,100	15,100	8,103	6,997	749	6,248	2,000	4,248
BS	299,000	255,000	8,103	246,897	26,418	220,479	*	
BSAI	319,100	270,100		253,894	27,167	226,727		

Note: the Council may set the TACs less than ABC for socio-economic reasons.

If NMFS determines that any allocation or apportionment of a TAC has been or will be reached, then NMFS determines the amount of an individual TAC that will be taken as the incidental catch allowance (ICA) in other target fisheries. For example, Alaska plaice caught incidentally in a yellowfin sole target fishery contributes to the Alaska plaice ICA. After deducting the ICA, the remaining TAC is the directed fishing allowance (DFA), which allows vessels full retention of the target species or species group. The directed fishery closes once the DFA is reached.

**Flatfish flexibility.** In addition to accounting for state water GHLs in setting TACs, there is a pending FMP amendment that would affect annual harvest specifications for flathead sole, rock sole, and yellowfin sole in 2015, at the earliest. Amendment 105 would allocate the ABC reserve (i.e., the difference between the ABC and TAC, minus a discretionary buffer amount that the Council could determine based on social, economic, or ecological considerations) for these three flatfish species among the Amendment 80 cooperatives and CDQ groups, using the same formulas that are used in the annual harvest specifications process. These entities would be able to exchange their flathead sole, rock sole, or yellowfin sole quota share for an equivalent amount of their allocation of the ABC reserve for these three species. The Amendment 80 cooperatives would provide annual reports to the Council no later than December 1st, each year, to include information on their use of ABC reserve exchanges and quota share transfers, actual harvest, and annual changes in catch capacity so that the current year's information could inform the Council's decision on future annual harvest specifications as to whether to establish a buffer reducing the amount of the ABC reserve available to be exchanged by eligible entities. With respect to implementation, NMFS noted at the time of final action that due to changes required for the catch accounting system, the amendment (if approved), is unlikely to be effective before 2016. Therefore it is extremely unlikely for an in-season adjustment to 2014 TACs since proposed rulemaking is still being drafted. The Council may wish to recommend 2015 harvest specifications in the event implementation and modification to the CAS has occurred in time for 2015, or wait until the December 2014 harvest specification cycle for 2015/2016. The Council also would need to provide its rationale or criteria it may use on whether it is necessary to incorporate a buffer in the ABC reserve for these three flatfish species in a particular year, and if so at what level. For example, the Council may wish to obviate the need for a more conservative ICA by restricting eligible entities from taking the full amount of the ABC surplus. Alternatively, the Council may wish to respond to market conditions by restricting the harvestable amount for a particular species. By being as explicit as possible in its rationale for the need for the restricted flexibility, the Council would streamline the justification and rulemaking process for the annual harvest specifications (particularly in its first year of application).

**Categories used for prohibited species catch limits**

**Trawl fisheries**

1. Greenland turbot, arrowtooth flounder and sablefish
2. rock sole, flathead sole, and "other flatfish"
3. yellowfin sole
4. rockfish
5. Pacific cod
6. pollock, Atka mackerel and "other species"

**Non-trawl fisheries**

1. Pacific cod
2. other non-trawl (longline sablefish and rockfish, and jig gear)
3. groundfish pot (exempt in recent years)

**Adopt prohibited species catch limits for Pacific halibut, crab, and herring**

Since 2008, the head and gut trawl catcher/processor sector, which targets flatfish, Pacific cod, Pacific ocean perch, and Atka mackerel, have been allocated groundfish TACs and PSC limits and members of the "Amendment 80" sector have been allowed to join cooperatives to manage their allocations. Regulations require that crab and halibut trawl PSC limits be apportioned between the BSAI trawl limited access and Amendment 80 sectors after subtraction of prohibited species quota (PSQ) reserves. Crab and halibut trawl PSC limits assigned to the Amendment 80 sector is then sub-allocated to Amendment 80 cooperatives as PSC cooperative quota (CQ). PSC CQ assigned to Amendment 80 cooperative(s) is not allocated to specific fishery categories. Regulations require the apportionment of each trawl PSC limit not assigned to an Amendment 80 cooperative be assigned into PSC bycatch allowances for seven specified fishery categories (**Item C-7(c)**).

*Trawl Fisheries:* The halibut PSC limit are apportioned to the trawl fishery categories as shown in the box at right. The overall PSC limit is fixed under Amendment 80 at 3,526 t, as of 2012. Additional reductions of 5 percent would occur if PSC limit amounts are transferred from the trawl limited access sector to the Amendment 80 trawl sector during a fishing year.

**Halibut Trawl PSC Limits**

3,526 t	Total Trawl Halibut Apportionment
2,325 t	Amendment 80
875 t	Trawl Limited Access
326 t	CDQ

*Fixed Gear Fisheries:* A 900 t non-trawl gear halibut mortality limit can be apportioned by fishery categories. Beginning in 2008, Amendment 85 divided the halibut PSC limit for the hook-and-line Pacific cod fishery between the hook-and-line CP and CV sectors (CVs  $\geq 60$  ft (18.3 m) LOA and CVs  $< 60$  ft (18.3 m) LOA combined). The Council can provide varying amounts of halibut PSC by season to each sector, tailoring PSC limits to suit the needs and timing of each sector.

*Crab:* Prescribed bottom trawl fisheries in specific areas are closed when PSC limits of Tanner crab *C. bairdi*, snow crab *C. opilio*, and red king crab are reached. A stair step procedure for determining PSC limits for red king crab taken in Zone 1 trawl fisheries is based on the abundance of mature Bristol Bay red king crab. Based on the 2013 estimate of effective

spawning biomass of 49.3 million pounds, the PSC limit for 2014 remains unchanged at 97,000 red king crabs. Up to 25% of the red king crab PSC limit can be used in the 56° - 56°10'N strip of the Red King Crab Savings Area. The red king crab PSC limit has generally been allocated among the pollock/Atka mackerel/other species, Pacific cod, rock sole, and yellowfin sole fisheries.

PSC limits for *C. bairdi* in Zones 1 and 2 are based on a percentage of the total abundance minus an additional reduction implemented in 1999 of *C. bairdi* crab as indicated by the NMFS trawl survey. Based on the 2013 model estimated total abundance (945,562,422 crabs), the PSC limit in 2014 for *C. bairdi* is unchanged from last year: 980,000 crabs in Zone 1 and 2,970,000 crabs in Zone 2.

PSC limits for red king crab and <i>C. bairdi</i> Tanner crab				
Species	Zone	Crab Abundance		PSC Limit
Red King Crab	Zone 1	≤ 8.4 million mature crab threshold or		32,000
		14.5 million lb effective spawning biomass (ESB)		
		> threshold, but < 55 million lb ESB		97,000
		≥ 55 million lb ESB		197,000
Tanner Crab	Zone 1	0-150 million crab	0.5% total abundance -	20,000
		150-270 million crab		730,000
		270-400 million crab		830,000
		> 400 million crab		980,000
Tanner Crab	Zone 2	0-175 million crab	1.2% total abundance -	30,000
		175-290 million crab		2,070,000
		290-400 million crab		2,520,000
		> 400 million crab		2,970,000

Snow crab (*C. opilio*) PSC limits are based on total abundance of *opilio* crab as indicated by the NMFS standard trawl survey. The limit is set at 0.1133% of the total snow crab abundance index, with a minimum limit of 4.5 million snow crabs and a maximum limit of 13 million snow crabs; the limit is further reduced by 150,000 crabs. The 2013 model estimate of 10,005,200,000 crabs result in a 2014 PSC limit of 11,185,892 crabs. Snow crab taken within the "*C. opilio* Bycatch Limitation Zone" accrues toward the PSC limits established for the trawl sectors.

**Herring:** In 1991, an overall herring PSC limit of 1 percent of the EBS biomass of herring was implemented. This limit is apportioned to the seven PSC fishery categories. The ADF&G estimate of herring spawning biomass for the eastern Bering Sea for 2014 is 217,153 t (**Item C-7(d)**). The corresponding herring PSC limit for 2014 at 1 percent of this amount is 2,172 t.

Seasonal apportionment of PSC limits The Council may also seasonally apportion the PSC limits. Regulations require that seasonal apportionments of bycatch allowances be based on information listed below.

**Factors to be considered for seasonal apportionments of bycatch allowances**

1. Seasonal distribution of prohibited species;
2. Seasonal distribution of target groundfish species relative to prohibited species distribution;
3. Expected prohibited species bycatch needs on a seasonal basis relevant to change in prohibited species biomass and expected catches of target groundfish species;
4. Expected variations in bycatch rates throughout the fishing year;
5. Expected changes in directed groundfish fishing seasons;
6. Expected start of fishing efforts; and
7. Economic effects of establishing seasonal prohibited species apportionments on segments of the target groundfish industry.

**Item C-7(e)** provides PSC use as of November 9, 2013 for trawl and non-trawl gear.

**BSAI Groundfish Plan Team Recommendations for Final OFLs and ABCs (mt) for 2014 and 2015.**

Species	Area	2013				2014			2015		
		OFL	ABC	TAC	Catch	OFL	ABC	TAC	OFL	ABC	TAC
Pollock	EBS	2,550,000	1,375,000	1,247,000	1,267,963	2,795,000	1,369,000		2,693,000	1,258,000	
	AI	45,600	37,300	19,000	2,964	42,811	35,048		47,713	39,412	
	Bogoslof	13,400	10,100	100	57	13,413	10,059		13,413	10,059	
Pacific cod	BSAI	359,000	307,000	260,000	221,396	n/a	n/a		n/a	n/a	
	BS	n/a	n/a	n/a	212,676	299,000	255,000		319,000	272,000	
	AI	n/a	n/a	n/a	8,720	20,100	15,100		20,100	15,100	
Sablefish	BS	1,870	1,580	1,580	640	1,584	1,339		1,432	1,210	
	AI	2,530	2,140	2,140	1,090	2,141	1,811		1,936	1,636	
Yellowfin sole	BSAI	220,000	206,000	198,000	156,302	259,700	239,800		268,900	248,300	
Greenland turbot	BSAI	2,540	2,060	2,060	1,747	2,647	2,124		3,864	3,173	
	BS	n/a	1,610	1,610	1,437	n/a	1,659		n/a	2,478	
	AI	n/a	450	450	310	n/a	465		n/a	695	
Arrowtooth flounder	BSAI	186,000	152,000	25,000	20,158	125,642	106,599		125,025	106,089	
Kamchatka flounder	BSAI	16,300	12,200	10,000	7,794	8,270	7,100		8,500	7,300	
Northern rock sole	BSAI	241,000	214,000	92,380	59,040	228,700	203,800		213,310	190,100	
Flathead sole	BSAI	81,500	67,900	22,699	16,713	79,633	66,293		77,023	64,127	
Alaska plaice	BSAI	67,000	55,200	20,000	23,312	66,800	55,100		66,300	54,700	
Other flatfish	BSAI	17,800	13,300	3,500	1,516	16,700	12,400		16,700	12,400	
Pacific ocean perch	BSAI	41,900	35,100	35,100	28,049	39,585	33,122		37,817	31,641	
	BS	n/a	8,130	8,130	1,707	n/a	7,684		n/a	7,340	
	EAI	n/a	9,790	9,790	9,530	n/a	9,246		n/a	8,833	
	CAI	n/a	6,980	6,980	6,747	n/a	6,594		n/a	6,299	
	WAI	n/a	10,200	10,200	10,065	n/a	9,598		n/a	9,169	
Northern rockfish	BSAI	12,200	9,850	3,000	1,994	12,077	9,761		11,943	9,652	
Blackspotted/Rougheye rockfishes	BSAI	462	378	378	341	505	416		580	478	
	EBS/EAI	n/a	169	169	185	n/a	177		n/a	201	
	CAI/WAI	n/a	209	209	156	n/a	239		n/a	277	
Shortraker rockfish	BSAI	493	370	370	420	493	370		493	370	
Other rockfish	BSAI	1,540	1,159	873	851	1,550	1,163		1,550	1,163	
	BS	n/a	686	400	181	n/a	690		n/a	690	
	AI	n/a	473	473	670	n/a	473		n/a	473	
Atka mackerel	BSAI	57,700	50,000	25,920	23,180	74,492	64,131		74,898	64,477	
	EAI/BS	n/a	16,900	16,900	15,776	n/a	21,652		n/a	21,769	
	CAI	n/a	16,000	7,520	7,284	n/a	20,574		n/a	20,685	
	WAI	n/a	17,100	1,500	120	n/a	21,905		n/a	22,023	
Skates	BSAI	45,800	38,800	24,000	24,928	44,194	37,432		42,156	35,651	
Sculpins	BSAI	56,400	42,300	5,600	5,547	56,424	42,318		56,424	42,318	
Sharks	BSAI	1,360	1,020	100	85	1,363	1,022		1,363	1,022	
Squids	BSAI	2,620	1,970	700	298	2,624	1,970		2,624	1,970	
Octopuses	BSAI	3,450	2,590	500	195	3,450	2,590		3,450	2,590	
<b>Total</b>	BSAI	4,028,465	2,639,317	2,000,000	1,866,580	4,198,898	2,574,868		4,109,514	2,474,938	

Final 2013 OFLs, ABCs, and TACs from 2013-2014 final harvest specifications, as revised; total catch updated through November 9, 2013.

## Minutes of the Joint Plan Teams for the Groundfish Fisheries of the Gulf of Alaska (GOA) and Bering Sea Aleutian Islands (BSAI)

November 18 - 22, 2013

North Pacific Fishery Management Council  
605 W 4th Avenue, Suite 306  
Anchorage, AK 99501

BSAI Team		GOA Team	
Mike Sigler	AFSC (BSAI co-chair)	Jim Ianelli	AFSC REFM (GOA co-chair)
Grant Thompson	AFSC REFM (BSAI co-chair)	Diana Stram	NPFMC (GOA co-chair)
Kerim Aydin	AFSC REFM	Sandra Lowe	AFSC REFM
Lowell Fritz	AFSC NMML	Chris Lunsford	AFSC ABL
Chris Siddon	ADF&G	Jon Heifetz	AFSC ABL
Alan Haynie	AFSC REFM	Mike Dalton	AFSC REFM
Jane DiCosimo	NPFMC (Coordinator)	Kristen Green	ADF&G
Bill Clark	IPHC (retired)	Obren Davis	NMFS AKRO
Brenda Norcross	UAF	Mark Stichert	ADF&G
Mary Furuness	NMFS AKRO Juneau	Paul Spencer	AFSC REFM
David Barnard	ADF&G	Nancy Friday	AFSC NMML
Leslie Slater	USFWS	Leslie Slater	USFWS
Dana Hanselman	AFSC ABL	Craig Faunce	AFSC FMA
Liz Chilton	AFSC FMA	Jan Rumble	ADF&G
		Ian Stewart	IPHC

### Introduction

The joint meeting of the Gulf of Alaska (GOA) and Bering Sea Aleutian Islands (BSAI) Groundfish Plan Teams convened Monday November 18, 2013 at 9:00 am at the Alaska Fisheries Science Center in Seattle, Washington to review joint stock assessments for sablefish and grenadiers and discuss other management issues. Chris Siddon, Brenda Norcross, Craig Faunce, and Ian Stewart were absent. Approximately 30 people attended part(s) or all of the joint meeting. The Joint Groundfish Plan Teams adopted a revised agenda.

## **Council update**

### **Board of Fisheries actions**

Mark Stichert reported on Alaska Board of Fisheries (BOF) changes to state Pacific cod management in the GOA and BSAI and Atka mackerel in the AI. The western GOA Pacific cod GHF was increased from 25% to 30%. Consideration was given to increasing the central GOA allocation but no change was made. A Bering Sea Pacific cod pot allocation was created at 3% of the BSAI ABC. If the BS and AI Pacific cod specifications are split in 2014, this allocation would occur off the aggregate BSAI ABC. The BOF also created a new Atka mackerel seine fishery in the eastern Aleutian Islands and set a GHF of 10% of the ABC in the EAI; the Board is scheduled to reconsider this decision on November 26, 2013.

### **Revised assessment plans**

Due to the government shutdown in October 2013, stock assessments for an abbreviated suite of model runs were required only for Steller sea lion prey species (pollock, Pacific cod, Bering Sea/Aleutian Islands Atka mackerel), and species where a conservation concern has been noted. In such "abbreviated" assessments, authors were not required to include alternative models and were not required to respond to SSC or Team comments, among other things. For all other Tier 1-3 stocks, updated projections from last year using 2013 catch data were required at a minimum, with results presented in executive summaries using the "off-year" format for stocks on biennial assessment cycles. For stocks managed in Tiers 4-6, executive summaries using the "off-year" format for biennial assessment cycles were required.

### **Stock structure and spatial management policy**

Grant Thompson relayed the Council's October 2013 policy on stock structure and spatial management of North Pacific stocks and stock complexes:

1. As soon as preliminary scientific information indicates that further stock structure separation or other spatial management measures may be considered, the stock assessment authors, plan teams (groundfish, crab, scallop), and SSC should advise the Council of their findings and any associated conservation concerns.
2. With input from the agency, the public, and its advisory bodies, the Council (and NMFS) should identify the economic and management implications and potential options for management response to these findings and identify the suite of tools that could be used to achieve conservation and management goals. In the case of crab and scallop management, ADF&G needs to be part of this process.
3. To the extent practicable, further refinement of stock structure or other spatial conservation concerns and potential management responses should be discussed through the process described in recommendations 1 and 2 above.
4. Based on the best information available provided through this process, the SSC should continue to recommend OFLs and ABCs that prevent overfishing of stocks.

Prior to The Team meeting, discussions between Council member John Henderschedt and members of the SSC, Plan Teams, and Council staff focused on three questions:

- A. Are the steps in the Council process in chronological order? The answer appears to be, "Yes," except as noted immediately below.
- B. Can the order of the steps be changed in the event of an emergency? The answer appears to be, "Yes."
- C. What is the Council's expectation as to the typical amount of time that Steps 2 and 3 will take? The answer appears to be, "About a year."

Grant presented the following two interpretations of the Council policy stemming from these discussions.

Interpretation #1

1. The SSC will discuss the available evidence for stock structure each December
2. The SSC will then rule on whether or not there is compelling evidence to necessitate separate stock management
3. If the Council wanted to try to continue to manage the separate stocks under a single ABC, then it would request a management response from industry that would demonstrate how the separate stocks could be managed sustainably under a common ABC
4. The SSC would review this plan in February:
  - If the proposed management response does achieve the goal of maintaining catch at a sustainable level for both stocks, then management would continue under a single ABC
  - If success cannot be demonstrated within a reasonable period of time, then the SSC would manage separate stocks

Interpretation #2

1. When the Team receives new information regarding the existence of stock structure or the impacts of fishing on stock structure, the Team would evaluate the extent to which this information causes concern about the way the stock/s is/are being managed (this is Step 1 in the Council's process)
2. A possible scale of concern (all actions are contingent on SSC concurrence):
  - a. Little or no concern, in which case no action needs to be taken
  - b. Moderate concern, in which case special monitoring (e.g., frequent updating of the template) is required at a minimum and Steps 2 and 3 of the Council's process *may* be activated
  - c. Strong concern, in which case Steps 2 and 3 of the Council's process *must* be activated
  - d. "Emergency," in which case the Team will recommend separate harvest specifications at the ABC level, the OFL level, or both, for the next season (straight to Step 4 of the Council policy)

The Teams discussed how well the two interpretations mesh with the Council policy, given the answers to questions A-C above:

- A. Interpretation #1 does not follow the chronological order of the Council policy, whereas Interpretation #2 does.
- B. Both interpretations allow for moving straight to specification of separate ABCs, OFLs, or both in the case of an emergency.
- C. Interpretation #1 does not allow for Steps 2 and 3 of the Council process to take the anticipated time of approximately one year, whereas Interpretation #2 does.

Team members suggested that the following issues merit further clarification or guidance:

- How much time is allowed for acceptance (by the Council or SSC) of an industry response to a management concern? Interpretation #1 sets a hard deadline of two months for submission of a management response, but the only limit on the amount of time required for demonstrating the plan's success is that it be "reasonable." Interpretation #2 sets no limit on the amount of time taken by Steps 2 and 3 in the Council policy. Either interpretation could be amended by specifying a limit on the amount of time. Also, both interpretations allow for moving directly to separate harvest specifications at any time, in the event that the SSC determines the rate of progress to be insufficient.

- What is the relationship between evidence of stock structure and degree of concern? One possibility, which is most consistent with Interpretation #1, is that degree of concern is synonymous with strength of evidence of stock structure. Another possibility, which is most consistent with Interpretation #2, is that degree of concern is a function of both the strength of evidence of stock structure and the extent to which the fishery is impacting that structure.
- How can the process for passing stock structure information to the SSC be improved? The Team minutes attempt to document all presentations made at the Team meetings, but it is not always clear which other documents from the September Team meetings get forwarded to (or reviewed by) the SSC, and the time available for the Team report at the October SSC meeting is sometimes short. Moreover, to keep the Team reports of reasonable length, they tend to focus on those items for which the Team(s) made some sort of recommendation, so it is possible that stock structure information is not being emphasized in those cases (if any) where the Team made no recommendation. It would be helpful if the SSC minutes consistently acknowledged receipt of information on stock structure.

The procedure used by the BSAI Team in evaluating stock structure information during this year's September meeting was similar to that described in Interpretation #2. In following this procedure, the BSAI Team communicated to the SSC both the evidence of stock structure and the rationale for the Team's determination of the associated level of conservation concern.

The Teams will continue to review case studies of the stock structure template. In September 2014 the GOA Team is scheduled to review northern and southern rock sole, deepwater flatfish (Dover sole), arrowtooth flounder, octopus, and skates. The BSAI Team is scheduled to review eastern Bering Sea pollock, arrowtooth flounder, flathead sole, and other rockfish. Review of the stock structure template for BSAI Pacific ocean perch will be scheduled for September 2015. In addition, the previously completed case studies can be compiled for SSC consideration if the SSC indicates an interest in reviewing this information at a future SSC meeting.

## **Economic SAFE Report**

Ron Felthoven and Ben Fissel of AFSC presented the Economic Stock Assessment and Fishery Evaluation (SAFE) report to the Joint Plan Team. Ron Felthoven summarized the document, new elements, and on-going research efforts by the Economics and Social Sciences Research Program. New sections this year include aggregate data from the National Catch Shares Report for Alaska catch share fisheries and 2008-2012 information from the Amendment 80 economic data report (EDR).

Ben Fissel presented changes in index share across the GOA and BSAI for ex-vessel and wholesale markets for catcher vessels and catcher processors. These indices provide insight into: 1) how product value is changing from year to year; and 2) to what degree changes in price versus quantity impacted the change in value.

Individuals (Team members and members of the public) suggested that it would be helpful to receive more information on the following topics in the future:

- Halibut catch, value, etc. because halibut is such an important topic for Council action. While not part of the groundfish FMP, it is managed in part by the Council, along with groundfish target species.
- Information on crab and salmon, because processors and harvesters make decisions about groundfish in part in connection with the market and resources conditions of these populations.
- Values by management group (e.g., different rock fish species and/or species groups).

- Tables on how much production by species goes to fish meal.

**The Teams discussed whether it would be helpful to include information from the Economic SAFE Report in individual stock assessments. The Teams recommended that this discussion be continued at the September 2014 meeting. It may be helpful to compare how information from the Ecosystem Considerations section is (or should be, or should not be) included in individual stock assessments.**

## **Sablefish**

Dana Hanselman presented the sablefish assessment. The new assessment included the following new data: the 2012 final catch and new catch for 2013; relative abundance for the 2012 longline survey, the 2013 longline survey, and the 2013 Gulf of Alaska (GOA) trawl survey; ages from the 2012 longline survey and fishery; and lengths for the 2012 longline fishery, the 2013 longline survey, the 2012 trawl fishery, and the 2013 GOA trawl survey. There were no model changes and no whale sensitivity analysis.

Abundance indices have dropped from peak levels: the domestic RPN is down 20%, the IFQ fishery down 15%, and the GOA trawl survey down 65% from the respective long-term means. All three indices are at their lowest levels. Declines in survey indices are due either to declines in the stock or some other unidentified mechanism. The authors investigated possible causes such as fish moving out of survey depths, temperature changes, prey density, bad bait, and whale depredation, but none seemed likely. Killer whale depredation was up slightly in the Bering Sea and Aleutian Islands, and sperm whale depredation was similar to 2012. Longline survey RPNs were stable for the western GOA, the Aleutian Islands, and Bering Sea, and down in the central and eastern GOA which are at time series lows. Model fits to the longline survey RPNs were consistent with the survey results. The 2013 GOA trawl survey was also down and has been dropping since 2002; there were few young fish found during the survey. Logbook and observer data show similar trends to those listed above. The gully index was down and has the same trend as the slope survey. Currently the gully index is not included in the assessment model. The IPHC survey index, which is not included in the assessment model, showed some increase in 2011 followed by a sharp decrease of about 28% from 2011 to 2012.

Model results show that biomass has been decreasing since 2003. Spawning biomass had leveled off and is now trending downward. The authors developed an aggregate normalized index using all three abundance indices, which was well correlated with the model estimates of biomass. Model estimates of recruitment were above average for the 1997, 2000, and 2008 year classes, with 2008 being just above average in the current assessment. The 2000 year class comprises about 20% of the spawning biomass and the 2008 year class comprises about 10% of the spawning biomass. This year class is larger than average but is still not showing up as strong as expected. The 2014 projected spawning biomass is at  $B_{34\%}$  which puts sablefish in Tier 3b. The 2014 ABC is estimated to be 13,722 t and represents a 15% decrease relative to the 2013 ABC. The biomass is projected to decline for several years.

Apportionment of the sablefish ABC has two goals: 1) to take into account the actual changes in the distribution of the population, and 2) to reduce inter-annual variability in area ABCs. These goals are not being met because recent changes in apportionment are too large to reflect actual distributional shifts. The problem is thought to be due to the approach not taking into account measurement error, leading to rapid changes in some area estimates and large swings in apportionments. As an example, the status quo apportionment would increase the 2014 Bering Sea ABC by 20% although ABCs for all the other areas would decline by 15–20%. There is higher uncertainty in the data for the Bering Sea because this area is only surveyed every other year and fishery CPUE is estimated with limited observer and logbook data. A possible solution

is to use a random effects model, which the authors will explore next year. Two options were proposed for this year's assessment: 1) go with the model ABC and standard apportionment, or 2) use the model ABC and fix apportionment at the same values as used last year and apply a 15% decrease across the board, which the authors recommended. This would be an interim measure to smooth ABC variability until more analyses are completed.

A Ph.D. student at UAF is working on a sablefish spatial model to evaluate apportionment strategies which will maximize spawning biomass, minimize volatility, and consider economic yield. The project will give guidance on apportionment by September 2015. Industry seemed to support the status quo 2013 apportionment applied to the 2014 ABC. As a clear biological concern has not been raised for either allocation scheme, the Team will provide both options.

**The Teams recommended following the authors' approach for apportionment as an interim measure (-15% across all areas). The Teams also recommended that the standard approach (used in previous year's assessments) be presented to the SSC and Council and noted that work is underway to select an improved apportionment approach.**

## **Grenadiers**

Pete Hulson presented an update of the grenadier assessment. Giant grenadier, the most abundant species of the complex, is used as a proxy for the remainder of the group. The Tier 5 recommendations of ABC and OFL for the eastern Bering Sea, Aleutian Islands, and Gulf of Alaska are the same values as for the last assessment. Total catch Alaska-wide was about 15,000 t for each of the last two years. The authors presented a preliminary random effects model for the Gulf of Alaska. This model was applied to the time series of grenadier survey biomass and accounts for missing data for the years that the survey did not sample the deep depth strata. The Teams did not recommend an OFL or ABC, as this stock complex is not managed under the groundfish FMPs. Final action to include this complex in the FMPs is scheduled for February 2014. If grenadiers are included "in the fishery," then harvest specifications would not be in effect until 2015, at the earliest.

## **Alternative statistical models for survey data**

The Teams discussed the rockfish CIE recommendation of exploring alternative methods to estimate biomass with trawl survey data. The CIE suggested that standard random sampling estimators were not well suited for use with patchy or rare distributions. The Teams determined that this was an important recommendation for rockfish, but is also applicable to all stocks that use the trawl surveys to assess stocks.

**The Teams recommended that the Science Center explore modeling approaches such as generalized linear models and hurdle models such as the delta-lognormal in order to obtain more accurate estimates of survey biomass and the variance. The Science Center may wish to consider organizing a study group composed of assessment and survey scientists to evaluate various methodologies.**

## **Meeting dates for 2014**

Tentative meeting dates for next year are September 22-25, 2014 (as needed) and November 17-21, 2014.

## **Adjourn**

The meeting adjourned at approximately 2:30 pm on Monday, November 18, 2013.

## **Minutes of the Bering Sea Aleutian Islands Groundfish Plan Team**

**North Pacific Fishery Management Council  
605 W 4th Avenue, Suite 306  
Anchorage, AK 99501**

**November 18-22, 2013**

Mike Sigler	AFSC (Co-chair)	Grant Thompson	AFSC REFM (Co-chair)
Jane DiCosimo	NPFMC (Coordinator)	Lowell Fritz*	AFSC NMML
Kerim Aydin	AFSC REFM	Alan Haynie	AFSC REFM
Chris Siddon*	ADF&G	Dana Hanselman	AFSC ABL
Brenda Norcross*	UAF	Mary Furuness	NMFS AKRO
David Barnard	ADF&G	Bill Clark	IPHC
Leslie Slater*	USFWS	Liz Chilton	AFSC FMA

\*attended part(s) of the meeting

The BSAI Groundfish Plan Team convened on Monday, November 22, 2013, at 3:00 pm to review 25 stock assessments; updates to the Ecosystem Considerations chapter, Economic SAFE Report, and BSAI forage fish assessment; and other management issues.

All members attended; some attended only parts of the meeting. As many as 65 people attended part(s) of the meeting.

### **Effects of October government shutdown**

Due to the government shutdown in October 2013, stock assessments for an abbreviated suite of model runs were required only for Steller sea lion prey species (pollock, Pacific cod, Atka mackerel), and species where a conservation concern has been noted. For all other Tier 1-3 stocks, updated projections from last year using 2013 catch data were required at a minimum, with results presented in executive summaries using the “off-year” format for stocks on biennial assessment cycles (i.e., some flatfishes, all rockfishes, all non-target species). In such “abbreviated” assessments, authors were not required to include alternative models and were not required to respond to SSC or Team comments, among other things. For stocks managed in Tiers 4-6, executive summaries using the “off-year” format for biennial assessment cycles were required.

Under normal circumstances, the Team expects to receive a full assessment in November of the current year before accepting a change in either model *structure* or model *inputs* (with the exception of routine updating of time series, such as adding a new catch datum to the end of the catch time series). However, for the special case of this “furlough year,” the Team left open the options of:

1. accepting a change in model *structure* for *Tier 3* stocks/complexes without receiving a full assessment in November *if* the Team reviewed and approved the change after receiving a full assessment in September;
2. accepting a change in model *structure* for *Tier 5* stocks/complexes without receiving a full assessment in November *if*, after evaluating alternative approaches, the authors recommend adoption of the Survey Averaging Working Group's random effects model; and
3. accepting a change in model *inputs* without receiving a full assessment in November *if* those changes were reviewed and approved in September, even if a full assessment was not received in September.

## BSAI fishery crab PSC

Diana Stram summarized a Council request for the Team to consider an annual review of crab PSC levels to assist efforts by ADF&G to determine appropriate crab TACs that are below the federal ABC and allow a sufficient buffer for crab PSC in the groundfish fisheries, with particular application to St. Matthew blue king crab, Tanner crab, and Bristol Bay red king crab. The Council requested information on PSC trends based upon potential changes in fishery behavior or management in the groundfish fisheries.

The Team noted the mismatch between crab PSC reporting in the groundfish stock assessments (by FMP or regulatory area) compared with State management districts, as stock assessments for groundfish and PSC reported therein often cover more than one crab stock. The Team commented on the statistical difficulties of projecting trends of any PSC removals.

**The Team recommended that the Council recommend to ADF&G that it consult with NMFS AKRO In-Season Management Division and the AFSC FMA Division when ADF&G meets to discuss setting TACs. NMFS staff would provide reports on changes in groundfish management and fisheries operations that may affect crab PSC in groundfish fisheries.**

The Team also suggested that crab stock assessment authors include information in their assessments on the PSC removals of each crab stock by groundfish target fisheries. Currently assessments include only bycatch by gear type without any target information included.

## Eastern Bering Sea pollock

Jim Ianelli presented the EBS pollock assessment.

Highlights from recent data:

- This year there was more fishing than usual around Pribilof Islands during roe season.
- Roe recovery rates have been lower in 2011-2013 than in earlier in the past decade. In 2013, the spatial distribution of the winter fishery was out of the CVOA. Members of the public expressed that they believed this was due in part to high concentrations of fish to the north, cold conditions, and Chinook bycatch avoidance.
- Size composition in the fishery shifted from bimodal in 2012 to unimodal in 2013, with the upper mode dropping out.
- Summer fishery CPUE was higher in 2013 than in 2011 or 2012.
- Mean weights at age are higher in 2009-2012 than previously, except that weights of 3- and 4-year-olds from the 2008 year class are the *lowest* in the time series (see "Future directions," below).
- The survey observed significant concentrations of pollock inside the "cold pool," which is unusual.

- The number of 5-year-olds estimated by this year's bottom trawl survey was the highest ever.

Highlights from this year's model explorations:

- Models in the "Mod0.x" series explore the effects of adding one piece of new data at a time, cumulatively, to last year's model. For example, addition of the 2012-2013 acoustic vessels of opportunity data caused an increase in the biomass estimates. Mod0.4 incorporates all of the new data, and is the authors' recommended model.
- Models in the "Mod1.x" series explore the method for estimating  $s_R$  that was recommended by the Recruitment Working Group. The resulting estimate of  $s_R$  appears reasonable, and the corresponding estimates of cohort strengths did not change appreciably, but the corresponding estimate of stock-recruitment steepness *did* change appreciably. Due to time limitations resulting from the October government shutdown, the authors felt that they did not have enough time to evaluate these impacts, and therefore do not recommend moving to this model at present.
- Mod2.0 explores the use of the "Kotwicki index." This method, which was presented to The Team in September, attempts to correct for the effect of fish density on the efficiency of the net used in the shelf bottom trawl survey. In general, the method estimates that efficiency varies inversely with density. Because fish density varies with space, so does the effect. Overall, high survey estimates tend to get corrected upward, and low survey estimates tend to get corrected downward. Coefficients of variation are higher than for the raw (uncorrected) estimates. Age composition data also get revised as a result of this method. The authors view Mod2.0 as preliminary, and do not recommend moving to this model at present.

Highlights from assessment results:

- The estimated strengths of the 2006 and 2008 year classes are very similar to last year's estimates, with the 2006 year class estimated to be slightly above average and the 2008 year class estimated to be about twice the average level. More recent year classes are all estimated to be slightly below average.
- Spawning biomass is projected to be 23% above  $B_{MSY}$  in 2014.
- Annual surplus production for 2014 is estimated at about 1.1 million t, maximum permissible ABC for 2014 is 2.528 million t, and the authors' recommended ABC for 2014 (based on the most recent 5-year average fishing mortality rate) is 1.369 million t. If the stock were managed under Tier 3, the maximum permissible ABC for 2014 would be 1.465 million t.

The Team accepted the authors' recommended model and harvest specifications for 2014-2015, noting that use of the 5-year average fishing mortality rate has been the accepted practice for setting ABC for this stock consistently since the 2010 assessment.

Future directions:

- In this year's assessment, projections are based on the assumption that weights at ages 6 and 7 will equal the lowest values in the historic weight-at-age time series, because these ages correspond to the 2008 year class in the two most important projection years (2014 and 2015) and, as noted above, the 2008 year class appears to have weights at age that are far below average. For the future, Jim would like Team guidance regarding the possibility of using a matrix of cohort-specific weights at age for projection (the current procedure uses a single vector of weights at age for all future years).
- The author also asked for Team guidance regarding issues pertaining to Tier 1 status and estimation of stock-recruitment parameters.

**The Team recommended that the authors explore the use of a matrix of cohort-specific weights at age for making projections.**

**The Team also recommended that the authors consider the recommendations of the Recruitment Working Group, once final recommendations have been accepted by the Teams and SSC.**

## **Aleutian Islands pollock**

Steve Barbeaux presented AI pollock assessment. The stock assessment covers areas 541, 542 and 543, excluding the northern part of each area. The most recent survey occurred in 2012; the value from that survey was a historic low. The only change in the assessment model from last year's assessment was to remove the pre-1991 survey estimates (which were previously included, but given extremely low emphasis). As a result, the new model results were very similar to last year's results. The stock is in Tier 3b with a 2014 ABC recommendation of about 35,000 t. However, ABC for this stock is limited by statute to 19,000 t.

## **Bogoslof pollock**

Jim Ianelli presented the Bogoslof pollock assessment. No new survey was conducted this year; the last survey occurred in 2012. As a result, the ABC and OFL recommendations remained the same as recommended last year.

## **Eastern Bering Sea Pacific cod**

Grant Thompson presented the EBS Pacific cod assessment. This was an "abbreviated" full assessment, consisting of running the model adopted in 2011 and 2012 (last year's Model 1) with the latest data. A number of alternative models had been discussed and requested by the Team and SSC in September/ October but Grant had been unable to implement them because of the government shutdown in October. The Team supports the use of last year's model for 2014 stock specifications.

Dave Somerton questioned the model's estimate of a steeply domed survey selectivity, as he and others have done for years. The group viewed survey and commercial catch compositions, which have little overlap. Commercial length compositions have a mode around 60-70 cm, whereas survey catches contain few fish larger than 60 cm. In the view of some Team members, it is this feature of the catch composition data that inevitably results in a domed survey selectivity and asymptotic commercial selectivity.

The Team discussed future work on the assessment. At the September meeting we had reviewed four models, of which one was Model 1 and the others were all variants of an exploratory model (called Model 4 last year and in September) that incorporated a number of improved features. Model 2 was Model 4 with survey selectivity and catchability estimated freely. Model 3 was Model 4 with survey selectivity forced asymptotic and a prior on survey catchability centered on 0.47 (based on archival tag data). Both Model 2 and Model 3 produced quite high estimates of survey catchability (1.37 in Model 2 and 1.27 in Model 3, despite the prior). They both also showed very high (unlikely) values of F in the 1980s.

For the current assessment, in September the Team requested six models (including Models 1 and 4), and the SSC added two more models to the list at its October meeting. Grant expressed some disappointment with the large number of models requested, noting that the purpose of the two stages in the preliminary review process (with Team/SSC meetings in May/June and September/October) is to *reduce* the number of models at each step, but this year the number

increased from three models requested in May/June to eight models requested in September/October.

**The Team recommended that Grant fit the following candidate models for next year's September meeting:**

Model	Description	Rationale
1	2011-12 standard	Standard practice
2b	Model 4 with fixed M, free survey selectivity, and annually varying survey Q (freely estimated mean and dev vector)	Grant has argued persuasively that the survey data simply cannot be fitted with a constant survey Q.
3a	Model 4 with fixed M, asymptotic survey selectivity, and Q=1.	An asymptotic candidate; one of the models requested by the SSC.
3b	Like Model 3a but with M estimated.	A check on the effect of freeing M.

One of the models requested by the SSC in October is not on the list: a version of Model 2 with Q=1 or with the mean of an annually varying Q fixed at one. In addition to the list above, it is understood that the author may bring forward other models (e.g. Model 4 itself). If the SSC settles on a list of models at its December meeting, it may not be necessary to hold the customary discussions of EBS cod models in May/June.

**The Team also repeated its previous recommendation that studies of the vertical distribution of Pacific cod continue in order to test the previous finding that the average product of survey catchability and selectivity across the 60-81 cm size range is 0.47 (based on vertical distribution from archival tags). These studies should include: 1) analysis of existing fish acoustic data (as recommended by Bob Lauth); and 2) depending on the results of that analysis, repeat the 2012 experiment in an area where Pacific cod are distributed farther off bottom and using an acoustic buoy to measure vertical response to the passing vessel.**

## **Aleutian Islands Pacific cod**

Grant Thompson presented the AI Pacific cod assessment.

The SSC has announced its intention to set a separate 2014 OFL and ABC for cod in the Aleutians, and to that end a separate AI assessment has been in development for some time. Grant Thompson had reported on fits of three models in September but none produced acceptable results, so at this meeting there was no accepted model or even tier for this stock. Grant presented two new Tier 3 assessments and two Tier 5 assessments.

Like the models shown in September, the Tier 3 models were simpler than the EBS model, with just one fishery and no season divisions. Selectivity was modeled using Stock Synthesis selectivity pattern 17, which is empirical rather than parametric. Two versions were fitted: Model 1, with survey selectivity free and survey Q=1; and Model 2, with survey selectivity asymptotic and a prior on log survey Q centered at zero with standard deviation 0.11. (The estimated value of Q in the model fit was 0.78.) The Tier 5 models used standard survey averaging methods (Kalman filter and the random effects model) to estimate present survey biomass.

The Tier 3 models fitted the data reasonably well but had some questionable features, including a very rapid increase in abundance in the 1980s, an extremely peaked estimate of survey

selectivity (Model 1), and difficulty reconciling the sustained downward trend in survey CPUE with the sustained upward trend in fishery lengths. In view of these features, and the lack of previous experience with selectivity pattern 17, Grant did not believe that the Tier 3 models could be relied on for determining 2014 OFL and ABC. The Tier 5 models, being entirely empirical, naturally fitted the survey time series satisfactorily. All of the models produced very similar values for ABC (around the level of recent catches), so Grant recommended using one of the Tier 5 models until a credible Tier 3 model emerged. The Team agreed.

Some members of the public voiced deep doubts about the reliability of the survey for estimating cod abundance, pointing out that the survey is conducted in summer when cod are scarce in the region while the fishery is conducted in the winter, when cod are apparently much more abundant. The Team shares this concern. Setting an OFL and ABC for 2014 therefore comes down to choosing between a questionable Tier 3 model and a questionable Tier 5 model. Fortunately the OFL/ABC numbers are similar, but questionable nonetheless.

**For continued development of a Tier 3 assessment, the Team recommended: 1) forcing the regime change recruitment offset to zero, 2) examining the usefulness of IPHC longline survey data, and 3) continuing to monitor commercial CPUE.**

## **Yellowfin sole**

Tom Wilderbuer presented the yellowfin sole assessment. There were no changes made to the stock assessment this year, but the model was updated with most current survey and fishery data available. In general the model fits the survey biomass estimates quite well. Yellowfin sole female spawning biomass is ~1.5 times above Bmsy, but declining since the 1980s. However, total biomass is trending upwards due to a strong 2003 age class. Additionally, the average exploitation rate is only 0.05 and the catch is only, on average, 75% of the ABC.

There was some discussion about smoothing the weight-at-age data requested by the SSC and a suggestion to consider a median smoother (among others) in the future. It was also noted that fishing effort was relatively high late into the season this year, but this was not a change in fishing behavior that warranted further discussion. Also noted was a near 50/50 sex ratio and a very large discrepancy between average ages of fish caught in the fishery versus those caught in the survey; just reiterating the ability of the fleet to target older (i.e., larger) fish.

## **Greenland Turbot**

Steve Barbeaux presented the Greenland Turbot assessment. Due to the federal government shutdown, no new models were explored. However, EBS shelf and ABL longline survey biomass, survey length frequency data, shelf survey age data, total catch, and fishery length frequency data were updated in the model. Model results projected a 2014 spawning biomass of 22,010 t, which was a 17% decline from last year's 2014 projection. A second model was run, which included an autocorrelation parameter, but the authors felt that there was not sufficient time to review its adequacy. For the early part of the time series (where no size composition or age composition data are available), the autocorrelation model allows recruitment to occur over multiple years rather than forcing a strong recruitment pulse into one year. This second model fit better than the model actually used for this year's stock assessment and will be examined fully in the upcoming year. The very strong 2008 and 2009 year classes are expected to increase the female spawning biomass significantly.

## Generic rockfish research priorities

For assessments involving age-structured models, this year's CIE review of BSAI and GOA rockfish assessments included three main recommendations for future research:

1. Selectivity/fit to plus group (e.g., explore dome-shaped selectivity, cubic splines)
2. Reevaluation of natural mortality
3. Alternative statistical models for survey data (e.g., GAM, GLM, hurdle models)

**The Team agreed that development of alternative survey estimators is a high priority, but concluded that this priority is not specific to rockfish, and should be explored in a Center-wide initiative (see “Alternative statistical models for survey data” under Joint Team minutes). For the remaining two items, the Team recommended that selectivity and fit to the plus group should be given priority over reevaluation of the natural mortality rate.**

## Pacific ocean perch

Paul Spencer presented the Pacific ocean perch assessment. The assessment model was not run, but the projection model was re-run with updated catch data. The estimated catches for 2012 and 2013 were within 2% of actual values. The estimates are based on the ratio of the proportion of remaining ABC that has been taken in Oct-Dec in the last 3 years added to the current year catch. The area apportionment was based on the standard method of a weighted average of the last three surveys. He also presented the random effects model which gave similar results as the standard approach.

Paul discussed future research plans based on SSC and CIE comments (see “Generic rockfish research priorities” above). Paul showed some of the fits to the survey age compositions and noted that dome-shaped selectivity could help the fit to the plus group. Plan Team members suggested that simulations could be done to see what the plus group should look like with the high fishing mortality that occurred in the 1960s. Another suggestion was to examine the compositions beyond the plus group to see if these ages look like an exponential decline. Paul said that the assessment used to have a slight dome-shape, but was later changed to be asymptotic. Another suggestion was to estimate the natural mortality rate freely, but Paul said that the tendency is for  $M$  to increase, which would not help the fit to the plus group.

Paul showed the increase in POP biomass in the EBS Slope survey for the last decade. He is considering ways to include this survey in the assessment model. One possibility would be simply to add the EBS slope and the AI survey values together, with the gaps in the biennial time series filled from a random effects model. AFSC RACE survey staff commented that the selectivity may not be the same, given the different footropes and the different habitat of each environment. Paul said that he was concerned that the two parts of the population may not move in synchrony. Paul said a comprehensive rockfish stock structure comparison would be useful, and volunteered to do the stock structure template for BSAI POP in 2015.

**In addition to the generic rockfish research priorities, the Team recommended that future POP research include exploratory use of the EBS slope index in the model.**

**The Team also recommended that the author present the stock structure template for this stock in September 2015.**

## Northern rockfish

Paul Spencer presented the northern rockfish assessment. The assessment model was not re-run, but the projection model was updated with new catches. The technique for projecting year-end catch for the current year was the same as in the BSAI POP assessment, and was almost

identical to the technique used for northern rockfish last year. The only difference is that a 5-year average was used last year for computing the proportion of the remaining October-December ABC that is caught by the end of the year, but this year Paul switched to a 2-year average, due to an apparent change in the way that the fishery has been prosecuted recently. The ABC and OFL are quite similar to last year's estimates. Paul discussed future research plans based on SSC and CIE comments, similar to those described under POP above. Paul noted that there are few northern rockfish found in either the EBS slope or the EBS shelf surveys, because their primary depths are in the seam between the two surveys. AFSC RACE survey staff confirmed the existence of a gap between the two surveys at depths of 175-200 m, where northern rockfish probably reside.

## **Blackspotted and Rougheye rockfish**

Paul Spencer presented the blackspotted and rougheye rockfish assessment.

For the Tier 5 portion of the stock, the authors recommended use of the random effects (RE) model that the Team and the Survey Averaging Working Group had asked authors to consider as an alternative. This change lowers the model estimates for biomass and OFL/ABC. In the document, only the RE results are shown for the Tier 5 portion of the stock. However, since there are no new data for the EBS slope or AI surveys this year, last year's biomass/OFL/ABC values for the Tier 5 portion of the stock could simply be rolled over if the SSC does not wish to use the results from the RE model.

The Team discussed whether to adopt the random effects model over the status quo method (weighted average of the last three surveys). Both were presented by the author (although not in the document). The CIE review raised the issue that we don't really know the CVs of the survey – they are an estimate. The author and Team discussed several ways to address process error in the RE model. For example, one could set a prior on the process error variance term. The author suggested that one could run the RE model with a common variance across surveys, which the status quo method implicitly assumes. These issues are not specific to blackspotted/rougheye rockfish, however.

For this assessment, the Team supports the authors' recommendation to use the RE model for the Tier 5 portion of the stock.

**The Team recommended that the authors continue to examine how the estimates of the random effects model (including process error variance) are impacted by changes in survey estimates and variances.**

**The Team also recommended reconsideration of split-tier management of this stock complex.**

### Blackspotted and rougheye rockfish spatial structure discussion

Paul Spencer revisited the spatial stock structure discussion that he had presented in September and in several previous Plan Team meetings. Although blackspotted/rougheye rockfish are managed in a two-species complex in the BSAI, rougheye rockfish are rarely found west of the eastern Aleutians; thus, the concern in the WAI pertains to blackspotted rockfish. Paul emphasized seven reasons for concern about fishing pressure on the Western Aleutian Island (WAI) component of the population.

- 1) Genetic information showing spatial structure at scales < 500 km, which is roughly the scale of one of the AI subareas.
- 2) High catch levels in the 1990s in the WAI that were followed by a sharp decline in WAI survey biomass estimates.

- 3) Estimated exploitation rates have exceeded UF35% (the biomass exploitation rate that would result from applying a fishing rate of F35% to the estimated beginning-year numbers at age) in 6 out of 10 years in the WAI from 2004-2013.
- 4) Overall, an 85% decline in survey biomass estimates in the WAI from 1991-2012, as estimated by a random effects time series model.
- 5) An increase in the proportion of survey tows which have not caught blackspotted/rougheye in the WAI, and within each WAI survey stratum deeper than 100 m.
- 6) A large percentage of the total harvest occurring in the WAI.
- 7) A decline in mean size in the WAI but not in other BSAI subareas.

The Team reiterated its key message from its September 2013 meeting minutes:

**The Team found the quantity and quality of the information presented to be compelling and commended the authors for compiling the information to document concerns regarding status quo management of the assemblage. The Team concurred with the authors' conclusions that the blackspotted/rougheye rockfish abundance has been reduced in the WAI. The Team has more concern over local overexploitation of this assemblage than other stocks that have been subjected to the stock structure template.**

**At this meeting, the Team repeated its "strong concern" about the WAI component of the stock (see Interpretation #2 in the Joint Team minutes on "Stock structure and spatial management policy"). If the SSC concurs with this level of concern, the Team anticipates a management response in 2014. The Team recommended that the authors update the 7 metrics (shown above) in time for the September 2014 meeting. At that meeting, the Team will review the WAI stock status again and evaluate the effect of any management response in 2014.**

## **Shortraker rockfish**

Ingrid Spies presented the shortraker rockfish assessment. This assessment is conducted on a two-year cycle to coincide with biennial Aleutian Islands surveys. The 2013 biomass estimate is based on survey data through 2012 and the estimated values for ABC and OFL in 2014 and 2015 are carried over from the 2012 assessment.

As of 11/09/13, the total catch of 420 t exceeded the ABC of 370 t, with the highest removal occurring in the WAI. This is the first year that shortraker rockfish bycatch was reported in the IFQ halibut fishery, based on observer data collected in the restructured observer program, which may have contributed to the TAC exceeding the ABC. The NMFS AK Regional Office may issue an OFL closure, but does not have the authority to close the IFQ halibut fishery on the basis of shortraker rockfish bycatch.

The assessment authors have used a surplus production model to estimate current biomass for several years, but suggest using the Survey Averaging Working Group's random effects model for future assessments.

**The Team recommended that the authors provide assessment estimates from both the existing surplus production model and the random effects model, with supporting details, in September 2014.**

## **Other rockfish**

Ingrid Spies presented the other rockfish assessment. She said that in 2012, she had not included unidentified rockfish in the catch data, but the amount of this component was very

small and changed the totals only slightly. The other rockfish assessment had no new survey data, so the recommendations repeat the prior assessment's results.

Ingrid presented some evidence of overexploitation of the non-shortspine thornyhead (non-SST) species of the other rockfish complex. The species complex is managed based on aggregate OFL and ABC values; there are no official OFL and ABC values for each species. However, hypothetical values of OFL for each species can be computed and used to evaluate whether overexploitation is occurring at the species level. The hypothetical OFL for shortspine thornyheads is quite large relative to the recent catch. In contrast, the hypothetical non-SST OFL was less than the catch in 2012. This overage has occurred for many years. The catch in 2013 was already larger than the hypothetical 2013 OFL of non-SST rockfish. The main constituent of the non-SST rockfish catch is dusky rockfish. The Amendment 80 fleet catches many of these dusky rockfish in the AI during the fishery for Atka mackerel. The fleet is aware of the issue and will be attempting to alleviate the problem.

**Because of the high harvest of the non-SST portion of the stock, the Team recommended that the stock structure template be completed for this assessment by September 2014. The Team also recommended that the authors report exploitation rates for individual species for the non-SST portion of the stock relative to hypothetical reference levels (e.g., ABC and OFL).**

## **Arrowtooth Flounder**

Ingrid Spies presented the arrowtooth flounder assessment. This is the first off-year assessment for this stock. The projection model was run, using as its basis last year's stock assessment model with a revised maturity schedule approved for use by the Team at its September 2013 meeting. The projection model included updates of catch for 2012 and projected catch for 2013 and 2014. The results of the 2013 shelf survey were not included in the assessment model.

The new maturity ogive had little effect on the total biomass, but resulted in a decrease in female spawning biomass for 2014. There was also a decrease in the OFL and ABC values for both 2014 and 2015.

The Team discussed which biomass and fishing mortality values from last year's assessment should be reported in the SAFE chapter summary table. Last year's method for estimating maturity parameters in that assessment was rejected. One option is to report the values from the 2011 assessment, which was accepted. A second option is to report the values as "n/a." A third option (preferred by the author), is to report the values from last year's rejected assessment. Unlike the harvest specifications (ABC and OFL), the biomass and fishing mortality values have no official standing (e.g., they do not appear in any Federal Register notice). The Team anticipated that the authors would work with Council staff to decide which values to report.

The Team accepted the authors' recommended OFLs and ABCs.

## **Kamchatka flounder**

Tom Wilderbuer presented the Kamchatka flounder assessment.

In 2011 and 2012, this stock was managed under Tier 5. An age-structured model was presented to the Team and SSC in September and October of 2012. The SSC did not accept the model, and recommended a large number of further evaluations. For 2013, the stock continued to be managed under Tier 5. The authors responded to the SSC's October 2013 recommendations in a preliminary assessment presented to the Team and SSC in September and October of this year. In September, the Team recommended that the model from the

preliminary assessment be used in the final assessment. The SSC had no comment on the preliminary assessment. The authors planned to provide a full assessment in November; however, as a result of the October government shutdown, only an executive summary was presented. The projection model was run, based on parameters and numbers at age from the age-structured model presented in the preliminary assessment.

The authors recommend setting ABC for 2014-2015 at the maximum permissible levels under Tier 3, based on the results of the projection model.

The Team held a lengthy discussion over whether it was appropriate to base harvest specifications on an assessment presented in “off-year” format that uses results from a preliminary analysis of an age-structured model that has not been approved by the SSC. Although this is clearly not an ideal scenario, the Team ultimately agreed to accept the author’s recommendations, citing the need for flexibility in light of the unusual circumstances surrounding this year’s assessments and the fact that a very complete analysis of the new model was reviewed in September (see “Effects of October government shutdown” above).

If the SSC concurs, Kamchatka flounder would be managed under Tier 3 for 2014. The Tier 3 results are not directly comparable to the Tier 5 results from last year. For example, the maximum permissible ABC for 2014 is 40% less than the 2013 ABC.

## Northern rock sole

Tom Wilderbuer presented the northern rock sole assessment.

In the 2011 and 2012 SAFE reports, the authors included an alternative (Model 7) that allowed survey catchability to vary with temperature. Model 7 was not accepted for use in either year, but in November 2012, the Team encouraged the authors to explore this alternative more fully. The SSC concurred, and in September of this year Tom gave an oral presentation indicating that Model 7 seemed to be statistically preferable to the base model (Model 1). As a Tier 1 stock, Northern rock sole was scheduled for a full assessment this year, but due to the October government shutdown, the final assessment was presented in “off-year” format only, with an executive summary based on two versions of the projection model. The projection models were, in turn, based on results from Models 1 and 7 in the 2012 assessment and an estimate of final 2013 catch.

The Team had a lengthy discussion of which model should be accepted for this year. On the one hand, it would be very unusual for the Team to recommend a change in model structure without a full, current-year assessment that includes the recommended change. On the other hand, the Team did receive full assessments that included this change in 2011 and 2012, but the change was not accepted in either of those years. The Team noted that the decision does not involve a conservation concern, as both models estimate that the stock is near  $B_0$  and is only lightly exploited. The discussion ended in a split decision. Given this split decision, the Team advises that Model 1 be retained for the purpose of setting 2014 harvest specifications (see also “Effects of October government shutdown” above).

**For November 2014, the Team recommended that the authors provide a full assessment including the temperature-dependent model with new data. At that time the Team requests that the model details be written out for documentation of change of model; the documentation should include a graph to compare the temperature-dependent Model 7 to the currently used Model 1.**

It was noted that survey biomass decreased 8% from 2012 to 2013. The survey can see younger age classes coming in, whereas the fishery does not see them until about age 11. The

exploitation rate remains at 4%; 93% of northern rock sole were retained 2012, a 9% increase. The bottom temperature in the EBS was below average in 2013, but not as cold as 2012.

## **Flathead sole**

Buck Stockhausen presented the flathead sole assessment. Flathead sole are managed as part of a stock complex along with Bering flounder. This is a Tier 3, age-structured assessment. This is the first “off-year” assessment of the complex, so there is no survey update; rather, the projection model was run using parameters from the 2012 model with updated catch data for 2012 and projected catch for 2013 and 2014. According to last year’s full assessment, the stock is in good shape with the biomass well above  $B_{35\%}$  and fishing mortality low relative to  $F_{OFL}$ . The author used a new catch estimation method relative to previous assessments. Previously, a linear regression of the recent weekly cumulative catch was used to arrive at a total catch for the year. For 2013, the ratio of the final catch in the previous year, 2012, to the corresponding week for 2012 was applied to the catch for the same week in 2013. The 2014 catch estimate is the same as the 2013 estimate. These catches do not include CDQ catches, which are small. The Team agreed that this is an improvement over the previous method.

The projection model results are similar to last year’s. Catch and survey biomass are up. The author recommended using the max ABC. The stock is not being overfished and is not approaching an overfished condition.

There was discussion about what how industry would respond if the catch was close to or at the ABC. It was also noted that the method of estimating catch for the current and next year, while acceptable, differed from methods used in other stocks.

## **Alaska plaice**

Tom Wilderbuer presented the Alaska plaice assessment. This is an “off-year” assessment. Although not used in the projection model, the chapter presents recent survey results, including the 2013 biomass point estimate (a 6% decrease in from 2012) and the 2012 age composition. The projection model output is only slightly changed from last year’s assessment. This is a lightly exploited stock, with exploitation rates of ~3 %. Alaska plaice is taken mostly as bycatch in the yellowfin sole fishery. Big year classes spawned in the early the 2000s should sustain the stock.

## **Other flatfish**

Tom Wilderbuer presented the “other flatfish” assessment. Although this stock complex was scheduled for an “off-year” assessment only, the authors provided more than an executive summary, including. 2013 catch and survey data. This is a Tier 5 stock complex. The 2014 biomass estimate decreased slightly (6%) since last year. The Team accepted the author’s recommended OFL and ABC.

## **Atka mackerel**

Sandra Lowe presented the Atka mackerel assessment. This assessment was a full update. New data included the 2012 fishery and survey age composition. Two assessment models were presented: last year’s model (Model 1), in which selectivity was held constant within each (of four) blocks of years, and an alternative (Model 2) that allowed fishery selectivity to vary annually, with the standard deviation of the changes estimated statistically. Prior to the 2008 assessment, selectivity had been allowed to vary annually, but the authors switched to the block format for the 2008-2012 assessments following a recommendation from the 2008 CIE review.

The new age data indicated that older year classes (1999-2001) are still prevalent in the population and increased the estimate of the 2007 year class. Under Model 2, which is the authors' recommended model, projected biomass and the maximum permissible ABC increased substantially, and the stock moved from Tier 3b to Tier 3a. For projections based on Model 2, average selectivity from the most recent 5-year period (2009-2013) was used.

The Team agreed with the authors' choice of model and their recommendations for OFLs and ABCs.

**The Team recommended plotting the average 2009-2013 fishery selectivity vector in Figure 17.13 for comparison purposes, along with selectivity from the terminal year.**

## Skates

Olav Ormseth presented the squid assessment. This was a scheduled "off-year" assessment. He provided an overview of the executive summary for BSAI skates. No changes were made to the assessment model for Alaska skate. The projection model was re-run with the most recent catch data. Results from the 2013 EBS shelf survey were presented but not used for making harvest recommendations. The 2014 and 2015 recommended OFLs and ABCs are slightly reduced from 2013, consistent with last year's projections. The author is planning to examine and respond to recommendations from the May 2013 CIE review in next year's full assessment.

## Sharks

Dana Hanselman presented the shark assessment. This was a scheduled "off-year" assessment. BSAI sharks are in Tier 6, with OFL and ABC set on the basis of maximum catch over the years 1997-2007. The recommended values for ABC and OFL in 2014 and 2015 are carried over from the 2012 assessment. As of 11/9/13, the shark complex catch of 85 t is well below the 2013 ABC of 1,020 t. Trawl survey data do not provide reliable estimates of abundance of sharks in the BSAI.

## Sculpins

Ingrid Spies presented the sculpin assessment. This was a scheduled "off-year" assessment. The 2013-2015 biomass estimate is based on survey data through 2012 and the recommended values for ABC and OFL in 2014 and 2015 are carried over from the 2012 assessment.

As of 11/9/13, the sculpin complex catch of 5,547 t is less than the total catch in 2012 and well below the 2013 ABC of 42,300 t. The biomass estimate for the six most abundant species on the EBS shelf has remained relatively stable and comprises 95% of the total biomass.

## Squids

Olav Ormseth presented the squid assessment. This was a scheduled "off-year" assessment.

Tier 6 recommendations are unchanged from last year. A CIE review in May 2013 concluded that the approach to recommending harvest specifications was consistent with Tier 6 but suggested that the most relevant time period should be chosen for reference, and that the foreign/joint venture era was not part of the most relevant time period. The authors are planning to examine and respond to CIE recommendations for next year's full assessment. Catch in 2013 was especially low, with a large reduction in the pollock fishery; the largest incidental catch was in the arrowtooth target fishery.

**The Team recommended that responses to CIE comments on the BSAI and GOA squid assessments be discussed in Joint Plan Team session in September 2014, to ensure common and consistent discussion of issues between teams.**

## Octopus

Liz Conners presented the octopus assessment. This was a scheduled “off-year” assessment. There were no changes to the predation-based estimate of octopus mortality from 1984-2008 survey data on Pacific cod diets, which is used as an alternative Tier 6 estimate. The consumption methodology is based on extensive diet data and includes estimation of uncertainty. The authors are planning to examine and respond to recommendations from the May 2013 CIE review in next year’s full assessment.

## Ecosystem Considerations

Stephani Zador presented the EBS and AI ecosystem assessments. No specific red flags were indicated by the tracked time series (summarized in the introduction). Future work will include extending 9-month climate projections to oceanography, plankton, and fish.

## Forage Fish

Olav Ormseth presented the forage fish assessment. The assessment was largely unchanged from the version presented in September. The format follows the GOA forage fish assessment, and will be an appendix to the BSAI SAFE report on a biennial basis. No new data were collected on forage fish during 2013, but catch stayed below the prohibited species catch limit as defined in the FMP. Forage fish catch occurs primarily as bycatch during the herring fishery and its bycatch was lower in 2013 than in 2012. The large 2012 catch was thought to have occurred in a narrow range (both temporally and spatially). It appears that the fishing fleet was able to avoid forage fish bycatch to a greater degree in 2013 than in previous years.

**The Team recommended that the BSAI forage fish assessment be scheduled for review at the Team’s September meeting in odd-numbered years.**

## Total current year removals

To ensure that it does not get overlooked, the Team noted that the following recommendation was made during the Joint Team session at the September meeting:

**“The Teams recommended that the Joint Teams schedule a review of how each stock assessment author(s) calculate total current year (and next year) removals. Following analysis of this inventory, the Teams will provide advice to authors on the appropriate methodology for calculating current year removals to ensure consistency across assessments and FMPs.”**

See September 2013 Joint Team minutes for more detail on the Teams’ discussion.

## Plan Team documents

**The Team recommended that the Council website include an archive of all documents prepared and reviewed at each September and November meeting.**

## Adjourn

The Team adjourned at approximately 4 pm on Thursday, November 21, 2013.

TABLE 10-FINAL 2014 AND 2015 APPORTIONMENT OF PROHIBITED SPECIES CATCH ALLOWANCES TO NON-TRAWL GEAR, THE CDQ PROGRAM, AMENDMENT 80, AND THE BSAI TRAWL LIMITED ACCESS SECTORS

PSC species and area <sup>1</sup>	Total non-trawl PSC	Non-trawl PSC remaining after CDQ PSQ <sup>2</sup>	Total trawl PSC	Trawl PSC remaining after CDQ PSQ <sup>2</sup>	CDQ PSQ reserve <sup>2</sup>	Amendment 80 sector <sup>3</sup>	BSAI trawl limited access fishery
Halibut mortality (mt) BSAI	900	832	3,675	3,349	393	2,325	875
Herring (mt) BSAI	n/a	n/a	2,172	n/a	n/a	n/a	n/a
Red king crab (animals) Zone 1	n/a	n/a	97,000	86,621	10,379	43,293	26,489
C. <u>opilio</u> (animals) COBLZ	n/a	n/a	11,185,892	9,989,002	1,196,890	4,909,594	3,210,465
C. <u>bairdi</u> crab (animals) Zone 1	n/a	n/a	980,000	875,140	104,860	368,521	411,228
C. <u>bairdi</u> crab (animals) Zone 2	n/a	n/a	2,970,000	2,652,210	317,790	627,778	1,241,500

<sup>1</sup>Refer to § 679.2 for definitions of zones.

<sup>2</sup>Section 679.21(e)(3)(i)(A)(2) allocates 326 mt of the trawl halibut mortality limit and § 679.21(e)(4)(i)(A) allocates 7.5 percent, or 67 mt, of the non-trawl halibut mortality limit as the PSQ reserve for use by the groundfish CDQ program. The PSQ reserve for crab species is 10.7 percent of each crab PSC limit.

<sup>3</sup>The Amendment 80 program reduced apportionment of the trawl PSC limits by 150 mt for halibut mortality and 20 percent for crab. These reductions are not apportioned to other gear types or sectors.

Note: Sector apportionments may not total precisely due to rounding.

TABLE 11-FINAL 2014 AND 2015 HERRING AND RED KING CRAB SAVINGS SUBAREA PROHIBITED SPECIES CATCH ALLOWANCES FOR ALL TRAWL SECTORS

Fishery Categories	Herring (mt) BSAI	Red king crab (animals) Zone 1
Yellowfin sole	148	n/a
Rock sole/flathead sole/other flatfish <sup>1</sup>	24	n/a
Turbot/arrowtooth/sablefish <sup>2</sup>	16	n/a
Rockfish	11	n/a
Pacific cod	33	n/a
Midwater trawl pollock	1,776	n/a
Pollock/Atka mackerel/other species <sup>3,4</sup>	164	n/a
Red king crab savings subarea non-pelagic trawl gear <sup>5</sup>	n/a	24,250
Total trawl PSC	2,172	97,000

<sup>1</sup> "Other flatfish" for PSC monitoring includes all flatfish species, except for halibut (a prohibited species), arrowtooth flounder, flathead sole, Greenland turbot, Kamchatka flounder, rock sole, and yellowfin sole.

<sup>2</sup> "Arrowtooth flounder" for PSC monitoring includes Kamchatka flounder.

<sup>3</sup> Pollock other than pelagic trawl pollock, Atka mackerel, and "other species" fishery category.

<sup>4</sup> "Other species" for PSC monitoring includes skates, sculpins, sharks, squids, and octopuses.

<sup>5</sup> In December 2013 the Council recommended that the red king crab bycatch limit for non-pelagic trawl fisheries within the RKCSS be limited to 25 percent of the red king crab PSC allowance (see § 679.21(e)(3)(ii)(B)(2)).

Note: Species apportionments may not total precisely due to rounding.

TABLE 12—FINAL 2014 AND 2015 PROHIBITED SPECIES BYCATCH ALLOWANCES FOR THE BSAI TRAWL LIMITED ACCESS SECTOR

BSAI trawl limited access fisheries	Prohibited species and area <sup>1</sup>				
	Halibut mortality (mt) BSAI	Red king crab (animals) Zone 1	<i>C. opilio</i> (animals) COBLZ	<i>C. bairdi</i> (animals)	
				Zone 1	Zone 2
Yellowfin sole	167	23,338	3,025,319	346,228	1,185,500
Rock sole/flathead sole/other flatfish <sup>2</sup>	0	0	0	0	0
Turbot/arrowtooth/sablefish <sup>3</sup>	0	0	0	0	0
Rockfish April 15 - December 31	5	0	5,143	0	1,000
Pacific cod	453	2,954	128,574	60,000	50,000
Pollock/Atka mackerel/other species <sup>4</sup>	250	197	51,429	5,000	5,000
Total BSAI trawl limited access PSC	875	26,489	3,210,465	411,228	1,241,500

<sup>1</sup> Refer to § 679.2 for definitions of areas.

<sup>2</sup> “Other flatfish” for PSC monitoring includes all flatfish species, except for halibut (a prohibited species), flathead sole, Greenland turbot, rock sole, yellowfin sole, Kamchatka flounder, and arrowtooth flounder.

<sup>3</sup> Arrowtooth flounder for PSC monitoring includes Kamchatka flounder.

<sup>4</sup> “Other species” for PSC monitoring includes skates, sculpins, sharks, squids, and octopuses.

Note: Seasonal or sector apportionments may not total precisely due to rounding.

TABLE 13—FINAL 2014 AND 2015 PROHIBITED SPECIES BYCATCH  
ALLOWANCES FOR NON-TRAWL FISHERIES

Non-trawl fisheries	Catcher/processor	Catcher vessel
Pacific cod-Total	760	15
January 1 - June 10	455	10
June 10 - August 15	190	3
August 15 - December 31	115	2
Other non-trawl-Total		58
May 1 - December 31		58
Groundfish pot and jig		Exempt
Sablefish hook-and-line		Exempt
Total non-trawl PSC		833

Note: Seasonal or sector apportionments may not total precisely due to rounding.



THE STATE  
of **ALASKA**  
GOVERNOR SEAN PARNELL

ITEM C-7(d)  
DECEMBER 2013  
**Department of  
Fish and Game**

DIVISION OF COMMERCIAL FISHERIES  
Headquarters Office

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November 26, 2013

Mr. Chris Oliver, Executive Director  
North Pacific Fishery Management Council  
604 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501-2252

Dear Chris:

This letter provides an estimate of the 2014 spawning biomass of Pacific herring (*Clupea pallasii*) in the eastern Bering Sea for the purposes of establishing bycatch caps per Amendment 16A of the Bering Sea/Aleutians Islands Groundfish FMP. The department's estimate of the 2014 biomass is 239,371 short tons, equivalent to 217,153 metric tons. This estimate is the sum of the spawning location estimates contained in the attached table.

Sincerely,

A handwritten signature in cursive script, appearing to read "Sherri Dressel".

Sherri Dressel  
Statewide Herring Fisheries Scientist

Table 1. Projections of Pacific herring spawning biomass for spawning aggregations in the eastern Bering Sea, Alaska for 2014.

<b>Spawning area</b>	<b>short tons</b>	<b>metric tons</b>
Norton Sound	52,138	47,299
Cape Romanzof	2,904	2,634
Nunivak Island	2,280	2,068
Nelson Island	4,279	3,882
Cape Avinof	1,323	1,200
Goodnews Bay	7,844	7,116
Security Cove	8,655	7,852
Togiak	157,448	142,834
Port Moller/Port Heiden	2,500	2,268
	239,371	217,153

cc: Jane DiCosimo, NPFMC  
Jeff Regnart, ADF&G  
Chris Siddon, ADF&G

<b>2013 BSAI Prohibited Species Limits and Catch</b>		
	<b>Metric Tons</b>	<b>Metric Tons</b>
BSAI Halibut Non-Trawl	833	418
BSAI Halibut PSQ	393	257
BSAI Halibut Trawl	3,200	2,774
BSAI Herring	2,648	988
	<b>Number of Animals</b>	<b>Numbers of Animals</b>
BSAI Zone 1 Bairdi Crab	779,749	246,984
BSAI Zone 1 Bairdi Crab PSQ	104,860	20,576
BSAI Zone 2 Bairdi Crab	1,869,278	406,183
BSAI Zone 2 Bairdi Crab PSQ	317,790	16,473
BSAI Zone 1 Red King Crab	69,782	22,808
BSAI Zone 1 Red King Crab PSQ	10,379	2,425
BSAI COBLZ Opilio Crab	7,623,125	600,900
BSAI COBLZ Opilio Crab PSQ	1,123,643	19,463
BS Chinook Salmon - Pollock Pelagic Trawl	55,104	12,446
BS Chinook Salmon PSQ	4,896	520
BSAI Non-Chinook Salmon Trawl	37,506	125,942
BSAI Non-Chinook Salmon PSQ	4,494	875



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December 3, 2013

Mr. Eric Olson, Chairman  
North Pacific Fishery Management Council  
605 W. 4<sup>th</sup> Ave, Suite 306  
Anchorage, AK 99501-2252

RE: Agenda Item C-7, BSAI Specifications

Dear Chairman Olson,

Thank you for the opportunity to provide comments in regards to the North Pacific Fishery Management Council's (the Council) consideration of BSAI specifications (agenda item C-7) at its December 2013 Council meeting. On behalf of the Freezer Longline Coalition (FLC) I would like to provide an update to Council on the 2013 harvest of BSAI Greenland turbot.

In March 2013, FLC and representatives with the A80 sector, in conjunction with consultation from NMFS, reached a voluntary agreement on the harvest of Greenland turbot by the freezer longline and A80 sectors in 2013. The agreement was as follows:

**2013 Greenland Turbot Allocation Agreement**

- NMFS will immediately close the BSAI turbot fishery in upon the opening of the BSAI turbot fishery on May 1, 2013.
- The A80 fleet will take actions to limit turbot bycatch in the BS subarea as much as possible while fishing for arrowtooth and Kamchatka flounder.
- FLC vessels will refrain from targeting turbot in the BS subarea until September 1, 2013.
- On August 31, 2013, the A80 fleet will stop targeting arrowtooth and Kamchatka flounder in the BS subarea.
- On September 1, 2013, NMFS will open the BS subarea for directed fishing for turbot, assuming sufficient stock levels to open the fishery. NMFS will monitor catch and move to close the fishery when the BS turbot TAC (1610 MT; ITAC of 1369) is reached for the year.
- Any rollover from the unspecified reserve on the 2013 turbot allocation will be available after September 1, 2013.

At the April 2013 Council meeting, FLC member Dave Little of Clipper Seafoods testified that FLC hoped this agreement would result in the availability of approximately 800 MT of Greenland turbot for harvest by our fleet in the Bering Sea. This amount would ensure it would be economically sustainable for our fleet to participate in the fishery in 2013. To produce this amount, it would have been necessary for the A80 fleet to limit their bycatch in the Bering Sea to a total of 400-500 MT while targeting arrowtooth and Kamchatka flounder.

The FLC is appreciative of the efforts of the NMFS and the A80 sector to facilitate a BS Greenland turbot fishery for the freezer longliners in 2013. However, although both fleets honored the agreement and cooperated in facilitating the fishery, the results of the efforts were

somewhat disappointing for the freezer longliners. NMFS data shows that Greenland turbot bycatch in the Bering Sea totaled over 720 MT in 2013. Consequently, the freezer longline harvest for Greenland turbot was limited to less than 600 MT, a less than 50/50 split between the two sectors. While the 2014 TAC for Greenland turbot is likely to be similar to 2013, it is the FLCs hope that the freezer longline sector will have the opportunity for an increase in harvest over 2013 to better ensure a viable freezer longline fishery next year.

The FLC appreciates the Council's ongoing interest ensuring a viable Greenland turbot fishery for the freezer longline sector in the Bering Sea. We welcome your continued attention to this matter as Council considers allocations for the BSAI fisheries in 2014.

Sincerely,



Chad I. See  
Executive Director  
Freezer Longline Coalition



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December 3, 2013

Mr. Eric Olson, Chairman  
North Pacific Fishery Management Council  
605 W. 4<sup>th</sup> Ave, Suite 306  
Anchorage, AK 99501-2252

RE: Agenda Item C-7, BSAI Specifications

Dear Chairman Olson,

Thank you for the opportunity to provide comments in regards to the North Pacific Fishery Management Council's (the Council) consideration of BSAI specifications (agenda item C-7) at its December 2013 Council meeting. On behalf of the Freezer Longline Coalition (FLC) I would like to specifically address our strong concerns in regards to the anticipated BSAI Pacific cod (P-cod) split and its impact on the opportunity for FLC members to participate in the federal P-cod fishery in the Aleutian Islands (AI) in 2014 under the current default management measures approved by the Council in October 2011.

The FLC represents the owners and operators of the nearly 30 vessels that participate in the hook-and-line catcher processor (HAL CP) sector of the federal P-cod fishery in the Bering Sea and Aleutian Islands. FLC member companies are the pioneers of the HAL CP sector in Alaska and have over 30 years of history fishing for P-cod in the North Pacific. The HAL CP fleet is a P-cod single species directed fishery fleet, and, therefore, is nearly fully reliant on P-cod. P-cod catch by this hook-and-line fleet in the AI may be viewed by some as relatively small when compared to other fleets; however, these longliners rely almost exclusively on the catch of P-cod.

The AI P-cod fishery is important for FLC members as a whole as well as for individual member vessels within the fleet. For some FLC Members, up to 50% of their revenues were derived from AI P-cod prior to current SSL restrictions enacted for the AI under the interim final rule published in the Federal Register on December 13, 2010 (75 Fed. Reg. 77,535). While harvest is down in the AI with the SSL restrictions, AI P-cod remains an instrumental component of revenues for a number of FLC member companies. Members who harvest AI P-cod in the AI are skilled operators in these waters with decades of experience navigating and harvesting in the AI fishing grounds. This allows them to efficiently harvest P-cod in the AI and reduce their number of trips into the BS, which require more fuel and crew time. Importantly, AI P-cod is typically larger in size than those found in the BS and return stronger prices on the international market, creating unique benefits for operators who participate in the AI fishery.

The FLC appreciates Council's efforts to prepare for managing the BS and AI P-cod fisheries in advance of the anticipated split of the existing BSAI-wide fishery. We respect the Council's continued past efforts to develop a management plan for the AI fishery and the difficulties in accomplishing this objective. When Council approved a default management plan for the BS and AI fisheries following a split that would create an open access fishery in the AI, it was

acknowledged to be an imperfect solution, but the best option to ensure an opportunity for all sectors to participate in the AI fishery.

Recent developments impacting the AI P-cod fishery have brought to light a significant unintended consequence of the BSAI P-cod split. Specifically, the HAL CP sector will be shut out of the federal directed fishery for AI P-cod in 2014. This is a result of a confluence of factors that have created a small, open access fishery in the AI that is effectively open only to trawl vessels in the early months of the year. Council action to address this unintended consequence is necessary to ensure the HAL CP sector has an opportunity to participate in 2014 and in future years.

Based on discussions with NMFS In-Season Management, the following scenario appears likely in the AI P-cod fishery:

- NMFS will open the AI P-cod fishery for directed fishing in 2014. Under the Council's default management plan, this will be an open access fishery in the AI. However, given the small amount of fish available for harvest\*and the existing SSL restrictions, the reality is there will very likely be no fish available for HAL CP vessels to participate in the fishery. Current SSL regulations prohibit HAL CPs from fishing in the AI until March 1st. Given the small amount of fish, it is almost certain the AI P-cod ITAC will be harvested by (predominantly) trawl CVs prior to that date. Trawl CVs (and one AFA trawl CP that targets P-cod) operate in the AI in the early part of the A season (trawl CVs season starts January 20). FLCs understanding is the trawl CVs generally begin fishing on about Feb. 1st, meaning they will have a full month to harvest the AI P-cod allocation. From discussions we've had, this would likely result in the full AI ITAC being harvested before March 1st and the HAL CP fleet being shut out of the AI fishery.

\*Rough calculations for the AI ITAC is as follows:

- AI GHL: proposed combined 2014 BS and AI ABC (270,100 mt) x 3% = 8,103 mt
- AI ABC – AI GHL: AI ABC of 15,100 mt – AI GHL of 8,103 mt = 6,997 mt
- AI TAC: assuming (note: this isn't certain) that ABC=TAC in AI, then AI TAC = 6,997 mt
- AI ITAC: CDQ allocation of 10.7% = 749 mt; 6997 mt – 749 mt = 6,248 mt
  - Additionally, NMFS In-Season Management (Mary Furuness) has indicated they plan to continue setting aside a portion of the TAC for incidental catch. This, roughly, may be about 1500 mt (or more): 6,248 mt – 1800 mt = 4,448 mt (depending on incidental catch amount).

Given this scenario, FLC would like Council to work with NMFS and, as needed, the State of Alaska on interim steps to ensure HAL CP vessels have the ability to continue fishing in the AI, as many in our fleet have done for over 30 years. We would envision these steps as temporary solutions before a long-term fix is developed by Council, likely through an FMP amendment. Two potential actions for the Council to consider include:

- GHL reallocation: Council could allocate to the 2 million MT cap during the 2014 TAC specification process and communicate with NMFS in regards to an in-season adjustment to selected TACs to accommodate a potential reallocation of AI state waters P-cod GHL quota later in the year. This may be through an adjustment of the AI P-cod TACs, or TACs of other species that NMFS determines unlikely to be fully harvested. This action can be performed by the NMFS Alaska Region through notification in the Federal

Register. A reallocation to the federal fishery would be distributed through the allocation process, including the allocation of a share of the quota to the CDQ fishery. Any such reallocation of GHL would likely be dependent upon the Alaska Board of Fish acting to permit the transfer of remaining GHL back to the federal fishery.

There is precedent for the reallocation of the state waters GHL to the BSAI fishery. On September 1, 2006, ADF&G transferred 3.5 million pounds (1588 MT) of the 2006 B Season GHL to NMFS.<sup>1</sup> The 3.5 million pounds represented a significant portion of the initial 2006 B Season GHL for the fishery. This reallocation occurred at the end of the first season of the state waters P-cod GHL in the AI, established in February 2006. Based on discussions with NMFS, this reallocation was completed by NMFS reducing the 2006 TAC for BSAI P-cod from 194,000 MT to 188,180 MT, allowing for the reallocation of the 1588 MT to the fishery.

- P-cod incidental catch allowance: Alternatively, Council and NMFS may consider utilizing the P-cod incidental catch allowance (ICA) to better manage bycatch in all P-cod fisheries in the BSAI, including the state waters P-cod fisheries. One avenue to address the state waters P-cod fisheries may be to incorporate some or all of the state waters P-cod GHL to be allocated to the State of Alaska into the ICA. The GHL included in the ICA would then become part of the 2 million MT allocation limit imposed on the federal BSAI fisheries, allowing for better management of these fisheries, including related bycatch. During the course of the year, NMFS would transfer the GHL included in the ICA to the State as needed for the operation of the AI state waters P-cod fishery. GHL not harvested in the state waters fishery would remain in the ICA and be subject to allocation to the federal P-cod fisheries, at the discretion of NMFS.

An anticipated benefit of each of these actions is an increased amount of fish available for harvest in the AI P-cod fishery. ADF&G reports that the GHL in the AI state waters P-cod fishery has not been fully harvested in six of the eight years since the fishery was established in 2006, including the recently closed 2013 season. The most recent year the GHL was met was in 2008, but this can be attributed to HAL CP vessels being permitted to fish in state waters that year. This year's final harvest numbers are confidential due to the small number of vessels participating in the fishery. However, ADF&G documents suggest that over 3.5 million pounds (1,588 MT) were rolled over from the state waters "A" season to the "B" season in 2013, resulting in a "B" season fishery of over 9.5 million pounds (4,309 MT). Similar numbers were reported by ADF&G for 2012. In 2011, the last year that end-of-season harvest rates were released for the fishery, ADF&G reported a harvest of only 595,289 pounds (270 MT). While 2011 is likely a lower harvest level than can be reasonably be expected in future years, the figures suggest that there will likely continue to be unharvested GHL in the AI state waters P-cod fishery. Should this unharvested GHL be made available to the federal AI P-cod fishery, even a small amount of quota in the range of 1500-2000 MT would be likely be sufficient to enable HAL CP vessels to participate in the AI P-cod fishery in 2014.

Council may also recommend applying both of these actions to the GHL for the Bering Sea state waters P-cod fishery established by the BOF in October. This may allow for greater economic relief for the HAL CP sector and others affected by limited (or no) fishing opportunity in the AI, as it could allow for additional P-cod for all sectors to harvest in the Bering Sea. Should the BS

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<sup>1</sup> ADF&G Fishery Management Report No. 12-38: Annual Management Report for Bering Sea-Aleutian Islands State-Waters Groundfish Fisheries and Groundfish Harvest from Parallel Seasons in 2011; Nov. 2012

GHL be included in the ICA, it would also provide NMFS and the Council with additional opportunity to manage bycatch all Bering Sea fisheries, state-waters included.

Long-term, FLC would like to see the Council develop a long-term solution to the HAL CP sector being subject to exclusion from the AI P-cod fishery in future years. Based on current projections and modeling, the ABC for AI P-cod is unlikely to be significantly different from 2014 for the foreseeable future. The AI P-cod SAFE presented at the November 2013 Plan Team meeting projects the 2015 ABC to be identical to 2014, at 15,100 MT. Given this, it's critical that a management plan be developed that ensures the HAL CP sector will have an opportunity to continue operating in the AI.

FLC recommends that Council initiate a discussion paper examining potential management strategies to ensure participation in the AI P-cod fishery by the HAL CP sector and others who have historically participated in the fishery. This paper would review previous efforts to develop a more defined management plan for the fishery under a BSAI split (some of which could be drawn from the April 2013 discussion paper titled "Overview of Apportionment of BSAI Pacific Cod Sector Allocations Between BS and AI Areas and AI Pacific Cod Processing Sideboards" ), identify additional unintended consequences of the current, open access management plan, and examine elements of a future management plan for the fishery that would address adverse impacts on fishery participants.

We believe that now is an appropriate time for Council to revisit efforts to address management of the AI P-cod fishery. Efforts in previous years to take on a more ambitious management plan were tabled, in part, due to uncertainties about a number of elements that would impact a future AI P-cod fishery, including the amount of fish available following a split, SSL-related management measures, and what unintended consequences may emerge the confluence of these elements and the default management plan established by the Council. Today, many of the uncertainties surrounding these matters are resolved and unintended consequences are emerging that require the attention of Council. Action to move forward to develop a new management plan for the AI P-cod fishery should be a priority for Council and all stakeholders in the fishery.

Sincerely,



Chad I. See  
Executive Director  
Freezer Longline Coalition



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December 3, 2013

Mr. Eric Olson, Chair  
North Pacific Fishery Management Council  
605 W. Fourth Avenue, Suite 306  
Anchorage, AK 99501-2252

Dr. James Balsiger, Regional Administrator  
NOAA Fisheries, Alaska Region  
709 West Ninth Street  
Juneau, AK 99802-1668

**Re: Agenda Item C-7, Groundfish Specifications; Bering Sea and Aleutian Islands Pacific cod ABC/TAC split**

Dear Chairman Olson, Dr. Balsiger, and Council Members:

You have legal and scientific responsibilities to manage the stocks of Pacific cod in the Aleutian Islands and Bering Sea separately. The Aleutian Islands population is declining, and better management is needed to ensure that there are enough cod to support sustainable fisheries and fill Pacific cod's important role in the ecosystem. Debate about sector and processing allocations can no longer delay necessary steps—you must now take action to implement the Science and Statistical Committee's (SSC) recommendation that separate overfishing limits (OFLs) and acceptable biological catches (ABCs) be established for the 2014 fishing season. We urge the National Marine Fisheries Service (NMFS) and the Council to take this opportunity to improve ecosystem-based fishery management in the Aleutian Islands.

The law explicitly requires NMFS to prevent overfishing by implementing conservation and management measures for fisheries. *See, e.g.*, 16 U.S.C. §§ 1801(a)(6) & 1851(a)(1). In fulfilling this obligation, the agency must “develop annual catch limits for each of its managed fisheries that may not exceed the fishing level recommendations of its [SSC].” *Id.* § 1852(h)(6). The Council has been aware for several years that the SSC recommended setting separate OFLs and ABCs for Aleutian Islands and Bering Sea Pacific cod. As far back as 2006, the Council was poised to take action to address the industry allocation issues associated with splitting management of cod. It declined to do so during final action on Amendment 85.

The Groundfish Plan Team has evaluated four stock assessment models for Aleutian Islands cod: two “tier 5” models that use only survey biomass data, and two age-structured “tier 3” models that use a greater number of parameters.<sup>1</sup> The preliminary maximum permissible Aleutian Islands ABCs calculated from the models ranged from approximately 13,000 mt to 17,000 mt. There is no justification for allowing Pacific cod catch in the Aleutian Islands to exceed these recommendations, and the declining trend of Pacific cod in the trawl survey biomass estimates warrant a lower TAC. A lower TAC is also needed to allow for the recovery of the endangered western population of Steller sea lions, one of the

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<sup>1</sup> Thompson, G., and W. Palsson. November 2013 Plan Team Draft. Chapter 2A: Assessment of the Pacific Cod Stock in the Aleutian Islands.

Oceana Comments on Pacific Cod ABC/TAC Split  
December 3, 2013  
Page 2 of 2

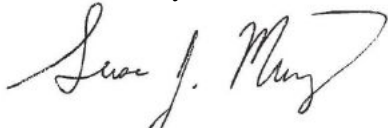
Pacific cod's principal predators. In addition to the declining cod population, the 2012 survey biomass of walleye pollock, another one of the Steller sea lions' primary prey, was the lowest ever recorded.<sup>2</sup> Since none of the stock assessment models explicitly account for the prey needs of Steller sea lions, we recommend reducing the TAC from the model's lowest ABC as a precautionary measure.

Once separate, precautionary measures—OFL, ABC, and TAC—for Aleutian Pacific cod are set, NMFS and the Council must take a hard look at the ecological impacts that fishing for cod is having in the Aleutian Islands. An intense trawl fishery targeting spawning aggregations is not sustainable. Fisheries targeting spawning aggregations can disrupt the behavior of spawning, disperse schools, and potentially decrease reproductive output of the stock.<sup>3</sup> Further, skipped spawning may result in overestimated stock production, and may be more prevalent in teleost fish than previously thought.<sup>4</sup> Taken together, spawning disruption and skipped spawning could have serious implications for current fishery management assumptions and lack of recruitment to the stock.

Finally, we are deeply disturbed by the increase in inadequately controlled and monitored fishing for Pacific cod in the State waters in the Aleutian Islands. These “parallel” fisheries have contributed to the degradation of seafloor habitat and to imbalances in the seasonal and spatial prey field for the endangered western population of Steller sea lions. We encourage NMFS and the Council to work with the State of Alaska to help determine a sustainable Guideline Harvest Limit (GHL) and better management for Pacific cod in the nearshore waters of the Aleutian Islands. The harvest limit should be responsive to the ecological conditions and status of the cod stock in the Aleutian Islands, as separate from the Bering Sea stock.

We look forward to continuing to work with you on this issue.

Sincerely,



Susan Murray  
Deputy Vice President, Pacific  
Oceana

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<sup>2</sup> Barbeaux, S., J. Ianelli, and W. Palsson. Chapter 1A: Assessment of the pollock stock in the Aleutian Islands. November 2013 Plan Team Draft.

<sup>3</sup> Dean, J.M., W.S. Hoffman, and M.P. Armstrong. 2012. Disruption of an Atlantic Cod Spawning Aggregation Resulting from the Opening of a Directed Gill-Net Fishery. *North American Journal of Fisheries Management* 32: 124–134.

<sup>4</sup> Skjæraasena, J., E., et.al. 2012. Frequent skipped spawning in the world's largest cod population. *PNAS*, Vol. 29, no. 23.

## 18. Assessment of the skate stock complex in the Bering Sea and Aleutian Islands

Olav A. Ormseth  
NMFS Alaska Fisheries Science Center, Seattle, WA

### Alaska skate harvest recommendations

Quantity	As estimated or <i>specified last year for:</i>		As estimated or <i>recommended this year for:</i>	
	2013	2014	2014	2015
$M$ (natural mortality rate)	0.13	0.13	<b>0.13</b>	0.13
Tier	3a	3a	<b>3a</b>	3a
Projected total (age 0+) biomass (t)	650,483	630,086	<b>603,520</b>	<b>579,785</b>
Female spawning biomass (t)				
Projected	194,072	189,811	<b>185,076</b>	<b>178,762</b>
$B_{100\%}$	266,810	266,810	<b>266,810</b>	<b>266,810</b>
$B_{40\%}$	106,724	106,724	<b>106,724</b>	<b>106,724</b>
$B_{35\%}$	93,384	93,384	<b>93,384</b>	<b>93,384</b>
$F_{OFL}$	0.113	0.113	<b>0.113</b>	0.113
$maxF_{ABC}$	0.098	0.098	<b>0.098</b>	0.098
$F_{ABC}$	0.098	0.098	<b>0.098</b>	0.098
OFL (t)	36,315	34,596	<b>32,381</b>	<b>30,278</b>
Maximum ABC (t)	31,720	30,218	<b>28,282</b>	<b>26,444</b>
ABC (t)	31,720	30,218	<b>28,282</b>	<b>26,444</b>
Status	As determined <i>last year for:</i>		As determined <i>this year for:</i>	
	2011	2012	2012	2013
Overfishing	No	n/a	No	n/a
Overfished	n/a	No	n/a	No
Approaching overfished	n/a	No	n/a	No

<b>other skate harvest recommendations</b>				
<b>Quantity</b>	As estimated or <i>specified last year for:</i>		As estimated or <i>recommended this year for:</i>	
	2013	2014	2014	2015
$M$ (natural mortality rate)	0.1	0.1	<b>0.1</b>	0.1
Tier	5	5	<b>5</b>	5
Biomass (t)	94,684	94,684	<b>94,684</b>	94,684
$F_{OFL}$	0.1	0.1	<b>0.1</b>	0.1
$maxF_{ABC}$	0.075	0.075	<b>0.075</b>	0.075
$F_{ABC}$	0.075	0.075	<b>0.075</b>	0.075
OFL (t)	9,468	9,468	<b>9,468</b>	9,468
Maximum ABC (t)	7,101	7,101	<b>7,101</b>	7,101
ABC (t)	7,101	7,101	<b>7,101</b>	7,101
<b>Status</b>	As determined <i>last</i> year for:		As determined <i>this</i> year for:	
	2011	2012	2012	2013
Overfishing	No	n/a	No	n/a

<b>aggregate harvest recommendations for the BSAI complex</b>				
<b>Quantity</b>	As estimated or <i>specified last year for:</i>		As estimated or <i>recommended this year for:</i>	
	2013	2014	2014	2015
OFL (t)	45,800	44,100	<b>41,849</b>	<b>39,746</b>
ABC (t)	38,800	37,300	<b>35,383</b>	<b>33,545</b>



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**Catch 13-003

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**Agenda Date:** 12/9/2013

**Agenda Number:** C-8

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

Discussion Paper on Cooperative Reporting Requirements

**ESTIMATED TIME:**

6 hours (all Fishing Cooperative Issues)

**ACTION REQUIRED:**

Review Discussion Paper

**BACKGROUND:**

During the April 2013 meeting, the Council heard presentations from most cooperative representatives. Although the Council was not required to take action on these reports, a broad discussion arose after the presentations and during staff tasking. Concerns were expressed on the variability of information being reported by the cooperative representatives both in written form and in their presentations. The Council determined that an up-to-date synopsis of current mandatory and voluntary elements of the reports would benefit reporting parties, the Council members, and the public. The Council requested staff to provide a discussion paper on the cooperative reports, as well as any annual stakeholder report in a comprehensive and structured way so that these reports may be used as effectively as possible. Specifically, the Council was interested in the regulatory requirements for cooperative reports, a summary of what is usually provided in the reports, and a discussion on applicability of the Paperwork Reduction Act (PRA) to Council requests for additional information. The discussion paper was mailed on November 27 and is attached as **Item C-8(a)**.

## **Review of Cooperative Reporting Requirements Discussion Paper December 2013**

### **I. Introduction**

In the last decade or more, the Council has developed several cooperative programs as options in larger catch share programs. As part of those cooperative programs, the Council required that cooperatives submit an annual written report detailing the use of cooperative quota (CQ). These reports are intended to be a resource for the Council to track the effectiveness of the cooperative and their ability to meet the Council's goals. Additionally, they are a tool for the cooperatives to provide feedback on the programs. Regulation provides a framework for the minimum required information for most of the reports, while the Council has the flexibility to augment this framework with additional information requests that may be pertinent to current issues in the fishery. At this time, regulations require annual written reports for each of the following Limited Access Privilege Programs (LAPP): American Fisheries Act (AFA), Amendment 80, and Central Gulf of Alaska (GOA) Rockfish Program. In addition, as part of Amendment 91, AFA sector representatives are required to provide an overview of their Chinook salmon bycatch reduction efforts under individual incentive program agreements (IPA). AFA representatives from the Inter-cooperative Agreement (ICA) for chum bycatch avoidance are required to provide a report on bycatch avoidance, which was part of Amendment 84. The Bearing Sea and Aleutian Island (BSAI) crab program is a new addition to the cooperative reporting process and will be presented on for the first time during the December 2013 Council meeting. In total, for the 2012 fishing year, there were 22 written reports provided to the Council for review and posted online for the public.

In general, cooperative reports are presented by cooperative managers during the April Council meeting. Regulations do not require cooperative managers to present cooperative reports to the Council; however, they are encouraged and have been common practice from many cooperative representatives in the past. During the April 2013 meeting, the Council heard presentations from most cooperative representatives. Although the Council was not required to take action on these reports, a broad discussion arose after the presentations and during staff tasking. Concerns were expressed on the variability of information being reported by the cooperative representatives both in written form and in their presentations. The Council determined that an up-to-date synopsis of current mandatory and voluntary elements of the reports would benefit reporting parties, the Council members, and the public. The Council requested staff to provide a discussion paper on the cooperative reports, as well as any annual stakeholder report in a comprehensive and structured way so that these reports may be used as effectively as possible. Specifically, the Council was interested in the regulatory requirements for cooperative reports, a summary of what is usually provided in the reports, and a discussion on applicability of the Paperwork Reduction Act (PRA) to Council requests for additional information.

In light of these requests, this paper is intended to be a resource that enables the Council to maximize the utility generated from the annual stakeholder-reporting process. In order to meet this objective, the paper includes a table summarizing current regulatory reporting requirements, PRA authorized information collections, and information the Council requested be voluntarily provided (see table below). The discussion paper provides a description of each cooperative or stakeholder program that is expected to submit an annual report. The discussion paper also addresses the applicability of the PRA to mandatory and voluntary information requests. The final section provides a few considerations for improving the cooperative report process.

DECEMBER 2013

Cooperative Program and OMB Number	Required Information and OMB Approved Voluntary Information	Voluntary requested information not submitted for OMB approval	Deadline	Recipient
AFA OMB 0648-0401	<p><i>Established in 50 CFR §679.61(f) as well as Section 210(a)(1)(B) of the AFA:</i></p> <ul style="list-style-type: none"> <li>Allocation of pollock and sideboard species to cooperative</li> <li>Sub-allocations of pollock and sideboard species on a vessel-by-vessel basis</li> <li>Retained and discarded catch on an area-by-area and vessel-by-vessel basis</li> <li>Method used to monitor fisheries</li> <li>Actions taken by cooperative against members that exceed catch or bycatch</li> <li>The total weight of pollock landed outside the State of Alaska on a vessel-by-vessel basis</li> <li>Number of salmon taken by species and season</li> <li>Each vessel's number of appearances on the weekly "dirty 20" lists for non-Chinook salmon</li> </ul>	<ul style="list-style-type: none"> <li>Voluntary oral presentation at April Council meeting</li> <li>Catch of Pacific cod by week and over time (in 2004)</li> <li>AFA exempt vessel activity in the GOA</li> <li>Inter-temporal harvest information</li> </ul>	<ul style="list-style-type: none"> <li>April 1<sup>st</sup> of each year</li> </ul>	NPFMC
AFA OMB 0648-0401	<p><i>Non-Chinook Intercooperative Agreement (ICA) Annual Report</i></p> <p>50 CFR 679.21(g)(4)</p> <ul style="list-style-type: none"> <li>An estimate of the number of non-Chinook salmon avoided as demonstrated by the movement of fishing effort away from Chum salmon Savings Areas</li> <li>The results of the compliance audit required at § 679.21(g)(2)(v)</li> </ul>	<ul style="list-style-type: none"> <li>Voluntary oral presentation at April Council meeting</li> </ul>	<ul style="list-style-type: none"> <li>April 1<sup>st</sup> of each year</li> </ul>	NPFMC
AFA OMB 0648-0401	<p><i>Chinook Salmon Incentive Plan Agreement (IPA) Annual Report</i></p> <p>50 CFR 679.21(f)(13)</p> <ul style="list-style-type: none"> <li>Incentive measures in effect in the previous year</li> <li>How incentive measures affected individual vessels</li> <li>How incentive measures affected salmon savings beyond current levels</li> <li>IPA amendments approved by NMFS since the last annual report and the reasons for amendments</li> <li>Sub-allocation to each participating vessel</li> <li>Number of Chinook PSC and amount of pollock (mt) at the start of each fishing season</li> <li>Number of Chinook PSC and amount of pollock (mt) caught at the end of each season</li> <li>Inseason transfers among entities of Chinook salmon PSC or pollock among AFA cooperatives</li> <li>Transfers among IPA vessels</li> <li>Amount of pollock (mt) transferred</li> </ul>	<ul style="list-style-type: none"> <li>Voluntary oral presentation at April Council meeting</li> </ul>	<ul style="list-style-type: none"> <li>April 1<sup>st</sup> of each year</li> </ul>	NPFMC
Central GOA Rockfish OMB 0648-0545	<p><i>Established in 50 CFR 679.5(r)(6)(i):</i></p> <ul style="list-style-type: none"> <li>Cooperative's quota and sideboard limit</li> <li>Cooperative's retained and discard catch of CQ and sideboard limit by statistical area and vessel-by-vessel basis</li> <li>Method used by cooperative to monitor fisheries</li> <li>Actions taken by cooperative in response to members that exceeded their catch allowance</li> </ul>	<ul style="list-style-type: none"> <li>Voluntary oral presentation at April Council meeting</li> <li>Inter-temporal harvest information</li> </ul>	<ul style="list-style-type: none"> <li>December 15<sup>th</sup> of each year</li> </ul>	NMFS

<p><b>Amendment 80</b> <b>OMB 0648-0565</b></p>	<p><i>Established in 50 CFR 679.5(s)(6)(i):</i></p> <ul style="list-style-type: none"> <li>Actual retained and discarded catch of CQ and GOA sideboard limit by area and by vessel</li> <li>Method used to monitor fisheries</li> <li>Actions taken by co-ops against members that exceed assigned CQ</li> <li>The percent of groundfish retained by the cooperative relative to aggregate groundfish retained by all Amendment 80 co-ops</li> <li>Results from a third party audit on cooperatives annual groundfish retention</li> </ul> <p><i>From Final Action on Amendment 105 Flatfish Specifications Flexibility in April 2013:</i></p> <ul style="list-style-type: none"> <li>By Dec 1<sup>st</sup>, annually :</li> <li>Flatfish exchanges</li> <li>Co-op transfers</li> <li>Actual harvest</li> </ul>	<ul style="list-style-type: none"> <li>Voluntary oral presentation at April Council meeting</li> <li>Catch information from the Northern Bristol Bay Trawl Area</li> <li>A retrospective indication of Amendment 80 catch capacity</li> <li>Inter-temporal harvest information</li> </ul>	<ul style="list-style-type: none"> <li>March 1<sup>st</sup> of each year</li> </ul>	<p>NMFS</p>
<p><b>BSAI Crab</b> <b>OMB 0648-0678</b></p>	<p><i>Voluntarily submitted information under approved OMB information collection</i></p> <ul style="list-style-type: none"> <li>Increase availability of QS for transfer to active participants and crew members</li> <li>Decrease high QS lease rates</li> <li>Improve low crew compensation</li> </ul>	<ul style="list-style-type: none"> <li>Voluntary oral presentation at December Council meeting</li> </ul>	<ul style="list-style-type: none"> <li>October of each year</li> </ul>	<p>NPFMC</p>

## II. Cooperative Reports

This following section provides a detailed description of each program's reporting process and current requirements. Included in the description is a summary of the catch share program, the regulatory requirements associated with the annual report, information on the Council's voluntary non-regulatory information requests throughout the history of the program<sup>1</sup>, and a summary of what has been included in past reports.

As an introductory matter, it is important to note that the AFA program was developed under special legislation that includes specific authority for the Council to request and receive detailed cooperative information through regulations. While both the Amendment 80 and the Central GOA rockfish programs have regulations requiring the submission of annual cooperative reports, the regulations require those reports to be submitted to the Regional Administrator. Section 402(b) of the MSA governs the release of data contained in these reports. The Council can request Amendment 80 and Central GOA Rockfish cooperatives to voluntarily provide the Council with information consistent with what they are required to provide to NMFS. In past reporting, cooperatives have generally provided NMFS and the Council with similar reports.

### a. American Fisheries Act

In 1998 Congress established the AFA specifically for the pollock fishery in the BSAI management area. Among other things, the AFA encouraged domestic enterprise in Alaskan fisheries and established provisions for the creation of fishery cooperatives in three sectors: at sea catcher/ processor, mothership, and inshore vessels. While vessels can choose not to participate in a cooperative and instead participate in a limited access fishery, the cooperatives are given exclusive allocation of pollock based on their members' historical catch.

In the 2012 season, there were nine active AFA cooperatives. In addition there is a catcher vessel inter-cooperative representing the seven shore-based groups along with the sideboard interests of the Mothership Fleet Cooperative and the High Seas Catcher Cooperative. While specific vessels have shifted membership over the years, these cooperatives were all created at the onset of the program.

From a Council perspective, these cooperatives are a valuable management tool. Overharvesting of pollock and exceeding bycatch limits becomes a concern of the entire cooperative. In order to avoid violations, members have the incentive to share information and strategy with their fellow vessels that may aid them in achieving the Council's goals. For AFA, this is specifically advantageous for reducing salmon prohibited species catch (PSC).

Reporting requirements for AFA cooperatives were established when the Act was first implemented. The objective was to provide the Council, Secretary of Commerce, and the public with the information necessary to assess the effectiveness of the program. The cooperative reports help to fulfill section 210(a)(1)(B) of the AFA which stipulates that while *"taking into account the interest of parties to any such contract in protecting the confidentiality of proprietary information,"* it is the Council and the Secretary's responsibility to, *"(A) make available to the public such information about the contract, contract modifications, or fishery cooperative the North Pacific Council and Secretary deem appropriate, which at a minimum shall include a list of the parties to the contract, a list of the vessels involved, and the amount of pollock and other fish to be harvested by each party to such contract; and (B) make available to the public in such manner as the North Pacific Council and Secretary deem appropriate information"*

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<sup>1</sup> These lists are as comprehensive as Council staff was able to glean from past documentation and personal communication. It is very possible additional informal requests were made over the years that are not included here.

*about the harvest by vessels under a fishery cooperative of all species (including bycatch) in the directed pollock fishery on a vessel-by-vessel basis.”*

These requirements are expanded in regulation<sup>2</sup>. Based on 50 CFR 679.61(f) the cooperatives are expected to report to the Council office by April 1<sup>st</sup> each year and include at a minimum:

- (1) The cooperative’s allocated catch of pollock and sideboard species, and any sub-allocations of pollock and sideboard species made by the cooperative to individual vessels on a vessel-by-vessel basis;
- (2) The cooperative’s actual retained and discarded catch of pollock, sideboard species, and PSC on an area-by-area and vessel-by-vessel basis;
- (3) A description of the method used by the cooperative to monitor fisheries in which cooperative vessels participated;
- (4) A description of any actions taken by the cooperative in response to any vessels that exceed their allowed catch and bycatch in pollock and all sideboard fisheries;
- (5) The total weight of pollock landed outside the State of Alaska on a vessel-by-vessel basis; and
- (6) The number of salmon taken by species and season, and list each vessel's number of appearances on the weekly “dirty 20” lists for non-Chinook salmon

In the original regulation, AFA annual reports required the submission of a preliminary report by December 1 of that fishing year, while the final report was not submitted until February of the following year. The purpose of this preliminary report deadline was to inform groundfish harvest specifications before the start of the upcoming fishing year. Requiring the final report before this time would place a large burden on the cooperatives as the pollock season closed November 1 so they would only have one month to compile data. In practice, the groundfish harvest specifications did not rely on the preliminary cooperative annual reports as much as NMFS had predicted. Thus, in June 2010 a Regulatory Impact Review (RIR) was presented to the Council evaluating the effects of removing this preliminary reporting requirement. In March of 2011, this change passed through as a final rule, dropping the preliminary reporting requirement and the moving deadline for the single cooperative report to April 1 of each year.

In 2012, eight cooperative reports<sup>3</sup> and one intercooperative report were filed:

- Pollock Conservation Cooperative (Catcher/ processors vessels) and High Seas Catchers Cooperative (Catcher vessels that deliver to the catcher/ processors)
- Mothership Fleet Cooperative
- Akutan Catch Vessel Cooperative
- Northern Victor Fleet Cooperative

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<sup>2</sup> These regulations superseded a letter from the Council to the cooperatives on October 21, 1999 and follow-up letter in November 1, 1999 that both provided advanced notice for what the Council expected in the annual reports.

<sup>3</sup> The Pollock Conservation Cooperative and High Seas Catchers submitted a combined cooperative report.

- Peter Pan Fleet Cooperative
- Unalaska Fleet Cooperative
- UniSea Fleet Cooperative
- Westward Fleet Cooperative#
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There is certainly variation in the content and depth of each report. All reports include some information that is above what the requirements stipulate. Some reports fail to include particular elements of the regulations. The structure tended to include:

- An introduction that explains who the cooperative represents
- Cooperative membership
- Member CQ % and initial allocation
- In-season management structure of the cooperative
- Transfers and harvest amount in the BS pollock-directed fishery
- Bycatch and Salmon PSC in the BS pollock-directed fishery
- Catch monitoring
- Sideboards in the BSAI and in the GOA (allocation, harvest and bycatch)
- Penalties/ civil actions

Elements of the regulations that were omitted by some reports include:

- Initial allocation and transfer of sideboard species
- Discarded catch of pollock and sideboard species
- Area-by-area harvest information
- Total weight of pollock landed outside the State of Alaska<sup>4</sup>

Elements of the regulations that have been interpreted in different ways:

- The regulation asks for harvests of pollock, sideboard species and PSC presented, “on an area-by-area and vessel-by-vessel basis”. Some cooperatives present this information first on an area-by-area basis for their full fleet and then a vessel-by-vessel basis. While other cooperatives present this harvest information for one vessel, area, and species at a time.
- Reports must specify the number of salmon taken by species and season. Some reports understand this to mean A and B season while some cooperatives report the whole fishing season.

Since the regulations were first enacted near the onset of the program, there have been small changes to the reporting requirements as well as informal/ implied requests for additional information that have manifested through the Council process.

- *Winter Pacific cod Fishery*

At the June 2000 meeting, three non-AFA vessels came to the Council with concerns that the newly implemented Act was having unintended effects on their operations by expanding effort in the Bering Sea Pacific cod fishery. This topic was followed by the Council with varying levels of intensity for several years with a strong push for the AFA and non-AFA Pacific cod sectors to reach a mutual agreement outside of Council regulatory action. In response, the 2004 catcher vessel inter-cooperative report

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<sup>4</sup> It’s possible that this requirement is omitted because the cooperative did not land pollock outside of Alaska, but this is not clear in all reports.

included information on AFA non-exempt vessels harvesting Pacific cod by week and over time<sup>5</sup>. This information was provided to illustrate that the high frequency of non-exempt vessels fishing Pacific cod in early 2000 was an anomaly in a four-year trend and the temporal dissemination of their effort should mitigate localized depletion concerns.

- *Salmon PSC*

Following particularly high levels of salmon PSC in 2005, the Council began to focus on bycatch avoidance and management within the AFA cooperatives. The AFA cooperatives voluntarily began managing bycatch under the ICA in 2002 to avoid triggering regulatory closures, and eventually this led to Amendment 84 (2007) to exempt vessels from the regulatory closures for participation in the ICA bycatch management. In 2007, annual ICA reports became required under the provisions of Amendment 84 of the BSAI Groundfish Fishery Management Plan (FMP). The final rule for Amendment 84 additionally required PSC reporting in the annual cooperatives reports. While initial regulations called for a significant amount of salmon PSC reporting within the annual cooperative reports, there has been some effort to mitigate duplicate requests for information. Thus the majority of the PSC reporting responsibilities have fallen to the ICA and the IPA reports (as of 2011). Currently, the number of salmon taken by species and season and the number of times a vessel's appeared on the weekly "dirty 20" lists for non-Chinook salmon are still required in the cooperative reports. Further requirements of the ICA and IPA reports will be discussed in a later section.

- *AFA GOA Sideboard Exempt Vessels Activity*

In February of 2012, the Council expressed concern for the possibility that AFA catcher vessels with GOA sideboard exemptions may lease their predetermined BS pollock allocation to another vessel and take advantage of the GOA fisheries beyond their historical catch. As there was no regulation preventing this from happening, the Council suggested that cooperatives voluntarily demonstrate the magnitude of this issue within their annual reports. This recommendation was acknowledged in the 2012 inter-cooperative report with a description of the relevant provisions laid out in the catcher vessel inter-cooperative agreement. The report also presented a table of GOA Pollock harvest by exempt vessel for the season.

Cooperatives routinely volunteer additional information. For example, the Pollock Conservation Cooperative/ High Seas Catchers Cooperative joint report presented their ratio of groundfish discard to groundfish retained for the past thirteen years. Furthermore the entire catcher vessel inter-cooperative report is a voluntary submission, providing the Council with a snapshot of how the catcher vessels operate relative to each other. This document, as well as some of the individual reports, appends annual inter-cooperative agreements and agreements on voluntary salmon area closures.

## **b. ICA/IPA**

Bering Sea salmon PSC management programs require separate reporting requirements annually to the Council. For non-Chinook salmon a report is required from the representative of the non-Chinook bycatch reduction ICA. This reporting requirement is a result of Amendment 84 (implemented by exempted fishing permit in 2006 B season and by regulation in 2007) to the BSAI Groundfish FMP to exempt all AFA pollock vessels to the Chum salmon savings area closure, when closed by regulation or by reaching a specified PSC limit, for participation in the ICA rolling hot spot program. Prior to Amendment 91, the Amendment 84 exemption also covered the Chinook salmon savings area when triggered. All references to Chinook salmon in the ICA and associated regulations were removed upon

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<sup>5</sup> The Council staff suspects this inclusion resulted from an informal Council request, but no evidence confirmed this fact. This inclusion of this information may have simply resulted from the cooperatives' desire to address the concern that the sideboards were strict enough.

implementation of Amendment 91. For Chinook salmon, separate reports are required from the representatives of each sector's incentive program agreement (IPA). There are three IPAs, a Shoreside Catcher Vessel (CV) program, a Mothership program and a combined Catcher Processor/Community Development (CDQ) program. These IPAs were created in conjunction with the Amendment 91 Bering Sea Chinook Salmon PSC management program implemented in 2011. An IPA must be approved by NMFS in order for a sector to operate under the sector proportion of the 60,000 annual PSC Chinook salmon cap.

The Council received annual reports from the ICA and IPAs most recently in April 2013. At that time, the Council moved to request a comprehensive report from staff to update the Chinook salmon adult equivalence (AEQ) analysis, provide additional information on Chinook salmon stock status off Alaska and some additional analyses of bycatch performance under Amendment 91. The Council also requested that the IPA representatives provide an additional report on ideas for incorporating chum salmon into existing IPAs as well as a description of incentive measures currently contained in each program for Chinook salmon. These reports were reviewed by the Council in October 2013. At that time, the Council moved for further consideration of modifications to both chum and Chinook salmon PSC management in the Bering Sea<sup>6</sup>. The Council will be addressing potential changes to the whole program, which could include modifying ICA and IPA management as well as the reporting requirements for the programs. Any discussion of modifying reporting requirements or timing for Bering Sea salmon management is best addressed in conjunction with the separate consideration of this specific issue. This will next be considered by the Council in either April or June of 2014.

### **c. Crab Program**

In 2005 the BSAI Crab rationalization program was implemented. Based on participation in the industry within a set of qualifying years, the program issued quota share (QS) to vessel owners and captains, as well as processor quota share (PQS) to processors in all fisheries except the Norton Sound Red king crab and the Pribilof Islands golden king crab. This process also allowed for the voluntary formation of cooperatives.

The program was initiated as a reaction to several problematic aspects of the previous, derby-style fishery. Safety was a primary concern as the sector became famous for its high levels of mortality and injury amidst a competitive market. In addition, the rationalized program was an effort to address:

- Resource conservation, utilization, and management problems;
- Bycatch and its' associated mortalities, and potential landing deadloss;
- Excess harvesting and processing capacity, as well as low economic returns
- Lack of economic stability for harvesters, processors and coastal communities

While past Council analyses have shown improvement in many of these areas post-rationalization, the program's 5-year review brought about a discussion of the unanticipated consequences of the program. Critics have focused on the high lease rates for individual fishing quota (IFQ), transfer of quota among non-active participants, and a decline in crew compensation as a fraction of the gross vessel revenue. These concerns prompted the presentation of two analyses to the Council in the February 2013 meetings. The first analysis was an initial review of a Regulatory Impact Review/ Initial Regulatory Flexibility Act (RIR/IRFA) evaluating the Council's management options for promoting active participation among lease holders. Presented at the same time was a discussion paper that considered addressing lease rates, crew compensation, and active participation through flexible cooperative management. This analysis suggested the utility of an annual cooperative report. After hearing these presentations from Council staff

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<sup>6</sup> Council motion on Bering Sea Salmon Bycatch from October 2013:  
<http://www.alaskafisheries.noaa.gov/npfmc/PDFdocuments/bycatch/BSsalmonBycMotion1013.pdf>

as well as public testimony from the cooperatives, the Council chose no immediate regulatory action. Instead the Council chose to send a letter to each of the cooperatives requesting that they voluntarily describe measures they are taking to:

- Ensure QS transfers to active participant and crew members
- Address high lease rates
- Address low crew compensation rates

The letter calls for any additional information or data the cooperatives wish to provide demonstrating the effectiveness of the current measures and the level of participation in cooperative established measures. It informs the BSAI crab cooperatives that these reports will help determine if the Council will take regulatory action in the future.

The reports were initially due in October 2013, but were rescheduled until the December 2013 meeting. The intention was to make this reporting process an annual event.

As described in more detail in section III of this discussion paper, the request for new information from crab cooperatives required clearance from the Office of Management and Budget (OMB). The information collection request <sup>7</sup> was approved by OMB on July 11, 2013 and has a valid OMB control number until September of 2016.

#### **d. Amendment 80 Cooperatives**

Implemented in 2008, the Amendment 80 Program is a limited access privilege program (LAPP) that allocates a portion of the BSAI total allowable catch (TAC) for Atka mackerel, Aleutian Islands Pacific ocean perch, and three flatfish species (yellowfin sole, rock sole, and flathead sole), along with an allocation of PSC quota for halibut and crab to the Amendment 80 sector. As part of this LAPP program, regulations require each cooperative that is issued CQ to submit an annual report detailing the use of the CQ to the Regional Administrator. The purpose of the cooperative reports is to monitor important activities of the cooperatives to determine progress in meeting the goals of the Amendment 80 program. The annual report for fishing activities under the CQ permit issued for the prior calendar year must be received by March 1 of each year. Regulations for Amendment 80 cooperative report requirement are located at § 679.5(s). Prior to February 2013, information required in the Amendment 80 cooperative report had to include at a minimum:

- (1) The cooperatives actual retained and discarded catch of CQ and GOA sideboard limited fisheries (if applicable) by statistical area and on a vessel-by-vessel basis;
- (2) A description of the method used by the cooperative to monitor fisheries in which cooperative vessels participated; and
- (3) A description of any actions taken by the cooperative against specific members in response to a member that exceeded the amount of CQ that the member was assigned to catch for the Amendment 80 cooperative.

In February 2013, NMFS implemented a regulatory amendment that removed the groundfish retention standard (GRS) in the BSAI. The GRS required a minimum level of groundfish retention of Amendment 80 vessels and cooperatives. As part of the regulatory amendment, each Amendment 80 cooperative is required to calculate and relate in its annual cooperative report its annual aggregate groundfish retention rate using the methodology initially established in regulation at § 679.27(j)(3). The additional reporting

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<sup>7</sup> See Appendix for this information collection request.

requirement was intended to provide information on the groundfish retention rates achieved by the Amendment 80 fleet. In addition, each Amendment 80 cooperative must have a third party audit the cooperative's groundfish retention calculations and include these findings as part of the annual Amendment 80 cooperative report. Provided is the specific language from regulations related to the amendment on the groundfish retention standard:

- For each Amendment 80 cooperative, a third party must audit the Amendment 80 cooperative's annual groundfish retention calculations and the Amendment 80 cooperative must include the findings of the third party audit in its Amendment 80 annual cooperative report.

In April 2013, the Council adopted a preferred alternative for a proposed amendment that would allocate the acceptable biological catch (ABC) reserve for flathead sole, rock sole, and/or yellowfin sole, among the Amendment 80 cooperatives and CDQ groups. As part of this action, the Council requested that Amendment 80 cooperatives provide draft annual reports to the Council no later than December 1<sup>st</sup>, each year to include information on their use of ABC reserve exchanges and quota share transfers, actual harvest, and annual changes in catch capacity (for example, measured by a change in the number of harvesting platforms). The Council requested December drafts of the annual reports so that the current year's information could inform the Council's decision, during the harvest specifications process, as to whether to establish a buffer reducing the amount of the ABC reserve available to be exchanged by eligible entities.

In 2012, the Alaska Seafood Cooperative (AKSC) and Alaska Groundfish Cooperative (AGC) submitted the required cooperative report to the Regional Administrator. All required Amendment 80 cooperative reports included the required information.

Additionally, since the release of cooperative information submitted to the Regional Administrator is governed by section 402(b) of the MSA, each of the cooperatives voluntarily provided a written cooperative report to the Council that was made available at the April 2013 meeting. In addition, the representative for the AKSC provided a voluntary oral presentation to the Council, while the AGC elected to not provide an oral presentation.

Since cooperative reports provided to the Council are voluntary, the depth of this information varied across the two reports.<sup>8</sup> In general, both cooperative reports included information on cooperative membership, management, catch monitoring, GOA sideboard management, 2012 groundfish catch, 2012 prohibited species catch (PSC) for halibut, crab, Chinook, and non-Chinook salmon, and information on retention compliance standard and the associated third party audit results. One cooperative report also provided an overview of findings and future issues to include information on harvest flexibility of Amendment 80 flatfish species, reducing halibut mortality, community outreach, and a list of potential regulatory changes that would benefit the cooperative.

As to Council requests for voluntary information, only one could be found. During the April 2010 meeting, the Council requested that Amendment 80 cooperative reports voluntarily include catch information from the Northern Bristol Bay Trawl Area (NBBTA). The purpose of this request was to monitor an agreement between certain northern Bristol Bay halibut fishermen and the Best Use Cooperative that yellowfin sole trawl vessels voluntarily avoid fishing in the southwest portion of the NBBTA, as well as an area southwest of the Nushagak Peninsula, to avoid conflicts with local halibut fishermen.

#### **e. Central GOA Rockfish Program**

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<sup>8</sup> Information provided in these voluntary reports is not verified for accuracy by the NMFS.

In 2007, the Central GOA Pilot Rockfish Program was implemented. The program was intended to enhance resource conservation and improve economic efficiency for harvesters and processor who participated in the program. Allocations of the primary rockfish species (Pacific ocean perch, northern rockfish, and pelagic rockfish) and important incidental catch species (i.e., sablefish, Pacific cod, shortraker and rougheye rockfish, and thornyhead rockfish) are divided between the catcher vessel sector and the catcher processor sector. In addition, each sector is allocated halibut PSC limits based on historic catch of halibut in the target rockfish fisheries. As part of reauthorization of the Magnuson-Stevens Act in 2007, the Pilot Program was extended until December 31, 2011. During that period, the Council completed action on Amendment 88 to the GOA Fishery Management Plan that revised the Rockfish Program and the amendment was implemented in 2012.

As part of the Central GOA Rockfish Program, each rockfish cooperative was required to submit to the Regional Administrator an annual rockfish cooperative report detailing the use of the cooperative's CQ by December 15 of each year. Information required in the cooperative report had to include at a minimum:

- (1) The cooperative's CQ, sideboard limit (if applicable), and any rockfish sideboard fishery harvests made by the rockfish cooperative vessels on a vessel-by-vessel basis;
- (2) The cooperative's actual retained and discarded catch of CQ, and sideboard limit (if applicable) by statistical area and on a vessel-by-vessel basis;
- (3) A description of the method used by the cooperative to monitor fisheries in which cooperative vessels participated; and
- (4) A description of any actions taken by the cooperative in response to any members that exceeded their catch as allowed under the rockfish cooperative agreement.

The purpose of the cooperative report is to use the information to enforce the use cap provisions, to track primary rockfish species quota share use, and dissuade eligible rockfish harvesters from forming cooperative agreements that would frustrate the goal of the use caps. The Council included use caps to limit the degree of consolidation that could occur in the Central GOA rockfish fisheries.

Under the new Rockfish Program in 2012, seven inshore cooperatives provided reports to the Regional Administrator. These seven inshore cooperatives were:

- Global Rockfish Cooperative
- International Seafoods of Alaska, Inc. Rockfish Cooperative
- North Pacific Rockfish Cooperative
- Ocean Beauty Seafoods Inc. Rockfish Cooperative
- Pacific Rockfish Cooperative
- Star of Kodiak Rockfish Cooperative
- Western Alaska Fisheries Rockfish Cooperative

In addition to the inshore cooperatives, there were also two offshore cooperatives during the 2012 fishing season that provided cooperative reports:

- Gulf of Alaska Best Use Cooperative
- Offshore Rockfish Cooperative

Each of the cooperatives provided a written report to the Regional Administrator on December 15 with all required information. In addition, since the release of these reports is governed by section 402(b) of the MSA, the cooperatives voluntarily provided the Council a cooperative report. These voluntary reports were made available at the April 2013 Council meeting. During the April 2013 Council meeting, the inshore cooperative representative provided a voluntary presentation to the Council and the representative

of the Best Use Cooperative also provided a voluntary presentation to the Council. There was not presentation provided by the Offshore Rockfish Cooperative.

All Central GOA rockfish cooperative reports that were voluntarily provided to the Council included the following information:

- Cooperative membership
- Cooperative management
- Catch monitoring
- Cooperative performance
  - Allocations
  - Transfers
  - Harvest
  - Whether use caps were exceeded (inshore cooperatives only)
    - Vessel level
    - Cooperative level
    - Processor level
  - Retained and discarded catch of cooperative quota
  - Sideboard limits and sideboard fishery harvests
  - Cooperative prohibited species catch
    - Halibut
    - Chinook salmon (inshore cooperatives only)
    - Other prohibited species catch (inshore cooperatives only)
- Penalties/Civil Actions

**f. Freezer Longline Conservation Cooperative**

The Freezer Longline Conservation Cooperative (FLCC) was incorporated on February 26, 2004. Since 2006, most of the holders of LLP licenses endorsed to target Pacific cod in the BS and AI with hook-and-line gear have voluntarily been members of the cooperative. In June 2010, the remaining LLP holders joined the cooperative. The cooperative apportions the sector's share of the available Pacific cod TAC among its members to eliminate the race for fish that arises under limited access management.

Unlike other Council developed cooperative programs, the FLCC cooperative is unique in that it was developed without Council involvement. As a result, an annual cooperative report by the FLCC was never requested from the Council. Despite the unique way the FLCC was developed, a cooperative report from FLCC could assist the Council in measuring the progress of the cooperative in addressing the Council's conservation goals, reducing overcapacity, increasing safety, and reducing bycatch and discards.

**g. Other Industry Generated Annual Reports**

This section provides a brief summary of the annual reporting requirements for the CDQ groups, and any Community Quota Entity (CQE) groups.

**Community Development Quota Program**

The Western Alaska CDQ Program is an economic development program associated with federally managed fisheries in the Bering Sea and Aleutian Islands (BSAI). The purpose of the program is to provide these 65 western Alaska communities the opportunity to participate and invest in BSAI fisheries, support economic development in western Alaska, to alleviate poverty and provide economic and social benefits for residents of western Alaska, and to achieve sustainable and diversified local economies in western Alaska.

Section 305(i)(1) of the MSA allocates a portion of the annual catch limit for each directed fishery of the Bering Sea and Aleutian Islands management area among six entities representing 65 western Alaska villages. The six entities (“CDQ groups”) and the villages associated with each of those entities are specifically named in section 305(i)(1)(D) of the MSA. The CDQ groups include the Aleutian Pribilof Island Community Development Association (APICDA), the Bristol Bay Economic Development Corporation (BBEDC), the Central Bering Sea Fishermen’s Association (CBSFA), the Coastal Villages Region Fund (CVRF), the Norton Sound Economic Development Corporation (NSEDCC), and the Yukon Delta Fisheries Development Association (YDFDA). The CDQ groups are nonprofit corporations whose board of directors and staff manage and administer CDQ allocations, investments, and economic development projects. CDQ groups use the revenue derived from the harvest of their fisheries allocations to fund economic development activities and provide employment opportunities.

Section 305(i)(1) of the MSA was amended on July 11, 2006, by the Coast Guard and Maritime Transportation Act (Coast Guard Act) (Public Law 109-241). The Coast Guard Act revised all of the existing language in section 305(i)(1) with new language. The new requirements addressed all aspects of management and oversight of the CDQ Program including the purpose of the CDQ Program; allocations of groundfish, halibut, and crab to the program and among the CDQ groups; management of the CDQ fisheries with respect to non-CDQ fisheries; eligible communities; eligibility criteria; limits on allowable investments; the creation of a CDQ administrative panel; compliance with State reporting requirements; a decennial review and allocation adjustment process; and other features of program administration and oversight by the State and NMFS. These amendments were intended to address a variety of oversight and management issues associated with the CDQ Program, including conferring a higher level of self-governance to CDQ groups through the creation of a CDQ “administrative panel.”

In September 2006, the CDQ groups formed the Western Alaska Community Development Association (WACDA) as the CDQ administrative panel. WACDA is a nonprofit corporation organized to represent the CDQ groups and comply with the requirements of the MSA that it:

- consist of 6 members with each CDQ group selecting one member of the panel;
- act only by unanimous vote of all 6 members of the panel;
- administer those aspects of the program not otherwise addressed in the MSA either through private contractual arrangement or through recommendations to the North Pacific Council, the Secretary, or the State of Alaska, as the case may be; and
- coordinate and facilitate activities of the entities under the program.

The groundfish and halibut CDQ fisheries are managed by NMFS and the CDQ crab fisheries are managed by NMFS and the State of Alaska. Federal reporting requirements for management of these fisheries are incorporated into generally applicable reporting requirements for the groundfish, halibut, and crab fisheries. These include observer coverage requirements, equipment and operational requirements, permitting requirements, the use of observer data to manage allocations, and logbook and landing reports.

The MSA addresses annual reporting requirements for the CDQ Program. Section 305(i)(1)(E) requires that each CDQ group submit an annual “Statement of Compliance” “that summarizes the purposes for which it made investment ...during the preceding year.” The CDQ groups submit statements of compliance each year, NMFS acknowledges receipt of those statements, and posts them on the Alaska region website at <http://alaskafisheries.noaa.gov/cdq/msa.htm>.

Under the MSA, NMFS has the authority to require reports from CDQ groups but only if those reports are necessary for the effective implementation of those provisions of section 305(i)(1) for which NMFS is responsible for administering.<sup>9</sup> Section 305(i)(1)(F)(ii) requires each CDQ group to

“ . . . comply with State of Alaska law requiring annual reports to the entity’s member villages summarizing financial operations for the previous calendar year, including general and administrative costs and compensation levels of the top 5 highest paid personnel.”

Although the State of Alaska does not have such a law, WACDA prepares an annual report on the CDQ Program. These annual reports have been completed for 2007 – 2011 and are available on WACDA’s website ([www.wacda.org](http://www.wacda.org)). In addition, WACDA approved a panel rule requiring *Annual Reports to CDQ Villages by CDQ Group* that was in effect from 2008 to 2012. That panel rule has since expired. However, each of the CDQ groups has prepared publically available annual reports prepared primarily for residents of the member communities. These annual reports are available on the websites for the individual CDQ groups.

### **Community Quota Entity Program**

To provide long-term opportunities for smaller Alaska communities to access the halibut and sablefish resources the Council developed the CQE Program. The program allows a distinct set of remote coastal communities in the GOA that met historic participation criteria in the halibut and sablefish fisheries to purchase and hold catcher vessel halibut QS in halibut Areas 2C, 3A, and 3B, and catcher vessel sablefish QS in the GOA. The communities are eligible to participate in the CQE Program once they are represented by a NMFS-approved non-profit entity called a CQE. This program structure creates a permanent asset for the community to use. The structure promotes community access to QS to generate participation in, and fishery revenues from, the commercial halibut and sablefish fisheries.

As part of the CQE program, a CQE must submit an annual report for each calendar year it holds any of the following: community charter halibut permits, halibut and sablefish individual fishing quota (IFQ) and quota shares, and community Pacific cod endorsed non-trawl groundfish LLP licenses. The CQE reports are submitted to the Regional Administrator by January 31 and can be released to the Council in a manner that is consistent with section 402(b) of the Magnuson-Stevens Act and applicable agency regulations and policies. Each CQE must report the following information:

- The eligible community or communities, represented by the CQE, any new communities, and any withdrawn communities
- Any changes in the bylaws of the CQE, board of directors, or other key management personnel
- Copies of minutes and other relevant decision making documents from all CQE board meetings held during the prior calendar year

In addition, each CQE must report business operations and detailed fishing activity for the charter halibut permit, IFQ, and LLP licenses for each eligible community represented by the CQE.

The purpose of the CQE report is to track the progress of the CQEs and assess whether the CQE issuance of the fishing privileges is meeting the overall goal of the CQE Program.

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<sup>9</sup> NOAA GC examined the authority of the CDQ Panel, as well as NMFS, to develop regulations to implement various statutory provisions of section 305(i)(1) in a legal memorandum dated June 1, 2007 and located at <http://alaskafisheries.noaa.gov/cdq/msa/legalop0607.pdf>

### III. Applicability of the Paperwork Reduction Act

The PRA, enacted in 1980, was, among other things, designed to “ensure the greatest possible public benefit from and maximize the utility of information created, collected, maintained, used, shared and disseminated by or for the Federal Government” and to “improve the quality and use of Federal information to strengthen decision making, accountability, and openness in Government and society.”<sup>10</sup> Much of the information contained in this section is from an April 7, 2010 memorandum by OMB that summarizes the information collection process under the PRA. See the Appendix for a copy of this memorandum.

Before requiring or requesting information from the public, the PRA requires Federal agencies (1) to seek public comment on proposed collections and (2) to submit proposed collections for review and approval by the OMB. OMB reviews agency information collection requests for approval or disapproval. When OMB approves an information collection, it assigns an OMB control number that the agency must display on the information collection.<sup>11</sup>

To obtain the public’s input on an agency request to collect information, the PRA generally requires the agency to publish a 60-day notice in the Federal Register soliciting public comment on the request. After the 60-day comment period has closed and the agency has considered the comments submitted, the agency submits the collection request to OMB and publishes a second Federal Register notice to announce the start of OMB review. This second notice informs the public about how to submit comments to OMB and informs the public that OMB may act on the agency’s request only after the 30-day comment period has closed.

According to the OMB memorandum, OMB review helps agencies “strike a balance” between collecting information needed to fulfill an agency’s statutory mission and guarding against “unnecessary or duplicative information that imposes unjustified costs on the American public.” See Appendix. Therefore, OMB evaluates a collection request to determine whether the information has practical utility<sup>12</sup>, minimizes the Federal information collection burden, with emphasis on those individuals and entities most adversely affected, and maximizes the practical utility of and public benefit from the information collected.<sup>13</sup> Under the PRA, OMB may approve a collection for up to three years at one time.<sup>14</sup> To extend the expiration date of a collection, an agency must provide the public with an opportunity to comment on the continuation of the collection, with the two notices described above, and resubmit the information collection request.<sup>15</sup>

The recently requested BSAI crab cooperative reports are a good example of the applicability of the PRA in the Council process. In February 2013, the Council passed a motion requesting that each cooperative in the BSAI Crab Rationalization Program voluntarily provide an annual report to the Council. During Council deliberation on the motion, NOAA General Counsel (GC) expressed a concern that the Council’s motion may be a collection of information subject to the requirements of the PRA. Upon further examination, NMFS and NOAA GC determined that the Council’s request was a collection of information subject to the review and approval requirements of the PRA. A letter was sent from NMFS to

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<sup>10</sup> 44 U.S.C. § 3501.

<sup>11</sup> Since cooperative reports are not a form, they are not required to display an OMB control number; however, each set of reports has an OMB number assigned to it.

<sup>12</sup> 44 U.S.C. § 3508.

<sup>13</sup> 44 U.S.C. § 3504.

<sup>14</sup> 44 U.S.C. § 3507(g). Some approvals are for shorter periods of time.

<sup>15</sup> Agencies may also discontinue collections at any time by submitting a short request to OMB.

the Council dated March 29, 2013 providing additional explanation on the applicability of the PRA to the Council generated information request to crab cooperatives (see Appendix for a copy of this letter).

The letter from NMFS explained that the PRA applies to agency collections of information using identical questions posed to, or reporting or recordkeeping requirements imposed on ten or more persons. PRA regulations at 5 CFR 1320.3(h) define “information” as “any statement or estimate of fact or opinion, regardless of form or format, and whether oral or maintained on paper, electronic or other media.” PRA regulations at 5 CFR 1320(c) define a “collection of information” as “...soliciting...the disclosure to an agency... of information...for an agency by means of identical questions posed to, or identical reporting, recordkeeping or disclosure requirements imposed on, ten or more persons, whether such collection of information is mandatory, voluntary, or required to obtain or retain a benefit.” “Collection of information” includes “any requirement or request for persons to obtain, maintain, retain, report, or publicly disclose information.” *Id.*

Given these provisions, the Council’s motion requesting each crab cooperative to voluntarily submit to the Council statements or estimates of fact or opinion concerning various measures taken by the cooperative constitutes a collection of information under the PRA. The Department of Commerce and NOAA have long considered Councils to be “agencies” for purposes of the PRA. The Council is requesting the same information from each cooperative and the fact that the Council’s request for this information is voluntary does not exempt it from the requirements of the PRA. Although there may be less than ten crab cooperatives during a given year, 5 CFR 1320.3(c)(4) states that “ten or more persons” refers to “the persons to whom a collection of information is addressed by the agency within any 12-month period, and to any independent entities to which the initial addressee may reasonably be expected to transmit the collection of information during that period...” Furthermore, regulations at 5 CFR 1320(c)(4)(ii) state that if a collection of information is addressed to all or a substantial majority of an industry, the collection is presumed to be addressed to ten or more persons. While the Council’s motion is directed to the crab cooperatives, the crab cooperatives include a substantial majority of crab harvests as members and cooperative managers will have to turn to their members to obtain the information requested by the Council. Therefore, the agency determined that the Council’s request for annual voluntary reports from the crab cooperatives is a collection of information under the PRA and triggers OMB review and approval.

The explanation provided in the March 29, 2013 letter also applies to information requests of Amendment 80, AFA, and Central GOA Rockfish cooperatives. While developing these cooperative programs, the Council included regulatory requirements for cooperatives to submit annual cooperative reports and NMFS simultaneously submitted PRA information collect requests for review and approval by the OMB during the development and Secretarial review of the regulations implementing these cooperative programs (see Appendix for an example of the Crab Program information collection request). During the past presentations of cooperative reports or other relevant actions in Council meetings, it has been common practice for Council members to ask for additional or modified information to be voluntarily included in future cooperative reports. These requests for additional information have, in most cases, not been submitted to OMB for review and approval. Based on the guidance from the March 29, 2013, letter to the Council, this was an oversight in many instances and staff is examining these previous requests to see if additional work is needed. As for new voluntary information requests, a PRA information request will be submitted to OMB for review and approval before the next cooperative report is due to the Council. Preparing the PRA submission will require additional work by staff to provide responses to the information required in the request to OMB approval, including rationale for the information collection, identification of respondents, and estimated costs for responding in both time and money. One suggestion to help facilitate preparation of the paperwork necessary for the PRA submission is for the Council to include all requests for additional or modified voluntary information into a motion that the Council can

approve. Council deliberations over the motion could provide the needed rationale and justification for the new information requests which staff can then use in preparing the documents needed for OMB review and approval.

In summary, the PRA should not discourage the Council from making requests for voluntary cooperative information to be included in future cooperative reports. Rather, this guidance advises the Council to pursue voluntary information requests in a more deliberative manner, providing clear explanation of the objective of the new information. Additionally, Council and NMFS staff will be required to track these Council information requests and submit the necessary PRA paperwork to OMB.

#### **IV. Considerations for Improving Cooperative Report Process**

As the Council looks to the future of cooperative reports, there are few changes the Council might want to consider. One change discussed at the April 2013 Council meeting was the timing of cooperative presentations. Currently the cooperative reports are presented to the Council during the April meeting. Council members previously indicated that there might be some utility in moving the presentations to the June meeting. As noted in Table 1, currently the Amendment 80 reports are required to be submitted to the agency by March 1, Central GOA Rockfish cooperative reports are due December 15, and AFA cooperative reports are due April 1. Given that Amendment 80 and AFA cooperative reports are submitted within days of the April Council meeting, shifting the presentation of the cooperative reports to the June meeting would provide more time for the Council and public to review those reports. The one potential drawback of shifting the presentations to the June meeting is that this is a travel meeting, which could make it more difficult for cooperative managers to attend and present their report to the Council.

As noted above, one suggestion to help facilitate preparation of the paperwork necessary for the PRA submission is for the Council to request additional and modified voluntary information into a motion that the Council could approve. Staff anticipates that the Council deliberation over the motion will provide the needed rational and justification for the new information requests which staff can then use in preparing the documents needed for OMB review and approval.

With a variety of reports being produced by the AFA fleet, the Council may wish to consolidate the reporting of all salmon PSC. The two salmon PSC elements currently in the annual cooperative reports are also included in the ICA report. While the “dirty 20” list is reported by vessel in both reports, the primary implication of shifting all salmon-related data to the ICA report would be the units of reporting for salmon by species and season. Furthermore, it is anticipated that any changes considered in PSC management for ICA and IPAs as requested by the Council for review in 2014 will impact the reporting requirements, thus the cooperative reports will likely be modified in conjunction with that pending action with minimal effort.

Finally, as noted in the PRA section, staff role in tracking Council information requests could increase. To facilitate the increased tracking of Council information requests, Council staff could increase its coordination of the numerous cooperatives reports that are routinely presented to the Council. Staff would track Council information requests on its website as a resource, and at each round of cooperative reporting, staff would provide the Council an introduction that includes an overview of what is currently required for the cooperative reports, a summary of what the cooperative programs are voluntarily providing in their annual reports, a reminder of Council generated voluntary requests, and which cooperatives will be providing a voluntary oral presentation.

**List of Prepares**

Jon McCracken, NPFMC  
Sarah Marrinan, NPFMC  
Lauren Smoker, NOAA GCAK  
Mary Furuness, NMFS  
Seanbob Kelly, NMFS  
Sally Bibb, NMFS  
Peggy Murphy, NMFS

**Persons Consulted:**

Chris Oliver, NPFMC  
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Tom Meyer, NOAA GCAK  
Patsy Bearden, NMFS  
Rachel Baker, NMFS  
John Gruver, United Catcher Boats Association  
Jason Anderson, Alaska Seafood Cooperative

## NOTICE OF OFFICE OF MANAGEMENT AND BUDGET ACTION

ITEM C-8(a)  
DECEMBER 2013

Date 08/26/2013

Department of Commerce  
National Oceanic and Atmospheric Administration

FOR CERTIFYING OFFICIAL: Simon Szykman

FOR CLEARANCE OFFICER: Jennifer Jessup

In accordance with the Paperwork Reduction Act, OMB has taken action on your request received  
07/11/2013

ACTION REQUESTED: New collection (Request for a new OMB Control Number)TYPE OF REVIEW REQUESTED: RegularICR REFERENCE NUMBER: 201306-0648-014

AGENCY ICR TRACKING NUMBER:

TITLE: Alaska Crab Rationalization Program Cooperative Report

LIST OF INFORMATION COLLECTIONS: See next page

OMB ACTION: Approved with changeOMB CONTROL NUMBER: 0648-0678

The agency is required to display the OMB Control Number and inform respondents of its legal significance in  
accordance with 5 CFR 1320.5(b).

EXPIRATION DATE: 08/31/2016

DISCONTINUE DATE:

BURDEN:	RESPONSES	HOURS	COSTS
Previous	0	0	0
New	10	300	40
Difference			
Change due to New Statute	0	0	0
Change due to Agency Discretion	10	300	40
Change due to Agency Adjustment	0	0	0
Change due to PRA Violation	0	0	0

TERMS OF CLEARANCE:

OMB Authorizing Official: Dominic J. Mancini  
Acting Deputy Administrator,  
Office Of Information And Regulatory Affairs

## List of ICs

IC Title	Form No.	Form Name	CFR Citation
Alaska Crab Rationalization Program Cooperative Report			50 CFR 680.5

# PAPERWORK REDUCTION ACT SUBMISSION

ITEM C-8(a)  
DECEMBER 2013

**Please read the instructions before completing this form. For additional forms or assistance in completing this form, contact your agency's Paperwork Clearance Officer. Send two copies of this form, the collection instrument to be reviewed, the supporting statement, and any additional documentation to: Office of Information and Regulatory Affairs, Office of Management and Budget, Docket Library, Room 10102, 725 17th Street NW, Washington, DC 20503.**

1. Agency/Subagency originating request DOC/NOAA/NMFS	2. OMB control number <span style="float: right;">b. <input checked="" type="checkbox"/> None</span> a. <u>0648</u> - _____
3. Type of information collection ( <i>check one</i> ) a. <input checked="" type="checkbox"/> New Collection b. <input type="checkbox"/> Revision of a currently approved collection c. <input type="checkbox"/> Extension of a currently approved collection d. <input type="checkbox"/> Reinstatement, without change, of a previously approved collection for which approval has expired e. <input type="checkbox"/> Reinstatement, with change, of a previously approved collection for which approval has expired f. <input type="checkbox"/> Existing collection in use without an OMB control number For b-f, note Item A2 of Supporting Statement instructions	4. Type of review requested ( <i>check one</i> ) a. <input checked="" type="checkbox"/> Regular submission b. <input type="checkbox"/> Emergency - Approval requested by ____ / ____ / ____ c. <input type="checkbox"/> Delegated  5. Small entities Will this information collection have a significant economic impact on a substantial number of small entities? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  6. Requested expiration date a. <input checked="" type="checkbox"/> Three years from approval date b. <input type="checkbox"/> Other Specify: <u>  /  /  </u>
7. Title <u>Alaska Crab Rationalization Program Cooperative Report</u>	
8. Agency form number(s) ( <i>if applicable</i> )	
9. Keywords	
10. Abstract  The North Pacific Fishery Management Council requested that each Crab Rationalization Program cooperative, after developing and implementing the measures to stimulate acquisition of crab quota share by crew and other active participants and to stimulate equitable crew compensation, voluntarily provide an annual report summarizing the effectiveness of each measure and the estimated number of participants in each measure, supported by documentation.	
11. Affected public ( <i>Mark primary with "P" and all others that apply with "x"</i> ) a. <input type="checkbox"/> Individuals or households d. <input type="checkbox"/> Farms b. <u>P</u> Business or other for-profit e. <input type="checkbox"/> Federal Government c. <input type="checkbox"/> Not-for-profit institutions f. <input type="checkbox"/> State, Local or Tribal Government	12. Obligation to respond ( <i>check one</i> ) a. <input checked="" type="checkbox"/> Voluntary b. <input type="checkbox"/> Required to obtain or retain benefits c. <input type="checkbox"/> Mandatory
13. Annual recordkeeping and reporting burden a. Number of respondents <u>10</u> b. Total annual responses <u>10</u> 1. Percentage of these responses collected electronically <u>0</u> % c. Total annual hours requested <u>100</u> d. Current OMB inventory <u>0</u> e. Difference _____ f. Explanation of difference 1. Program change _____ 2. Adjustment _____	14. Annual reporting and recordkeeping cost burden ( <i>in thousands of dollars</i> ) a. Total annualized capital/startup costs <u>0</u> b. Total annual costs (O&M) <u>0</u> c. Total annualized cost requested <u>0</u> d. Current OMB inventory <u>0</u> e. Difference _____ f. Explanation of difference 1. Program change _____ 2. Adjustment _____
15. Purpose of information collection ( <i>Mark primary with "P" and all others that apply with "X"</i> ) a. <input type="checkbox"/> Application for benefits e. <u>P</u> Program planning or management b. <u>X</u> Program evaluation f. <input type="checkbox"/> Research c. <input type="checkbox"/> General purpose statistics g. <input type="checkbox"/> Regulatory or compliance d. <input type="checkbox"/> Audit	16. Frequency of recordkeeping or reporting ( <i>check all that apply</i> ) a. <input type="checkbox"/> Recordkeeping b. <input type="checkbox"/> Third party disclosure c. <input checked="" type="checkbox"/> Reporting 1. <input type="checkbox"/> On occasion 2. <input type="checkbox"/> Weekly 3. <input type="checkbox"/> Monthly 4. <input type="checkbox"/> Quarterly 5. <input type="checkbox"/> Semi-annually 6. <input checked="" type="checkbox"/> Annually 7. <input type="checkbox"/> Biennially 8. <input checked="" type="checkbox"/> Other (describe) _____
17. Statistical methods Does this information collection employ statistical methods <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	18. Agency Contact (person who can best answer questions regarding the content of this submission)  Name: <u>Patsy A. Bearden</u> Phone: <u>(907) 586-7008</u>

## 19. Certification for Paperwork Reduction Act Submissions

On behalf of this Federal Agency, I certify that the collection of information encompassed by this request complies with 5 CFR 1320.9

**NOTE:** The text of 5 CFR 1320.9, and the related provisions of 5 CFR 1320.8(b)(3), appear at the end of the instructions. *The certification is to be made with reference to those regulatory provisions as set forth in the instructions.*

The following is a summary of the topics, regarding the proposed collection of information, that the certification covers:

- (a) It is necessary for the proper performance of agency functions;
- (b) It avoids unnecessary duplication;
- (c) It reduces burden on small entities;
- (d) It used plain, coherent, and unambiguous terminology that is understandable to respondents;
- (e) Its implementation will be consistent and compatible with current reporting and recordkeeping practices;
- (f) It indicates the retention period for recordkeeping requirements;
- (g) It informs respondents of the information called for under 5 CFR 1320.8(b)(3):
  - (i) Why the information is being collected;
  - (ii) Use of information;
  - (iii) Burden estimate;
  - (iv) Nature of response (voluntary, required for a benefit, mandatory);
  - (v) Nature and extent of confidentiality; and
  - (vi) Need to display currently valid OMB control number;
- (h) It was developed by an office that has planned and allocated resources for the efficient and effective management and use of the information to be collected (see note in Item 19 of instructions);
- (i) It uses effective and efficient statistical survey methodology; and
- (j) It makes appropriate use of information technology.

If you are unable to certify compliance with any of the provisions, identify the item below and explain the reason in Item 18 of the Supporting Statement.

Signature of Senior Official or designee

Date

Agency Certification (signature of Assistant Administrator, Deputy Assistant Administrator, Line Office Chief Information Officer, head of MB staff for L.O.s, or of the Director of a Program or StaffOffice)	
Signature  signed by Emily Menashes (A)	Date  06/19/2013
Signature of NOAA Clearance Officer	
Signature	Date

## **SUPPORTING STATEMENT**

### **CRAB RATIONALIZATION (CR) PROGRAM: CR COOPERATIVE ANNUAL REPORT**

**OMB CONTROL NO. 0648-XXXX**

This request is for a new information collection.

## **INTRODUCTION**

In January 2004, the U.S. Congress amended Section 313(j) of the [Magnuson-Stevens Fishery Conservation and Management Act](#) (Magnuson-Stevens Act) as amended in 2006 to mandate the Secretary of Commerce (Secretary) to implement the Crab Rationalization Program (CR Program) for the Bering Sea and Aleutian Islands Management Area (BSAI) crab fisheries. The CR Program allocates BSAI crab resources among harvesters, processors, and coastal communities. The North Pacific Fishery Management Council (Council) prepared, and NMFS approved, the Fishery Management Plan for BSAI King and Tanner Crabs (Crab FMP). The Crab FMP establishes criteria for the management of certain aspects of the BSAI crab fisheries by the State of Alaska Department of Fish and Game (ADF&G) and is implemented by regulations at [50 CFR part 680](#).

The National Marine Fisheries Service, Alaska Region (NMFS) implemented the CR Program to both maintain rigorous safeguards on use of fishing privileges for a public resource and to provide safeguards for program constituents. The CR Program components include quota share (QS) allocation, processor quota share (PQS) allocation, individual fishing quota (IFQ), individual processing quota (IPQ) issuance, quota transfers, use caps, crab harvesting cooperatives, protections for Gulf of Alaska groundfish fisheries, arbitration system, monitoring, economic data collection, and cost recovery fee collection.

Under the CR Program, NMFS issued QS to eligible harvesters based on their participation during a set of qualifying years in one or more of the nine CR Program fisheries. QS is an exclusive, revocable privilege allowing the holder to harvest a specific percentage of the annual total allowable catch (TAC) in a CR Program fishery. Each year, the QS holder's annual allocation, called IFQ, provides an exclusive harvesting privilege for a specific amount of raw crab pounds, in a specific crab fishery, in a given season. The size of each annual IFQ allocation is based on the amount of QS held by a person in relation to the total QS in a crab fishery.

## **A. JUSTIFICATION**

### **1. Explain the circumstances that make the collection of information necessary.**

In December 2011, NMFS presented a report to the Council detailing the performance of the CR Program during its first 5 years. Based on this 5-year report, the Council requested a discussion paper detailing measures that CR Program cooperatives could do to stimulate acquisition of QS

by crew and other active participants and to stimulate equitable crew compensation. NMFS presented the discussion paper to the Council at the February 2013 Council meeting.

**2. Explain how, by whom, how frequently, and for what purpose the information will be used. If the information collected will be disseminated to the public or used to support information that will be disseminated to the public, then explain how the collection complies with all applicable Information Quality Guidelines.**

**a. CR Cooperative Annual Report (on Effectiveness of QS Transfer to Active Participants and Crew Members)**

Upon receiving and reviewing the discussion paper, the Council passed a motion (purpose statement) requesting that each CR Program cooperative develop and implement procedures to adopt the following measures. An annual report is due at the October 2013 Council meeting to summarize the effectiveness of each measure and the estimated number of participants in each measure. Documentation to support the summary must also be submitted.

- ◆ Increase availability of QS for transfer to active participants and crew members. Create additional opportunities for persons active in the fisheries to have better access to quota.

Cooperatives could adopt a variety of different measures to promote quota ownership by members who are active. These measures could be loan assistance, buyer preferences, or rights of first offer to allow each cooperative the flexibility to address the issue in a way that it perceives to be the most appropriate for its circumstances. A small cooperative that has mostly active participants may appropriately establish internal financing of crew quota share purchases. A larger cooperative may better address active participation share acquisitions by granting a purchase preference to active participants.

A cooperative could report on the extent to which its members are active. Such a report could identify the number of QS holders in the cooperative, the amount of IFQ brought to the cooperative by those QS holders both active and inactive, the changes in the number of QS holders, and the amount of QS that is held by persons who are active. The report could also separately identify members who are active as crewmembers, as well as persons meeting a specified vessel ownership interest.

- ◆ Decrease high QS lease rates. The high lease rates in the fisheries are said to contribute greatly to the decline in revenues to persons who actively participate in the fisheries as vessel owners and crew. Lower lease rates could allow for more of the fisheries' revenues to be realized by vessel owners and crews.

A cooperative could implement a lease cap in its cooperative agreement. If a cooperative were to oversee all transactions to implement a cap on leases, that cooperative would need to monitor all transfers of shares to ensure that the cap is not exceeded. The limitation could be applied to any transfer or lease within a cooperative or between the cooperative and any other cooperative, verifying simply that no lease rate exceeded the specified cap. The cooperative could use a system of affirmations from its members to support its report.

The annual report (and supporting affirmations) to the Council would not specify any lease rates, but would state that lease rates were not in excess of the cap.

- ◆ Improve low crew compensation. To limit the effects of the leasing market and to protect crews from the financial impacts of high lease rates, the amount of any lease payment charged to crews could be limited or capped.

A cooperative could establish minimum crew pay standards which could define the minimum percentage of gross ex vessel revenues that a vessel may pay to its crewmembers. Such a limit could serve a purpose similar to a minimum wage law. Such a measure would be intended to more directly and comprehensively protect crew from further declines in the share of vessel revenues paid to crew that has occurred under the CR Program.

The more general goal of these measures may be to achieve equity and economic stability in the harvest sector. Cooperative implementation could be accomplished through requirements that a cooperative:

- 1) include in its cooperative agreement a provision that requires all vessels to compensate crews in excess of a specified percentage of the vessel's gross revenues,
- 2) verify compliance by review of each member vessel's gross revenues and total crew compensation

The annual report to the Council would not specify crew compensation amounts (due to confidentiality limitations), but would affirm that all the cooperative's vessels met the standard.

Since implementation of the program, crew compensation as a percentage of gross revenues has varied with the amount of harvests. Some participating crews have suggested that the consolidation of quota provides a benefit, even if payments for harvest of that added quota are at a lower percentage due to charges for lease payments. In other words, some crew may believe that the acceptable minimum share of vessel revenues paid to the crew should differ with the amount of harvests.

Reasonable compensation may differ across fisheries due to a variety of factors (such as crab prices, catch rates, working conditions, and risk). These differences are suggested by historical data from the fisheries. For example, the percentage of vessel gross revenues paid to crew in the Bristol Bay red king crab fishery has been lower than that percentage in the Bering Sea *C. opilio* fishery; however, daily pay in the red king crab fishery has exceeded daily pay in the *C. opilio* fishery. Any percentages should consider whether different percentages are appropriate for different fisheries. In addition, to the extent that harvests overlap across fisheries (such as *C. bairdi* harvests made in the Bristol Bay red king crab and Bering Sea *C. opilio* fisheries), it may be difficult (or inappropriate) to attempt to separate payments by fishery.

The voluntary annual report from each cooperative is to be provided to the Council at its October 2013 meeting.

The estimated time for report completion, including gathering and compiling information is based on discussion among Alaska Region staff, and an averaging of several different types of annual cooperative reports required under other Alaska programs, resulting in 30 hours:

- Rockfish cooperative report = 40 hr
- American Fishing Act cooperative report = 12 hr
- Amendment 80 cooperative report = 25 hr
- Community Quota Entity annual report = 40 hr

<b>CR Coop Annual Report, Respondent</b>	
<b>Number of respondents</b>	<b>10</b>
<b>Total annual responses</b>	<b>10</b>
Frequency of response = 1	
<b>Total burden hours</b>	<b>300 hr</b>
Time per response = 10 hr	
<b>Total personnel cost (\$25/hr)</b>	<b>\$7,500</b>
<b>Total miscellaneous cost (39.75)</b>	<b>\$40</b>
Postage cost (1.35 x 5 = 6.75)	
Fax (\$6 x 5 = 30)	
Photocopy cost (10 x 6 pp x 0.05 = 3.00)	

<b>CR Coop Annual report, Federal Government</b>	
<b>Total annual responses</b>	<b>0</b>
<b>Total burden hours</b>	<b>0</b>
<b>Total personnel cost</b>	<b>0</b>
<b>Total miscellaneous cost</b>	<b>0</b>

It is anticipated that the information collected will be disseminated to the public or used to support publicly disseminated information. The Council will retain control over the information and safeguard it from improper access, modification, and destruction, consistent with National Oceanic and Atmospheric Administration (NOAA) standards for confidentiality, privacy, and electronic information. See response to Question 10 of this Supporting Statement for more information on confidentiality and privacy. The information collection is designed to yield data that meet all applicable information quality guidelines. Prior to dissemination, the information will be subjected to quality control measures and a pre-dissemination review pursuant to Section 515 of Public Law 106-554.

**3. Describe whether, and to what extent, the collection of information involves the use of automated, electronic, mechanical, or other technological techniques or other forms of information technology.**

The CR Cooperative Annual Report may be submitted to the Council by courier, mail, or fax.

**4. Describe efforts to identify duplication.**

This information collection is part of a specialized and technical program that is not like any other.

**5. If the collection of information involves small businesses or other small entities, describe the methods used to minimize burden.**

Cooperatives are not small businesses or small entities; thus this information collection does not impose a significant impact on small entities.

**6. Describe the consequences to the Federal program or policy activities if the collection is not conducted or is conducted less frequently.**

If the collection were not conducted or conducted less frequently, the information needed by the Council detailing measures that CR Program cooperatives could implement to stimulate acquisition of QS by crew and other active participants and to stimulate equitable crew compensation would not be available and the problems of acquisition and compensation would not be solved.

**7. Explain any special circumstances that require the collection to be conducted in a manner inconsistent with OMB guidelines.**

No special circumstances exist.

**8. Provide information on the PRA Federal Register Notice that solicited public comments on the information collection prior to this submission. Summarize the public comments received in response to that notice and describe the actions taken by the agency in response to those comments. Describe the efforts to consult with persons outside the agency to obtain their views on the availability of data, frequency of collection, the clarity of instructions and recordkeeping, disclosure, or reporting format (if any), and on the data elements to be recorded, disclosed, or reported.**

A Federal Register Notice published on April 12, 2013 (78 FR 21912) solicited public comments. No comments were received.

**9. Explain any decisions to provide payments or gifts to respondents, other than remuneration of contractors or grantees.**

No payment or gift is provided under this program.

**10. Describe any assurance of confidentiality provided to respondents and the basis for assurance in statute, regulation, or agency policy.**

This information is voluntary, but in support of management of commercial fishing efforts under 50 CFR part 680, under section 402(a) of the Magnuson-Stevens Act (16 U.S.C. 1801, et seq.) and under 16 U.S.C. 1862(j). Responses to this information request are confidential under section 402(b) of the Magnuson-Stevens Act. They are also confidential under NOAA Administrative Order 216-100, which sets forth procedures to protect confidentiality of fishery statistics.

**11. Provide additional justification for any questions of a sensitive nature, such as sexual behavior and attitudes, religious beliefs, and other matters that are commonly considered private.**

This information collection does not involve information of a sensitive nature.

**12. Provide an estimate in hours of the burden of the collection of information.**

Estimated total respondents: 10. Estimated total responses: 10. Estimated total burden: 300 hr.  
Estimated total personnel costs: \$7,500.

**13. Provide an estimate of the total annual cost burden to the respondents or record-keepers resulting from the collection (excluding the value of the burden hours in Question 12 above).**

Estimated total miscellaneous costs: \$40.

**14. Provide estimates of annualized cost to the Federal government.**

No costs or burden will occur to the Federal government.

**15. Explain the reasons for any program changes or adjustments.**

This is a new program.

**16. For collections whose results will be published, outline the plans for tabulation and publication.**

NMFS will not publish any results from this program.

**17. If seeking approval to not display the expiration date for OMB approval of the information collection, explain the reasons why display would be inappropriate.**

Not Applicable.

**18. Explain each exception to the certification statement.**

Not Applicable.

**B. COLLECTIONS OF INFORMATION EMPLOYING STATISTICAL METHODS**

This collection does not employ statistical methods.

**UNITED STATES DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration***National Marine Fisheries Service**P.O. Box 21668**Juneau, Alaska 99802-1668*

March 29, 2013

Eric Olson, Chairman  
Chris Oliver, Executive Director  
North Pacific Fishery Management Council  
605 W. Fourth Avenue, Suite 306  
Anchorage, Alaska 99501

Dear Chairman Olson and Mr. Oliver:

At its February 2013 meeting, the North Pacific Fishery Management Council (Council) considered a draft analysis examining active participation requirements for persons acquiring or holding vessel owner quota share in the BSAI crab fisheries (agenda item C-4(b)) and a discussion paper considering measures for BSAI crab cooperatives to address various crew issues (agenda item C-4(c)). As you know, the Council decided to take no further action on either of these agenda items. However, the Council passed a motion requesting that each cooperative in the Crab Rationalization program voluntarily provide an annual report to the Council that describes the measures the cooperative is taking "to facilitate the transfer of quota share to active participants and crew members" and "available measures which affect high lease rates and crew compensation." The motion also states that the reports should describe the "effectiveness of the measures implemented through the cooperatives, the estimated level of member participation in any voluntary measures, and include supporting information and data." According to the Council's February 2013 newsletter, these reports are to be provided to the Council at its October meeting.

During Council deliberation on the motion, NOAA General Counsel expressed a concern that the Council's motion may be a collection of information subject to the requirements of the Paperwork Reduction Act (PRA). She indicated that further research would be needed to make a definitive determination and that the agency would report back to the Council on our findings.

We have had an opportunity to examine the requirements of the PRA and its implementing regulations. Based on that review, and with guidance from NOAA General Counsel, we have determined that the motion passed by the Council and described above constitutes a collection of information subject to the review and approval requirements of the PRA. The following paragraphs provide additional explanation for our determination.



The PRA applies to (1) agency (2) collections of (3) information using identical questions posed to, or reporting or recordkeeping requirements imposed on, (4) ten or more persons. The Department of Commerce and NOAA have long considered councils to be “agencies” for purposes of the PRA. PRA regulations at 5 C.F.R. § 1320.3(h) define “information” as “any statement or estimate of fact or opinion, regardless of form or format, and whether oral or maintained on paper, electronic or other media.” PRA regulations at 5 C.F.R. § 1320.3(c) define a “collection of information” as “... soliciting ... the disclosure to an agency ... of information ... for an agency by means of identical questions posed to, or identical reporting, recordkeeping, or disclosure requirements imposed on, ten or more persons, whether such collection of information is mandatory, voluntary, or required to obtain or retain a benefit.” “Collection of information” includes “any requirement or request for persons to obtain, maintain, retain, report, or publicly disclose information.” *Id.* The Council’s motion requests each crab cooperative to voluntarily submit to the Council statements or estimates of fact or opinion concerning various measures taken by the cooperative and is an agency collection of information under the PRA. The fact that the Council’s request for this information is voluntary does not exempt it from the requirements of the PRA.

As to the last criterion, NOAA General Counsel noted during the February meeting that the Council’s motion may be exempt from the PRA because there are currently less than ten crab cooperatives.<sup>1</sup> Our additional research revealed that PRA regulations at 5 C.F.R. § 1320.3(c)(4) state that “ten or more persons” refers to “the persons to whom a collection of information is addressed by the agency within any 12-month period, and to any independent entities to which the initial addressee may reasonably be expected to transmit the collection of information during that period ....” Furthermore, regulations at 5 C.F.R. § 1320(c)(4)(ii) state that if a collection of information is addressed to all or a substantial majority of an industry, the collection is presumed to be addressed to ten or more persons. The Council’s motion is directed to the crab cooperatives, but these cooperatives will have to turn to their members to obtain the information requested by the Council. Also, NMFS currently issues over 99 percent of the individual fishing quota annually issued in all crab fisheries under the Crab Rationalization Program to these crab cooperatives.<sup>2</sup> Therefore, we have determined that the collection of information is addressed to ten or more persons, thus triggering the review and approval requirements of the PRA. I have attached a copy of a memorandum from the Administrator of the Office of Management and Budget (OMB), which provides a concise summary of the central requirements of the PRA that may assist the Council in the development of future information collections.

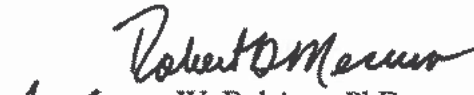
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<sup>1</sup> Crab cooperatives are “persons” under the PRA. Regulations at 5 C.F.R. § 1320.3(k) define “person” as “an individual, partnership, association, corporation ... business trust, or legal representative, an organized group of individuals, a State, territorial, tribal, or local government or branch thereof, or a political subdivision of a State, territory, tribal, or local government or a branch of a political subdivision.”

<sup>2</sup> Initial Review Draft of Provisions Defining Active Participation Requirements for the Acquisition and Use of Owner Shares, prepared for agenda item C-4(b) at the February 2013 Council meeting, at page 9.

Personnel within the NMFS Alaska Region Sustainable Fisheries Division have begun preparation of the documents needed to obtain OMB review and approval of this new annual report from crab cooperatives. We believe that review and approval of this collection of information can be completed prior to the Council's October 2013 meeting.

Sincerely,

  
James W. Balsiger, PhD  
Administrator, Alaska Region

Attachment: Office of Management and Budget Memorandum dated April 7, 2010

cc: Lisa Lindeman: NOAA General Counsel, Alaska Section  
cc: Leonard Herzog: Alaska King Crab Harvesters Cooperative  
cc: Sandra Toomey: Aleutian Gold Crab Cooperative  
cc: Trevor McCabe: Coastal Villages Crab Cooperative  
cc: Rob Rogers: Crab Producers and Harvesters LLC  
cc: Edward Poulsen: Dog Boat Cooperative  
cc: Tim Abena: Independent Crabber's Cooperative  
cc: Erling Jacobsen: Inter-Cooperative Exchange  
cc: Mary Mezich: R & B Cooperative  
cc: Christian Asay: Trident Affiliated Crab Harvesting Corporation  
cc: Mark Gleason: Alaska Bering Sea Crabbers  
cc: Ruth Christiansen: Alaska Bering Sea Crabbers



ADMINISTRATOR  
OFFICE OF  
INFORMATION AND  
REGULATORY  
AFFAIRS

EXECUTIVE OFFICE OF THE PRESIDENT  
OFFICE OF MANAGEMENT AND BUDGET  
WASHINGTON, D.C. 20503

April 7, 2010

MEMORANDUM FOR THE HEADS OF EXECUTIVE DEPARTMENTS AND AGENCIES,  
AND INDEPENDENT REGULATORY AGENCIES

FROM:

Cass R. Sunstein   
Administrator

SUBJECT:

Information Collection under the Paperwork Reduction Act

On January 21, 2009, the President issued a memorandum calling for the establishment of “a system of transparency, public participation, and collaboration.”<sup>1</sup> The memorandum required an Open Government Directive to be issued by the Director of the Office of Management and Budget (OMB), instructing “executive departments and agencies to take specific actions implementing the principles set forth in this memorandum.”

Implementing the President’s memorandum, OMB’s Open Government Directive requires a series of measures to promote the commitments to transparency, participation, and collaboration.<sup>2</sup> Section 4 of the Directive specifically instructs the Administrator of the Office of Information and Regulatory Affairs (OIRA) to “review existing OMB policies, such as Paperwork Reduction Act guidance and privacy guidance, to identify impediments to open government and to the use of new technologies and, where necessary, issue clarifying guidance and/or propose revisions to such policies, to promote greater openness in government.”

This Memorandum responds to that requirement by offering clarifying guidance with respect to the Paperwork Reduction Act of 1995 (PRA)<sup>3</sup> in order to specify its central requirements and to increase transparency and openness.

The PRA was designed, among other things, to “ensure the greatest possible public benefit from and maximize the utility of information created, collected, maintained, used, shared and disseminated by or for the Federal Government” and to “improve the quality and use of Federal information to strengthen decisionmaking, accountability, and openness in Government and society.”<sup>4</sup> Federal agencies play a critical role in collecting and managing information in order to promote openness, reduce burdens on the public, increase program efficiency and

<sup>1</sup> Available at <http://www.gpoaccess.gov/presdocs/2009/DCPD200900010.pdf>.

<sup>2</sup> Available at [http://www.whitehouse.gov/omb/assets/memoranda\\_2010/m10-06.pdf](http://www.whitehouse.gov/omb/assets/memoranda_2010/m10-06.pdf).

<sup>3</sup> 44 U.S.C. chapter 35; see 5 CFR Part 1320.

<sup>4</sup> 44 U.S.C. § 3501.

effectiveness, and improve the integrity, quality, and utility of information to all users within and outside the government.<sup>5</sup>

Before requiring or requesting information from the public, the PRA requires Federal agencies<sup>6</sup> (1) to seek public comment on proposed collections and (2) to submit proposed collections for review and approval by the Office of Management and Budget (OMB). OMB's Office of Information and Regulatory Affairs (OIRA) reviews agency information collection requests for approval or disapproval. When OMB approves an information collection, it assigns an OMB control number<sup>7</sup> that the agency must display on the information collection.<sup>8</sup> OMB has issued regulations and guidance to promote agency compliance with the PRA.<sup>9</sup>

#### What counts as "information" under the PRA?

OMB regulations define "information" as "any statement or estimate of fact or opinion, regardless of form or format, whether in numerical, graphic, or narrative form, and whether oral or maintained on paper, electronic or other media."<sup>10</sup> This category includes:

- (1) requests for information to be sent to the government, such as forms (e.g., the IRS 1040), written reports (e.g., grantee performance reports), and surveys (e.g., the Census);
- (2) recordkeeping requirements (e.g., OSHA requirements that employers maintain records of workplace accidents); and
- (3) third-party or public disclosures (e.g., nutrition labeling requirements for food).<sup>11</sup>

The PRA applies to collections of information using identical questions posed to, or reporting or recordkeeping requirements imposed on, "ten or more persons."<sup>12</sup> For the purpose of counting the number of respondents, agencies should consider the number of respondents within any 12 month period. If a collection of information is addressed to all or a substantial

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<sup>5</sup> 44 U.S.C. § 3506(b).

<sup>6</sup> With some exceptions, the PRA applies to "any executive department, military department, Government corporation, Government controlled corporation, or other establishment in the executive branch of the Government (including the Executive Office of the President), or any independent regulatory agency." 44 U.S.C. § 3502(1).

<sup>7</sup> The OMB Control Number is two four-digit codes separated by a hyphen. The first four digits identify the sponsoring agency and bureau, and the second four digits identify the particular collection. The public can find OMB's inventory of currently approved collections, with OMB control numbers, online at <http://www.reginfo.gov>.

<sup>8</sup> The PRA prohibits agencies from penalizing or denying a benefit to (1) those who fail to respond to Federal collections of information that do not display valid OMB control numbers and (2) those who have not been informed that a response is not required unless the collection of information displays a valid control number. Litigants may raise these public protections at any time during an administrative process or judicial action. See 44 U.S.C. § 3512(b); *Center for Auto Safety v. NHTSA*, 244 F.3d 144 (D.C. Cir. 2001); *Saco River Cellular Inc. v. FCC*, 133 F.3d 25 (D.C. Cir. 1998).

<sup>9</sup> Please see OIRA's website: [http://www.whitehouse.gov/omb/inforeg\\_default/](http://www.whitehouse.gov/omb/inforeg_default/).

<sup>10</sup> 5 C.F.R. 1320.3(h).

<sup>11</sup> See 5 C.F.R. 1320.3(c).

<sup>12</sup> 44 U.S.C. § 3502(3)(A)(i). Under the PRA, "person" means "an individual, partnership, association, corporation, business trust, or legal representative, an organized group of individuals, a State, territorial, tribal, or local government or branch thereof, or a political subdivision of a State, territory, tribal, or local government or a branch of a political subdivision." 44 U.S.C. § 3502(10).

majority of an industry or sector in a 12 month period, that collection is presumed to be addressed to ten or more persons.<sup>13</sup>

The requirements of the PRA apply to voluntary collections as well as to mandatory collections and collections required to obtain a Federal benefit (e.g., a job, a grant, a contract).<sup>14</sup> In implementing program activities, agencies should be aware of the applicability of the PRA and address PRA compliance in sufficient time to solicit and respond to public comment.<sup>15</sup>

#### What does not count as information under the PRA?

OMB regulations specify a number of items that are generally not “information” under the PRA.<sup>16</sup> Important examples are

- affidavits, receipts, changes of address, or consents;
- tests of the aptitude, abilities, or knowledge of persons; and
- facts or opinions that are (1) submitted in response to general solicitations of public comments,<sup>17</sup> (2) addressed to a single person, (3) obtained or solicited at or in connection with public hearings or meetings, (4) obtained through direct observation by the agency (e.g., through visual inspection to determine how long it takes for people to complete a specific transaction), or (5) obtained from participants in clinical trials (which typically do not involve answers to “identical questions”).

It is worth emphasizing that facts or opinions obtained in connection with public meetings do not count as “information.” This “public meeting” exception allows agencies to engage with the public on the Internet so long as the engagement is the functional equivalent of a public meeting (i.e., not a survey). In addition, it is important to underline that general solicitations, such as *Federal Register* notices, do not trigger the PRA. It follows that agencies may offer the public opportunities to provide general comments on discussion topics through the Internet. More generally, agencies may use social media and web-based technologies in a variety of specific ways without triggering the PRA.<sup>18</sup>

#### What information collections do not require OMB approval?

By statute, the PRA does not apply to some types of information collections. OMB approval is not required for information collections during a Federal criminal investigation or prosecution, during a civil action to which the United States is a party, or during the conduct of intelligence activities.<sup>19</sup> Agency collections from “agencies, instrumentalities, or employees of

<sup>13</sup> 5 C.F.R. 1320.3(c)(4)(ii).

<sup>14</sup> See 44 U.S.C. § 3502(3); 5 C.F.R. 1320.3(c).

<sup>15</sup> Given that the required public comment periods total 90 days, agencies should plan for at least 90 days plus time to respond to comments and questions that arise during OMB review.

<sup>16</sup> 5 C.F.R. 1320.3(b). Please see the Appendix for the regulatory text.

<sup>17</sup> Documents such as Advance Notices of Proposed Rulemaking, Requests for Comments, Requests for Information, and Notices of Proposed Rulemaking are generally not information collections.

<sup>18</sup> For additional information, see OIRA Memorandum on Social Media, Web-Based Interactive Technologies, and the Paperwork Reduction Act, available at [http://www.whitehouse.gov/omb/inforeg\\_default/](http://www.whitehouse.gov/omb/inforeg_default/).

<sup>19</sup> 44 U.S.C. § 3518(c). Please see the Appendix for the statutory exemptions.

the United States” in their official capacities are generally not subject to the PRA, unless those collections are for “general statistical purposes.”<sup>20</sup> It is worth emphasizing that agencies may ask for facts and opinions of Federal employees without triggering the PRA.

#### What are the public notice and comment requirements for information collection requests?

To obtain the public’s input on an agency’s proposal to collect information, the PRA generally requires the agency to publish a 60-day notice in the *Federal Register* soliciting public comment on the agency’s proposed collection. The notice must include a specific request that the public evaluate whether the proposed collection of information is necessary; evaluate the accuracy of the agency’s estimate of the burden that the collection would impose on respondents; comment on how to enhance the quality, utility, and clarity of the information to be collected; and comment on how to minimize the burden of the collection of information.<sup>21</sup>

After conclusion of the 60-day comment period and the agency’s internal consideration of the public’s comments, the agency submits the collection to OMB and publishes a second *Federal Register* notice to announce the start of OMB review.<sup>22</sup> This second notice informs the public about how to submit comments to OMB and informs the public that OMB may act on the agency’s request only after the 30-day comment period has closed.



#### When and how may the public notice and comment requirements be reduced?

Under certain circumstances, an agency head or designee may request that it be permitted to seek expedited, or “emergency,” OMB review of an information collection request. When expedited review is granted, the agency must take all practicable steps to consult with members of the public, but OMB may modify or, if necessary, waive the public comment requirements.<sup>23</sup> And when review is expedited, OMB acts promptly through a suitably streamlined process, consistent with the purposes of the PRA.

OMB may grant expedited review if: “(i) Public harm is reasonably likely to result if normal clearance procedures are followed; (ii) An unanticipated event has occurred; or (iii) The use of normal clearance procedures is reasonably likely to prevent or disrupt the collection of information or is reasonably likely to cause a statutory or court ordered deadline to be missed.”<sup>24</sup>

<sup>20</sup> 44 U.S.C. § 3502(3)(A).

<sup>21</sup> 44 U.S.C. § 3506(c)(2)(A). If a new information collection is associated with a proposed rule, OMB regulations require that only one notice be published. Agencies include this PRA notice in the preamble to the proposed rule and comments are directed to OMB. See 44 U.S.C. § 3506(c)(2)(B); 5 C.F.R. 1320.11.

<sup>22</sup> 44 U.S.C. § 3507(a)(1)(D).

<sup>23</sup> 5 CFR 1320.13(c) and (d).

<sup>24</sup> 44 U.S.C. § 3507(j); 5 C.F.R. 1320.13(a)(2).

As these situations arise, agencies should consult with OIRA to select an approach that permits them to comply with the PRA while meeting their other obligations.<sup>25</sup>

An agency may also request a “generic clearance” in situations in which (a) there is a need for multiple, similar low-burden collections that do not raise substantive or policy issues and (b) the specifics of each collection cannot be determined until shortly before the data are to be collected. Generic clearances have proved useful for customer satisfaction surveys, focus group testing, and website usability surveys. To obtain a generic clearance, agencies provide the public with opportunity for comment as required by the PRA and provide all information that would allow for meaningful comment, including a description of the need for the collection, the general nature of the collection, an estimate of the overall burden, and a description of the methodologies that will be used to collect the data. Once approval is granted for the overall collection, individual collections that fall within the generic clearance are reviewed on an expedited basis and are not generally required to undergo further public comment. Agencies are encouraged to consult with their OMB desk officers before developing a generic clearance to determine if it is appropriate.

What does OMB evaluate during its review of proposed collections?

A central goal of OMB review is to help agencies strike a balance between collecting information necessary to fulfill their statutory missions and guarding against unnecessary or duplicative information that imposes unjustified costs on the American public. In this regard, OIRA evaluates whether the collection of information by the agency:

- is necessary for the proper performance of the functions of the agency, including whether the information has practical utility;<sup>26</sup>
- minimizes the Federal information collection burden, with particular emphasis on those individuals and entities most adversely affected; and
- maximizes the practical utility of and public benefit from information collected by or for the Federal Government.<sup>27</sup>

OIRA also reviews the extent to which the information collection is consistent with applicable laws, regulations, and policies related to privacy, confidentiality, security, information quality, and statistical standards. In addition, OMB coordinates efforts across Federal agencies in shared areas of interest and expertise.

Under the PRA, OMB may approve a collection for up to three years at one time.<sup>28</sup> To extend the expiration date of a collection, an agency must provide the public with an opportunity to comment on the continuation of the collection, with the two notices described above, and

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<sup>25</sup> This includes setting a schedule for when the agency will provide the public with opportunities for full notice and comment under the PRA.

<sup>26</sup> 44 U.S.C. § 3508.

<sup>27</sup> 44 U.S.C. § 3504.

<sup>28</sup> 44 U.S.C. § 3507(g). Some approvals are for shorter periods of time. In the case of “emergency” requests, OMB approvals are limited to six months. 44 U.S.C. § 3507(j)(2).

resubmit the information collection request.<sup>29</sup> The public may have access to an inventory of currently approved agency collections at <http://www.reginfo.gov/public/do/PRAMain>.<sup>30</sup>

What resources are available to provide assistance?

OIRA provides guidance on its website<sup>31</sup> and makes its staff available to assist agencies in determining whether their activities are information collections under the PRA. When questions arise about the applicability of the PRA, an agency's internal resources, coordinated by the agency's Chief Information Officer, are the best sources for guidance and assistance. By working together, for example, OMB and the agencies have been able to minimize the number of PRA violations and to bring agencies into compliance when PRA violations occur. Finally, the PRA requires OMB to report to Congress annually on the Federal Government's major activities under the Act. This report, the Information Collection Budget (ICB), is available on OIRA's website.

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<sup>29</sup> Agencies may also discontinue collections at any time by submitting a short request to OMB.

<sup>30</sup> To ensure that the public record is accurate, agencies must submit, and OMB must review, documentation of all proposed revisions to an active collection before those revisions may be implemented. If the agency is considering significant or substantive revisions to the collection, it must provide the public with an opportunity to comment on the proposed revisions, as it would with a new collection. For insignificant or non-substantive changes, the agency is not required to seek public comment.

<sup>31</sup> [http://www.whitehouse.gov/omb/infoereg\\_default/](http://www.whitehouse.gov/omb/infoereg_default/)

## Appendix

### Statutory Exemptions<sup>32</sup>

- (1) Except as provided in paragraph (2), this subchapter shall not apply to the collection of information—
- (A) during the conduct of a Federal criminal investigation or prosecution, or during the disposition of a particular criminal matter;
  - (B) during the conduct of—
    - (i) a civil action to which the United States or any official or agency thereof is a party; or
    - (ii) an administrative action or investigation involving an agency against specific individuals or entities;
  - (C) by compulsory process pursuant to the Antitrust Civil Process Act and section 13 of the Federal Trade Commission Improvements Act of 1980; or
  - (D) during the conduct of intelligence activities as defined in section 3.4(e) of Executive Order No. 12333, issued December 4, 1981, or successor orders, or during the conduct of cryptologic activities that are communications security activities.
- (2) This subchapter applies to the collection of information during the conduct of general investigations (other than information collected in an antitrust investigation to the extent provided in subparagraph (C) of paragraph (1)) undertaken with reference to a category of individuals or entities such as a class of licensees or an entire industry.

### OMB Regulations

OMB regulations specify categories of items that are generally not “information” under the PRA.<sup>33</sup> These categories include:

- (1) Affidavits, oaths, affirmations, certifications, receipts, changes of address, consents, or acknowledgments; provided that they entail no burden other than that necessary to identify the respondent, the date, the respondent's address, and the nature of the instrument (by contrast, a certification would likely involve the collection of “information” if an agency conducted or sponsored it as a substitute for a collection of information to collect evidence of, or to monitor, compliance with regulatory standards, because such a certification would generally entail burden in addition to that necessary to identify the respondent, the date, the respondent's address, and the nature of the instrument);
- (2) Samples of products or of any other physical objects;
- (3) Facts or opinions obtained through direct observation by an employee or agent of the sponsoring agency or through nonstandardized oral communication in connection with such direct observations;
- (4) Facts or opinions submitted in response to general solicitations of comments from the public, published in the *Federal Register* or other publications, regardless of the form or format thereof, provided that no person is required to supply specific information pertaining to the commenter, other than that necessary for self-identification, as a condition of the agency's full consideration of the comment;

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<sup>32</sup> 44 U.S.C. § 3518(c).

<sup>33</sup> 5. C.F.R. 1320.3(h).

- (5) Facts or opinions obtained initially or in follow-on requests, from individuals (including individuals in control groups) under treatment or clinical examination in connection with research on or prophylaxis to prevent a clinical disorder, direct treatment of that disorder, or the interpretation of biological analyses of body fluids, tissues, or other specimens, or the identification or classification of such specimens;
- (6) A request for facts or opinions addressed to a single person;
- (7) Examinations designed to test the aptitude, abilities, or knowledge of the persons tested and the collection of information for identification or classification in connection with such examinations;
- (8) Facts or opinions obtained or solicited at or in connection with public hearings or meetings;
- (9) Facts or opinions obtained or solicited through nonstandardized follow-up questions designed to clarify responses to approved collections of information; and
- (10) Like items so designated by OMB.



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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Anchorage, AK 99501  
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## Action Memo Text

**File Number:**Crab 13-006

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**Agenda Date:** 12/9/2013

**Agenda Number:** C-9

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

BSAI Crab Cooperative Reports; Crew Provisions, etc.

**ESTIMATED TIME:**

6 hours (all Fishing Cooperative Issues)

**ACTION REQUIRED:**

Receive cooperative reports.

**BACKGROUND:**

The Congressional-lead rationalization of the Bering Sea Aleutian Islands (BSAI) crab fishery in 2005 was a response to significant issues in crew safety, resource conservation, bycatch management and economic instability for competing parties of the previous derby-style fishery. Despite the improvements in most of these areas, criticisms have been raised by some stakeholders as a result of rationalization. The program's 5-year review highlighted these issues, which included the social and economic concerns of:

- (1) the transfer of quota share (QS) among non-active participants;
- (2) the high lease rates for individual fishing quota (IFQ);
- (3) the amount of the lease rate that is charged against crew compensation;
- (4) and a decline in the percent of gross vessel revenue attributed to crew compensation.

These concerns prompted the Council to request the presentation of two analyses at the February 2013 meeting. The first analysis was an initial review of a Regulatory Impact Review/Initial Regulatory Flexibly Act analysis (RIR/IRFA) evaluating the Council's management options for promoting transfers of QS to those who have maintained active participation in that fishery. The second was a discussion paper that considered addressing lease rates, crew compensation, and active participation through flexible cooperative management. The discussion paper suggested the utility of an annual cooperative report in understanding cooperatives' self-management of these issues.

After hearing these presentations from Council staff and testimony from stakeholders, the Council chose no immediate regulatory action. Instead the Council chose to send a letter to each of the crab cooperatives requesting that they voluntarily describe measures the cooperative is taking to address these issues. The letter called for any relevant information or data to support their members' efforts and a description of the level of participation in these efforts. It informed the BSAI crab cooperatives that these reports would determine if the Council would attempt to take regulatory action in the future. These voluntary reports were intended to be a reoccurring submission in October of each year.

This is the first round of reports from the crab cooperatives. As a reference to the Council, cooperatives and the public, tables of Economic Data Reporting (EDR) information have been updated from the previous discussion paper (**Item C9a**). Additionally, the Alaska Fisheries Science Center has provided a snapshot of preliminary EDR information on the newly redefined lease rate variable (**Item C9b**).

## **BSAI Crab Cooperative Report Reference and Updated EDR Tables<sup>1</sup>**

North Pacific Fishery Management Council

### **BACKGROUND**

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After hearing these presentations from Council staff and testimony from stakeholders, the Council chose no immediate regulatory action. Instead the Council chose to send a letter<sup>2</sup> to each of the crab cooperatives requesting that they voluntarily describe measures the cooperative is taking to address these issues. The letter called for any relevant information or data to support their members' efforts and a description of the level of participation in these efforts. It informed the BSAI crab cooperatives that these reports would determine if the Council would attempt to take regulatory action in the future. These voluntary reports were intended to be a reoccurring submission in October of each year<sup>3</sup>.

For this 2013/2014 season there were ten cooperatives registered with the National Marine Fisheries Service (NMFS). The cooperatives include:

- (1) Alaska King Crab Harvesters Co-op
- (2) Aleutian Island Co-op
- (3) Alternative Crab Exchange (ACE)
- (4) Coastal Villages Crab Co-op
- (5) Crab Producers and Harvesters LLC
- (6) Dog Boat Co-op
- (7) Independent Crabbers Co-op
- (8) Inter-cooperative Exchange (ICE)
- (9) R& B Co-op
- (10) Trident Affiliated Crab Harvesting Co-op

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<sup>1</sup> Prepared by Sarah Marrinan, NPFMC staff; Persons consulted Michael Fey, PSMFC, Mark Fina, US Seafoods

<sup>2</sup> See attachment for the full letter

<sup>3</sup> The first round of reporting was initially scheduled to be on the agenda for the October 2013 Council meeting, but was rescheduled to the December 2013 meeting.

In addition, the Alaska Bering Sea Crabbers (ABSC) is a 501 c-5 trade association that represents the policy interests of members across several cooperatives and comprising 70 percent of the QS.

### UPDATED CRAB ECONOMIC DATA REPORT (EDR) TABLES

Every year since 2006<sup>4</sup>, participants of the rationalized crab program have been required to provide economic data to the Pacific States Marine Fisheries Commission (PSMFC) in order to assist the Council and NMFS in assessing the success of the program. These Economic Data Reports (EDR) contain cost, revenue, ownership and employment data. The discussion paper presented to the Council in February of 2013 used these data to illustrate how captain and crew compensation has changed over time in the crab fisheries.

An updated account of economic statistics for this fishery is provided in this section to serve as a reference for the Council when receiving the cooperative reports. The February 2013 discussion paper acts as a starting point for the information provided as well as insight to this information. The previous discussion paper provided EDR ranging from 1998 to 2011. These tables have been updated to include preliminary 2012 data<sup>5</sup>. They focus specifically on the Bristol Bay red king crab fishery (BBR) and the Bering Sea *C. opilio* (snow crab) fishery (BSS) as these fisheries, along with the golden king crab fishery constituted the majority of the fleet before and after rationalization. However, issues of confidentiality arise in the golden king crab fishery and are therefore not included among data presented here.

The BBR rationalization went into effect in the summer of 2005. Table 1 demonstrates that while harvest levels significantly increased, the fleet consolidated to an average of less than half of their sizes in the years preceding<sup>6</sup>.

**Table 1. Average Catch and average number of vessels by fishery before and after implementation of the rationalization program**

Fishery	Seasons	Average number of participating vessels	Average harvest per season (Pounds)
Bristol Bay red king crab	2001, 2004	212	10,270,216
	2005/06-2011/12	70	14,114,273
Bering Sea snow crab	2001, 2004, 2005	174	21,423,479
	2005/06-2011/12	70	38,544,937

Source: Economic Data Reporting

Because the number of QS holders has changed little since implementation of the program, most of this consolidation is asserted to arise from leasing of shares. The term leasing is often used loosely to refer to short term transfers of shares. The program structure, however, complicates any discussion or consideration of these leases. To induce cooperative membership, the program includes a prohibition on transfers of annual allocations of individual fishing quota (IFQ), except by cooperatives. This prohibition, together with the operational efficiencies gained in a cooperative, has led to almost all quota share holders (i.e., holders of long term shares) joining cooperatives and almost all IFQ being held by cooperatives. A

<sup>4</sup> Participants in the fishery also provided historical information from 1998, 2001, 2004 and 2005.

<sup>5</sup> The 2012 EDR is currently in the process of being audited. Therefore in some of the tables staff was able to include preliminary 2012 data, while in other tables this information was not yet available.

<sup>6</sup> This table depicts the same trends as the 2013 February discussion paper. Differences in values primarily result from the use of a different data sources (EDR vs. Alaska Fish and Game fish tickets) rather than from the addition of years.

cooperative receives annual allocations of IFQ based on quota share (or long term share) holdings of its members and oversees the harvest and distribution of those IFQ. Although cooperatives trade IFQ, the large majority of all transfers are within cooperatives. These intra-cooperative transfers result in little information being available to know the extent to which transfers that most people would characterize as a traditional lease (i.e., the purchase of IFQ), are the source of consolidation. Under the program's structure, those cooperative held IFQs may be harvested by any vessel registered to fish the cooperative's IFQ, without any documented transfer. Since all IFQ attributable to cooperative members' QS are allocated to the cooperative without identification of the member that contributed QS from which the allocation arises, IFQ use cannot be tracked back to a QS holder. Consequently, a vessel's harvest of IFQ cannot be assigned to a specific QS holder. Even if vessel IFQ usage could be traced to an individual QS holder, participants in the fisheries suggest that a variety of arrangements exist under which vessels coordinate harvests of IFQ by member vessels (some of which may not be considered leases).

Although masking effect of the cooperative IFQ allocations prevents identification of the specific source of IFQ use by a vessel, the complexity of share distributions and the variety of ownership structures also limits the extent to which leasing and lease rates can be fully identified. Even if it is assumed that all of the IFQ attributable to a member's QS are harvested by the vessel owned by that QS holder, the prevalence of overlapping (but not identical) ownership of vessels and QS holdings limits the ability of analysts to identify IFQ use arising from a lease (or a short term transfer at a negotiated price), rather than IFQ use arising from transfers that are simply share management arrangements by a business. Often such transfers are undertaken as a business practice among affiliated entities at non-market rates that are structured for internal management reasons, rather than at negotiated lease prices. These arrangements further complicate any understanding of leasing practices and lease rates.

Due to this sometimes complex and often unique structure of transfers that take place within and between cooperatives, IFQ lease information previously collected by the EDR has been considered to be of poor quality. The 2012 EDR (i.e., the EDR submitted in July 2013 for 2012 reporting) limited the definition of lease with the intention of limiting some of this noise and providing a clearer variable. Therefore in 2012, fishery participants filled out a table in the EDR according to the following language:

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*In Table 6 below, record the total pounds and monetary cost for transfers of annual CR crab fishing (IFQ, CDQ) and/or processing (IPQ) quota pounds received for your use during the previous calendar year, by CR fishery. Use the CR Fishery codes from Table A and Quota Type codes from Table B.*

*Include only transfers of quota for which you paid the only monetary compensation, based on the market value or a price negotiated between you and the quota holder(s). Do not include quota transfers for which:*

- *payment was based on a nominal (or non-negotiated) price, **or***
- *non-monetary or in-kind compensation was included in the transaction, in addition to transferred quota pounds and monetary payment, **or***
- *you did not use the quota pounds for crab harvested and/or processed by this vessel or purchased from delivering vessels by the end of the season, or re-transferred the quota pounds for use by another vessel.*

*For all market-value and/or negotiated-price quota transfers, report the following:*

**Pounds Transferred:** *Record the total pounds of transferred crab fishing (IFQ, CDQ) and/or processing (IPQ) quota used to harvest CR crab on the vessel or purchase CR crab from delivering vessels during the previous calendar year.*

**Total Cost:** Record the total gross cost paid as monetary compensation, before taxes or fees are deducted. Include all post-season adjustments paid as of the date of submitting this EDR, but do not report any payments not paid by this date.

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It is understood that the updated EDR will not collect *all* forms of IFQ transactions. For instance this re-specification omits arm's length lease transactions that occur between a QS holder who allocates their QS among multiple vessels that they own without compensation changing hands. However the narrower scope will allow the Council a starting place for quantitatively assessing lease rates with a clearer understanding of the results, and are therefore more likely to be interpreted appropriately.

These data on lease rates are in the process of being audited and consequently are not available for evaluation. Theoretically when these data become available in the near future, Council, stakeholders and the public will have access to the cost per pounds transferred by fishery and quota type for market-value and negotiated price transfers of quota. This information may provide empirical support for further measures QS holders are taking to avoid imposing high lease rates on those seeking additional IFQ.

In addition to the forthcoming lease information, the EDR has been consistently providing data on changes in crew compensation since the onset of the program. These data may be useful to assess the effects of the program on crew.<sup>7</sup> These effects vary across participants, but consolidation of catch on fewer vessels has led to crews receiving greater average annual compensation from the fisheries, but catching a substantially greater amount of crab.

In the first five years of the program, average crew pay was approximately three times the average of the three pre-program years for which data are available (1998, 2001, and 2004) (see Table 2). On average, crewmembers are making larger amounts annually than pre-rationalization. This can also be seen in Figures 1 and 2 where average crew pay is shown to be consistently greater in post-rationalization years, with the exception of 1998 in BSS. In 1998, when the TAC in the fishery was near historic highs, average crew compensation was relatively similar to the post program level (with the exception of 2011 and 2012). During that year, vessels harvested at a very high level, but vessel revenues were lower due to a lower crab price.

While the amount paid to crew has increased relative to pre-implementation, the average share of a vessel's revenues paid to crew (including the captain) have declined from approximately 35 percent in both fisheries prior to implementation of the program, to the low 20 percent range following implementation. Most (if not all) vessel owners are believed to have continued to pay crew a share of vessel revenues after deduction of certain operating expenses (such as food and fuel). The difference in compensation since implementation of the program is believed to have arisen from the deduction of lease payments (made to quota share holders who lease their IFQ to vessel owners for harvest) and mortgage payments or quota costs for purchases of quota share fished by the vessel.<sup>8</sup>

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<sup>7</sup> The most obvious effect of the rationalization program on crews arose from the contraction of the fleet. The contraction of fleets in the various fisheries to between one-third and one-half of their pre-program size has resulted in the seasonal loss of approximately 975 crew jobs in the BBR and approximately 675 crew jobs in BSS. While these losses have clearly affected a large number of individuals who were displaced, additional effects have been felt by those crew who have retained their positions in the fisheries.

<sup>8</sup> While the deduction of lease payments may be the immediate source of the reduction, it should be noted that modification of crew payments (such as changing from crew share payment system to another payment system or changing the structure of deductions away from charging royalties) could result in the same payment without directly relating the changes to lease royalties (or other quota costs).

In the last three years, the TAC, the harvest, and mean revenues have fallen considerably in BBR. Figure 1 illustrates a fluctuating shape for average crew pay in BBR, which has been influenced by several market spikes: one at the onset of the program from fleet consolidation and several from red king crab price fluctuations. In 2012, the mean percent of gross vessel revenue dropped to 20.3 percent; however, the revenues and harvest from this fishery were the lowest they have been since rationalization. Additionally, the active fleet size in BBR has continued to decline every year (with the exception of 2007-2008), suggesting a trend of more leasing or quota consolidation taking place on each vessel.

In 2011, average crew compensation in BSS increased as a result of a substantial increase in the snow crab price while there was also relatively high average vessel catch. This change is demonstrated in Table 2 and Figure 2. In that year, the average price rose to slightly higher than \$2.50 per pound from approximately \$1.30 in the preceding year. In 2012, the average vessel harvested a record of more than 1.2 million pounds, bringing average crew pay also up to a record of more than \$53,000. At the same time the average percent of revenues paid to crew decreased between 2010 and 2011 by about one percentage point. The BSS fleet has not demonstrated the same consistent consolidation that BBR has demonstrated, ranging between 63 and 73 vessels post implementation.

**Table 2. Average crew compensation before rationalization (1998, 2001, and 2004 through 2012)**

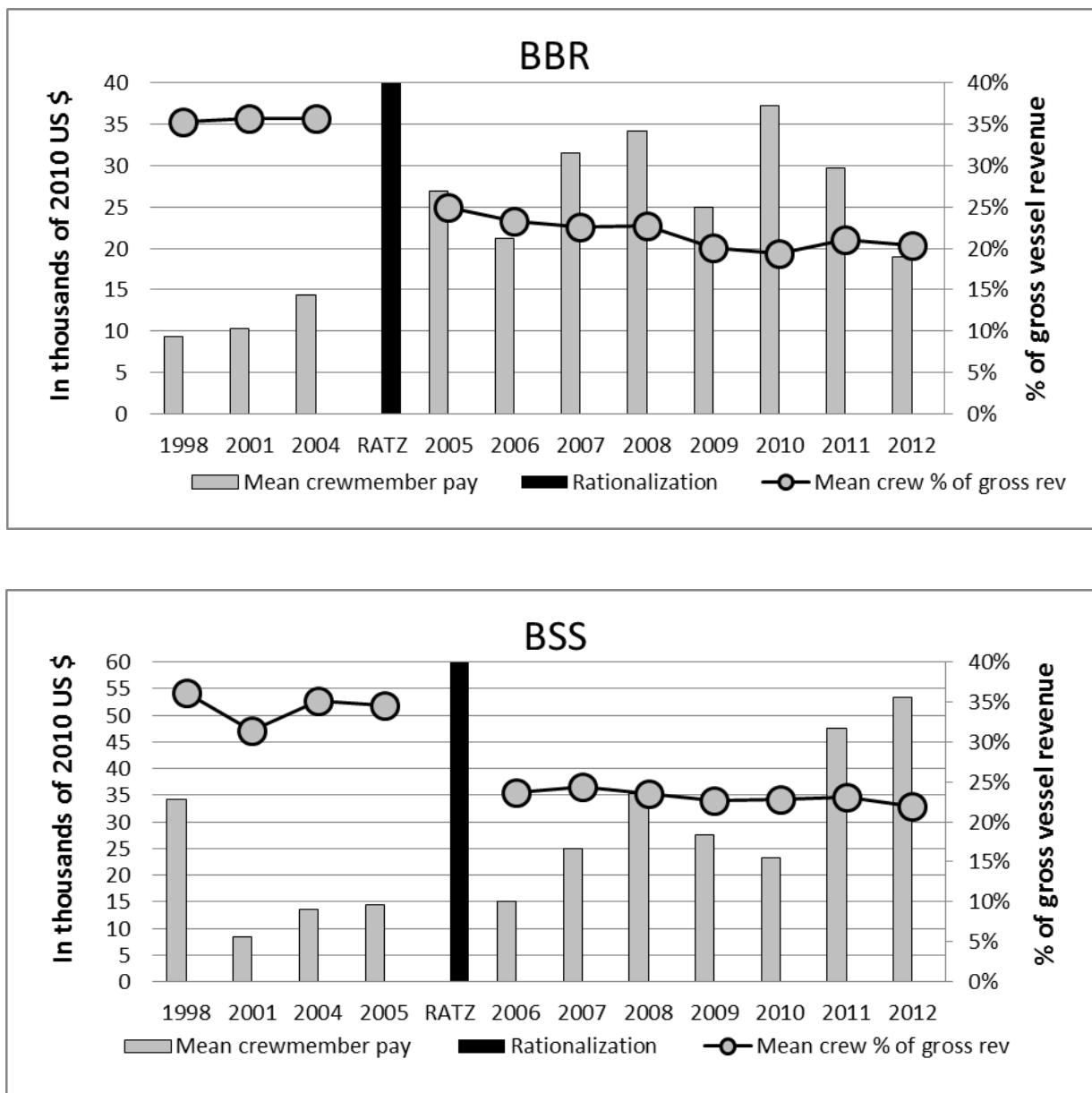
Fishery	Year	Number of vessels	Mean vessel harvest (pounds)	Mean vessel revenues (2010 \$)	Mean captain pay (2010 \$)	Mean crewmember pay (2010 \$)	Mean % of gross vessel revenues paid to crew
Bristol Bay red king crab	1998	190	56,289	200,058	23,472	9,296	35.3
	2001	182	36,195	214,053	26,400	10,374	35.7
	2004	220	58,802	317,102	36,335	14,333	35.7
	2005	83	194,812	977,373	70,781	26,951	25.0
	2006	77	192,991	799,222	54,468	21,181	23.3
	2007	70	269,194	1,254,729	79,563	31,544	22.6
	2008	75	246,932	1,299,204	80,881	34,225	22.8
	2009	67	223,270	1,056,221	61,452	24,931	20.1
	2010	61	229,189	1,689,362	93,091	37,284	19.4
	2011	58	128,209	1,290,915	76,163	29,774	21.1
	2012	56	126,283	953,902	55,627	19,034	20.3
Bering Sea snow crab	1998	162	1,098,577	832,605	99,742	34,113	36.2
	2001	158	112,589	213,587	23,003	8,365	31.4
	2004	167	123,606	289,251	34,054	13,651	35.1
	2005	147	158,943	302,038	35,440	14,529	34.6
	2006	73	453,455	546,741	39,238	15,091	23.6
	2007	63	496,195	894,148	63,685	24,994	24.4
	2008	72	780,820	1,352,927	96,052	35,179	23.5
	2009	71	721,180	1,063,090	70,635	27,550	22.7
	2010	64	700,171	900,301	58,138	23,313	22.8
	2011	65	760,386	1,880,198	122,240	47,454	23.1
	2012	69	1,210,142	2,472,440	158,118	53,379	21.9

Source: Economic Data Reporting

Notes: Dollar amounts are adjusted for inflation based on CPI-U, using 2010 as the base year

Data excludes any vessels on which the crew was paid in excess of 75 percent of the vessel's gross revenues

**Figure 1 and 2. Mean crew compensation and mean percent of gross vessel revenue paid to crew for BBR and BSS**



Source: Economic Data Reporting

Focusing on data from those vessels that participated in both BBR and BSS carries unsurprising results (Table 3). Similar to BBR, the fraction of gross vessel revenues paid to crew demonstrates a slowing declining trend until 2011. While this trend is interrupted in 2011, the percentage falls again slightly in 2012 despite a slight increase in vessel revenues and crew pay. The fact that the mean value for percent of gross revenues paid to crew exceeds the median values after 2007, indicates that there are likely a few outliers offering their crew a higher percent of gross vessel revenue and pulling the value of mean crew compensation higher. Overall there is not a significant change in median values from 2011 to 2012 as presented in Table 3.

**Table 3. Crew compensation on vessels that fished both BBR and BSS before rationalization (1998, 2001, and 2004) and after rationalization (2006 through 2012)**

Year	Number of vessels	Vessel Revenues		Captain Pay		Crew Pay (excluding captain)		Percent of gross vessel revenues paid to crew (including captain)	
		Mean	Median	Mean	Median	Mean	Median	Mean	Median
1998	151	1,051,804	1,000,346	125,080	118,907	254,141	236,882	35.9	35.3
2001	143	443,071	375,825	51,175	44,172	98,951	88,538	34.1	34.3
2004	162	630,611	592,948	73,477	70,758	150,418	137,425	35.7	35.5
2006	57	1,393,091	1,281,589	101,014	98,200	198,068	183,835	23.9	24.2
2007	55	2,247,351	1,991,349	146,485	147,993	305,249	288,599	23.0	22.4
2008	61	2,775,223	2,691,152	182,992	179,879	391,931	371,523	22.6	22.4
2009	57	2,294,573	2,124,387	143,114	141,217	310,558	276,926	21.1	20.9
2010	57	2,664,483	2,412,428	154,211	152,470	328,330	319,245	19.9	19.2
2011	54	3,330,571	2,988,742	210,243	214,248	461,205	436,141	22.2	21.2
2012	54	3,634,224	3,392,900	231,509	233,059	501,567	480,487	21.8	21.0

Source: Economic Data Reporting

Notes: Dollar amounts are adjusted for inflation based on CPI-U, using 2010 as the base year

Data excludes any vessels on which the crew was paid in excess of 75 percent of the vessel's gross revenues.

The year 2005 is omitted because BBS was prosecuted as limited entry derby and BBR was prosecuted as a shared-based fishery.

The relationship between compensation and quota consolidation becomes clearer, if the fleet is separated into quartiles of pounds fished. Table 4 splits each fleet into quartiles of vessels; the first quartile comprising of those vessel that harvest the least weight of crab and the fourth quartile of vessels harvesting the largest weight of crab. Within each year, in almost all cases, the percent of revenues paid to crew decreases as pounds of crab harvested increases. In other words, as a vessel consolidates quota (by either leasing or purchasing quota), a smaller share of the revenues of the vessel are paid to crews. Although the contractual arrangements likely differ across vessels, this pattern suggests that quota costs are being absorbed, in part, by crew.

In addition, through 2010, a downward trend in share of revenues paid to crews is suggested in the quartiles harvesting the greatest amounts of crab. This trend likely arises, in part, from an adjustment to the change to rationalization. It is unclear whether the downward trend reflects a distribution of additional costs (such as added fuel costs) that are disproportional to added revenues or simply an adjustment to the labor market (arising from vessel owners who perceive an opportunity to reduce crew compensation due to increase of supply in the labor market). This consistently declining trend is upset in 2011 for the third and fourth quartiles, as the percentage of ex vessel revenues paid to crew increased, with the exception of the third quartile in BSS. This third quartile of BSS does have an increase in percent of gross revenues paid to crew in the following year, 2012, as well as an absolute increase in average crew pay of 146 percent relative to 2010, this group's lowest paying year. This interruption to a steady decline in percent of revenue paid to crew is not necessarily a trend, however. The fourth quartile of BBR and the third quartile of BSS each lost several tenths of a percentage point of gross revenue to crew in 2012.

In addition, percent of gross revenue to crew in the first and second quartile continues to decline on average; however, these are less likely to be attributed to lease rates since these vessels are harvesting relatively less crab and therefore not likely to lease as much of their IFQ.

**Table 4. Crew comp by quartile of pounds of fish (1998, 2001, 2004 through 2012)**

Fishery	Year	Number of vessels	First quartile of pounds harvested				Second quartile of pounds harvested			
			Mean pounds harvested	Mean vessel revenues	Mean crew pay (excluding captain)	Percent of gross to crew (including captain)	Mean pounds harvested	Mean vessel revenue	Mean crew pay (excluding captain)	Percent of gross to crew (including captain)
Bristol Bay red king crab	1998	47-48	24,360	93,223	4,332	33.5	42,387	148,395	7,316	36.4
	2001	45-46	14,209	85,386	4,392	33.2	25,222	150,528	7,719	36.5
	2004	55	27,841	151,261	7,086	35.2	47,509	259,953	12,260	34.5
	2005	20-21	61,177	298,868	14,914	32.8	111,565	554,361	23,327	28.6
	2006	19	67,950	284,132	12,463	29.2	126,503	526,726	18,816	26.3
	2007	17-18	98,619	459,688	21,439	32.9	192,984	913,128	27,579	22.7
	2008	18-19	85,454	486,346	19,119	29.0	172,991	919,202	30,721	25.0
	2009	16-17	92,251	436,019	15,753	26.9	184,818	870,863	22,576	19.9
	2010	15	91,593	661,660	26,853	28.5	192,946	1,425,690	31,649	16.6
	2011	14-15	55,423	556,565	20,024	28.9	100,639	1,038,812	26,722	20.1
	2012	14	61,405	461,619	14,313	27.5	99,885	769,533	15,395	18.0
Bering Sea snow crab	1998	40-41	539,777	413,211	19,895	37.3	934,607	698,362	28,913	36.0
	2001	39-40	45,411	86,698	3,092	27.4	77,664	148,055	5,957	30.7
	2004	41-42	64,885	153,258	7,237	33.9	95,520	225,181	11,012	34.7
	2005	36-37	84,930	171,746	8,379	32.4	122,265	246,069	12,656	36.1
	2006	18	153,219	177,895	8,188	30.2	308,944	372,337	11,659	22.4
	2007	15-16	185,828	335,061	15,525	32.4	346,523	630,284	21,202	24.5
	2008	18	308,833	506,626	19,826	27.8	557,810	993,648	32,946	25.2
	2009	17-18	300,835	423,288	15,385	26.9	512,418	744,413	23,514	23.6
	2010	16	279,980	359,600	13,229	27.3	495,425	623,745	21,394	25.2
	2011	16	302,207	845,961	27,240	27.2	570,582	1,357,396	47,730	27.0
	2012	17	488,144	991,654	28,618	25.0	894,468	1,805,531	47,301	23.7

Fishery	Year	Number of vessels	Third quartile of pounds harvested				Fourth quartile of pounds harvested			
			Mean pounds harvested	Mean vessel revenues	Mean crew pay (excluding captain)	Percent of gross to crew (including captain)	Mean pounds harvested	Mean vessel revenue	Mean crew pay (excluding captain)	Percent of gross to crew (including captain)
Bristol Bay red king crab	1998	47-48	60,997	216,946	9,829	35.1	96,844	339,795	15,613	36.0
	2001	45-46	35,552	213,594	10,608	37.3	69,304	403,895	18,651	35.6
	2004	55	62,574	341,485	15,406	36.7	97,283	515,708	22,581	36.3
	2005	21	209,205	1,052,886	29,527	21.5	390,937	1,971,068	39,461	17.3
	2006	19-20	203,839	851,919	22,093	21.1	364,636	1,497,367	30,843	17.1
	2007	17-18	294,186	1,360,732	34,754	19.3	482,900	2,247,087	42,022	16.0
	2008	19	282,308	1,477,511	46,188	21.8	438,476	2,270,974	40,076	15.6
	2009	17	249,735	1,181,662	31,251	19.4	358,570	1,699,858	29,603	14.7
	2010	15-16	243,171	1,782,014	42,592	17.6	379,055	2,813,163	47,372	15.1
	2011	14-15	123,352	1,235,242	30,339	19.1	228,247	2,280,372	41,397	16.6
	2012	14	123,994	909,324	18,560	18.7	219,850	1,675,135	27,868	17.1
Bering Sea snow crab	1998	40-41	1,222,998	920,991	36,958	34.7	1,686,333	1,289,783	50,411	36.8
	2001	39-40	115,683	222,009	8,788	34.0	209,994	394,623	15,501	33.5
	2004	42	128,412	302,304	15,126	36.4	204,208	473,022	21,078	35.4
	2005	37	156,099	321,685	15,881	35.8	270,478	465,132	21,032	34.0
	2006	18-19	480,291	591,992	16,652	21.8	849,371	1,018,528	23,403	20.3
	2007	16	501,859	900,706	25,553	21.3	931,170	1,675,597	37,104	19.9
	2008	18	818,908	1,450,551	36,568	21.8	1,437,727	2,460,884	51,377	19.2
	2009	18	736,305	1,069,434	29,086	21.0	1,311,810	1,979,682	41,539	19.4
	2010	16	708,306	911,548	23,582	20.3	1,316,975	1,706,312	35,047	18.6
	2011	16-17	783,536	1,953,070	46,902	19.8	1,348,463	3,277,061	66,738	18.8
	2012	17-18	1,287,522	2,692,028	58,026	20.7	2,117,085	4,293,431	78,117	18.6

Source: Economic Data Reporting

Notes: Dollar amounts are adjusted for inflation based on CPI-U, using 2010 as the base year

Data excludes any vessels by which the crew was paid in excess of 75 percent of the vessel's gross revenues

## **RELEVANT EDR REVISIONS AND DATA AVAILABILITY**

The EDR forms were revised by the Council in February 2013 with guidance from the Council staff, NOAA Alaska Fisheries Science Center (AFSC), NMFS and PSMFC. Along with the re-specification of QS leases the Council sought to minimize the collection of duplicate information. The February 2013 discussion paper on crab crew compensation additionally presented average daily pay for captains and crew using a variable, “number of days fished”, which was collected from the EDR up until 2011. This information can also be obtained from Alaska Fish and Game (ADFG) fish ticket data or from the Confidential Interview Form (CIF) generated through the Observer Program. Therefore the Council chose to omit this information request from the 2012 EDR. While the AFSC and PSMFC have determined that CIF data are the most reliable source for this information, this dataset begins in 2007/2008 omitting several important years post program implementation and all years pre-implementation. Preliminary assessments between CIF and EDR datasets demonstrate an average of 24 percent difference in the “days fishes” variable. While AFSC determines how and if to rectify these datasets, Council staff has chosen to omit this information due to the potential for poor quality and misinterpretation.

# North Pacific Fishery Management Council

Eric A. Olson, Chairman  
Chris Oliver, Executive Director



605 W. 4th Avenue, Suite 306  
Anchorage, AK 99501-2252

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Visit our website: <http://www.alaskafisheries.noaa.gov/npfmc>

February 27, 2013

Trident Affiliated Crab Harvesting Corporation  
Attn: Christian Assay  
5303 Shilshole Ave NE  
Seattle, WA 98107

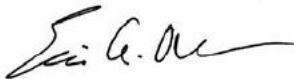
Dear Mr. Assay:

At its February meeting in Portland, the Council addressed several issues related to BSAI crab fisheries. Among the items considered by the Council was a staff discussion paper concerning the use of cooperative implemented measures to facilitate quota share holdings by vessel owners and crewmembers in the crab fisheries and to address high lease rates and crew compensation issues. The Council elected to take no regulatory action at this time, in large part due to representations of cooperative representatives that voluntary measures currently being implemented by the cooperatives could effectively address the concerns which have been repeatedly articulated to the Council.

To assess the success of those efforts, the Council requests that each of the BSAI crab rationalization cooperatives voluntarily provide an annual report detailing measures the cooperative is taking to facilitate the transfer of quota share to active participants (including crew members and vessel owners) and available measures it is taking to address high lease rates and crew compensation. The annual reports should convey to the Council the effectiveness of the measures implemented through the cooperative and the estimated level of member participation in any voluntary measures, and include appropriate supporting information or data in that regard. The Council intends to schedule time during its October meeting each year for cooperatives to present any reports that they may wish to provide, beginning this October 2013. Based on feedback from the cooperatives the Council may determine whether to revisit these issues in the context of regulatory remedies.

Please let us know, through our Executive Director Chris Oliver, if you have any questions concerning this request.

Sincerely,



Eric Olson  
Chairman

CC: Mark Gleason  
Joe Sullivan

This letter was addressed and mailed to the following Crab Coops:

Alaska King Crab Harvester Cooperative  
Attn: Lenny Herzog  
916 Delaney Street  
Anchorage AK 99501

Aleutian Gold Crab Cooperative  
Attn: Sandra Toomey  
PO Box 207  
Chinook, WA 98614

Coastal Villages Crab Cooperative  
Attn: Trevor McCabe  
711 H Street, Suite 200  
Anchorage, AK 99501

Crab Producers and Harvesters LLC  
Attn: Rob Rogers  
4019 21<sup>st</sup> Ave W  
Seattle, WA 98199

Dog Boat Cooperative  
Attn: Edward Poulsen  
c/o NSEDC 420 L St, Suite 310  
Anchorage AK 99501

Independent Crabbers Cooperative  
Attn: Tim Abena  
3103 Mill Bay Road  
Kodiak, AK 99615

Inter-Cooperative Exchange (ICE)  
Attn: Erling Jacobsen  
PO Box 280  
Lind, WA 99341

R&B Cooperative  
Attn: Mary Mezich  
7215 156<sup>th</sup> Street SW  
Edmonds, WA 98026

Trident Affiliated Crab Harvesting Corporation  
Attn: Christian Assay  
5303 Shilshole Ave NE  
Seattle, WA 98107

And copied to:

cc: Mark Gleason, Executive Director  
Alaska Bering Sea Crabbers  
5470 Shilshole Ave NW, Suite 505  
Seattle, WA 98107

Joe Sullivan  
Sullivan & Richards  
4005 20<sup>th</sup> Ave W, Suite 221  
Seattle, WA 98109

## **Preliminary Report on 2012 Economic Data Report results for BSAI Crab Harvest Quota Allocation Transfer Lease Activity and Quota Market Prices**

Alaska Fisheries Science Center, Economic and Social Sciences Research Program  
December 3, 2013

This report provides preliminary results from the BSAI Crab Rationalization Economic Data Report (EDR) program collection of crab harvest quota allocation lease data associated with Bering Sea snow crab (BSS) and Bristol Bay red king crab (BBR) fisheries prosecuted during the 2012 calendar year. BSAI Crab EDR data collection during the most recent annual cycle (EDR forms for 2012 data were due from submitters on July 31, 2013) implemented revised data collection forms and other reporting requirements under Amendment 42 to the BSAI King and Tanner Crabs FMP ([78 FR 36122, June 17, 2013](#)). Prior to the implementation of EDR revisions, data collected regarding quota lease activity and costs did not differentiate between transfers of quota between independent entities that were priced at competitive market rates from non-arms-length transactions (i.e., those between affiliated entities or other types of non-market transfers characterized by nominal prices or in-kind compensation). For this reason, EDR quota data collected previously for 2005-2011 fisheries was not deemed of sufficient quality to disseminate. For collection of data associated with 2012 fisheries, EDR forms employ revised instructions specifying quota lease data elements as market-rate or negotiated-price transfers of annually-issued IFQ or CDQ pounds (see Figure 1).

Preliminary results of analysis of EDR quota lease data shown in Table 1 are provided for informational purposes only; data upon which these results are based have not been fully validated and the fishery-level summary statistics shown are expected to change upon completion of the validation process.<sup>1</sup> Revisions in EDR reporting protocols were developed to address data quality limitations identified in previously collected data; however, assessment of the revised EDR design and data collection protocols is pending completion of data validation audits. Final statistical results for EDR data, incorporating error corrections identified in the validation process, as well as a summary of EDR data quality findings, will be published in the BSAI 2013 Crab Economic Status Report.<sup>2</sup>

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<sup>1</sup> EDR data validation includes mandatory audit of supporting documentation by a third-party auditor; audits of Crab EDR data are performed by AKT CPA, LLC of Portland, OR and are currently ongoing for 2012 EDR data; audit reports for 2005-2011 annual EDR collections can be accessed at [http://www.psmfc.org/alaska\\_crab/](http://www.psmfc.org/alaska_crab/). Consultation with AKT staff (12/2/13) regarding preliminary audit findings for 2012 quota lease data indicate moderate rate of incidence of errors in quota lease pounds and cost reported, but do not indicate any systematic bias in magnitude or direction of reporting errors.

<sup>2</sup> The Economic Status Report for BSAI Crab provides a comprehensive presentation of statistical information and analysis regarding economic dimensions of the fishery evaluation; the 2013 report is in preparation, with expected release in January, 2014.

Table 1 shows aggregated results for crab fishing quota lease volume (in pounds) and cost reported for crab vessels active in 2012 calendar year BBR and BSS fisheries,<sup>3</sup> by fishing quota type category, including total quantities summed over all reporting vessels, average values (both median and mean) for volume and cost of leased quota per vessel, average lease price paid (\$US per pound), and average lease rate (lease price as percentage of ex-vessel price) per vessel. Both median and arithmetic mean average value metrics are presented to provide information on the variation in reported values within each stratum, with the higher mean values shown indicating the presence of a subset of high-value data points in these data. Harvest quota types are categorized as the following: catcher vessel owner (CVO) Class A IFQ; catcher vessel owner Class B IFQ and catcher/processor owner (CPO) IFQ; catcher vessel crew (CVC) IFQ and catcher/processor crew (CPC) IFQ, and community development quota (CDQ).

The number of vessels reporting quota leases in the 2012 BBR fishery range from 49 vessels leasing CVO Class A shares, to 5 vessels leasing CDQ shares (out of 64 crab vessels active during the 2012 BBR fishery), and from 52 vessels leasing CVO A Class BSS IFQ allocation to 11 vessels leasing CDQ allocation (out of 72 active vessels) in the BSS fishery. Total volume and cost over all vessels leasing the respective quota types range from 3.5 million pounds and \$17.6 million for BBR CVO Class A IFQ, to 159,000 pounds and \$855,000 for BBR CVO and CPC crew IFQ; BSS lease volume and cost ranged from 40.8 million pounds and \$40.8 million for CVO A Class IFQ to 1.7 million pounds and \$1.8 million for crew share IFQ.

Per vessel averages (median) for BBR quota leased volume and cost ranged from 65 thousand pounds and \$328,000 per vessel for BBR CVO A Class IFQ, to four thousand pounds and \$22,000 for BBR CVO and CPO crew IFQ; BSS per-vessel averages ranged from 654 thousand pounds and \$679,000 per vessel for per vessel CVO- A Class IFQ to 48 thousand pounds and \$49,000 for BSS crew share IFQ.

The difference in median and mean values shown in Table 1 are most pronounced in the per-vessel pounds and cost statistics. This primarily reflects the incidence of high volume quota lease activity on the part of a small number of vessels within each quota type category (particularly in the case of pooled results for CVO- B Class and CPO IFQ, where the latter is leased exclusively by a small subset of vessels).

Average (median) lease prices and lease rates shown in Table 1 range from \$5.40 per pound (64% of ex-vessel price) for BBR CDQ to \$5.14 per pound (64% of ex-vessel) for BBR CVO A Class IFQ, and \$1.12 (49% of ex-vessel price) for BSS CDQ to \$1.00 per pound (46% of ex-vessel) for BSS CVO A Class allocation. Average values are calculated over individual vessel-level observations of both quota lease price and ex-vessel value; the general consistency of results between median and mean statistics across quota types indicates the relative uniformity of quota price paid by leasing vessels and the limited effect that the small number of high-price outliers in data have on aggregate statistical results.

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<sup>3</sup> Note that CR crab fisheries are managed on a July-June seasonal calendar. 2012 calendar year fisheries include the 2011/2012 BSS season and 2012/2013 BBR season.

Table 1: Crab Harvest Quota Leasing - Volume, Cost, and Lease Prices and Rates, 2012 Calendar Year Fisheries (PRELIMINARY RESULTS, BBR and BSS fisheries only)

Fishery	Quota type <sup>a</sup>	Vessels <sup>b</sup>	Pounds Leased (1000 pounds)			Cost (\$1000)			Average Lease Price (\$/pound) <sup>c</sup>		Average Lease Rate (% of ex-vessel value) <sup>d</sup>	
			Total	Average per vessel		Total	Average per vessel		Median	Mean	Median	Mean
				Median	Mean		Median	Mean				
BBR	CVO A	49	3,529	65	72	17,586	328	359	5.14	5.18	64%	65%
	CVO B +CPO	41	536	8	12	2,971	48	68	5.33	5.48	65%	67%
	CVC + CPC	33	159	4	5	855	22	24	5.18	5.34	62%	66%
	CDQ	5	369	71	74	2,180	433	436	5.40	5.93	64%	72%
BSS	CVO A	52	40,758	654	784	40,769	679	784	1.00	1.02	46%	49%
	CVO B +CPO	45	6,569	84	131	7,353	101	147	1.09	1.17	46%	51%
	CVC + CPC	37	1,728	48	45	1,859	49	49	1.09	1.11	46%	48%
	CDQ	11	6,464	563	588	7,286	662	662	1.12	1.13	49%	49%

**Source: NMFS AFSC BSAI Crab Economic Data (preliminary findings subject to revision following completion of data validation).**

<sup>a</sup> Harvest quota types are categorized in this report as the following: CVO A – catcher vessel owner Class A IFQ; CVO B + CPO - catcher vessel owner Class B IFQ and catcher/processor owner IFQ; CVC + CPC – catcher vessel crew IFQ and catcher/processor crew IFQ. Statistics reported represent results pooled over all quota types and/or regional designations within each category.

<sup>b</sup> Vessels column shows total count of vessel-level observations for fishery-year where both pounds and cost of quota leased were reported as non-zero values; in a small number of observations where leased pounds was reported for a given fishery/quota type but lease cost was missing, the mean price over all complete observations was used to impute the missing data in computing the total aggregate lease cost over all vessels.

<sup>c</sup> Average lease price statistics by fishery and quota type are calculated as the median and arithmetic mean, respectively, over all observations where both pounds and cost for one or more quota type within the respective category were reported as non-zero values.

<sup>d</sup> Average lease rate statistics by fishery and quota type are calculated as the median and mean, respectively, of the ratio of lease price to ex-vessel price, over all observations where both ex-vessel and lease pounds, and ex-vessel revenue and lease cost, were reported as non-zero values.

**2. CR Crab Fishing Quota Costs, by CR Fishery and Quota Type  
Market-Value and Negotiated-Price Transfers Only**

In Table 2 below, record the total pounds and monetary cost for negotiated transfers of annual crab fishing quota (IFQ and CDQ) pounds received for harvest on your vessel during calendar year 2012, by CR fishery and harvest quota permit type. Use the CR Fishery codes from Table A and Quota Type codes from Table B.

Include only transfers of quota for which you paid only monetary compensation, based on the market value or a price negotiated between you and the quota holder(s). Do **not** include quota transfers for which:

- payment was based on a nominal (or non-negotiated) price, **or**
- non-monetary or in-kind compensation was included in the transaction, in addition to transferred quota pounds and monetary payment, **or**
- you did not catch the transferred quota pounds on this vessel by the end of the season, or re-transferred the quota pounds for use by another vessel.

For all market-value and/or negotiated-price quota transfers, report the following:

**Pounds Transferred:** Record the total pounds of transferred crab fishing quota used to land crab caught by the vessel during the previous calendar year.

**Total Cost:** Record the total gross cost paid as monetary compensation, after taxes or fees are deducted. Include all post-season adjustments paid as of the date of submitting this EDR, but do not report any payments not paid by this date.

**Table 2: CR Crab Fishing Quota Costs, by CR Fishery and Quota Type:  
Market-Value and Negotiated Price Transfers Only**

Quota Type	CR Fishery	Pounds Transferred	Total Cost
CVO-A	BBR	lbs	\$
	BSS	lbs	\$
	EAG	lbs	\$
	WAG	lbs	\$
	EBT	lbs	\$
	WBT	lbs	\$
	SMB	lbs	\$
	PIK	lbs	\$
	WAI	lbs	\$
CVO-B	BBR	lbs	\$
	BSS	lbs	\$
	EAG	lbs	\$
	WAG	lbs	\$
	EBT	lbs	\$
	WBT	lbs	\$
	SMB	lbs	\$
	PIK	lbs	\$
	WAI	lbs	\$

Catcher Vessel Crab EDR  
Page 10 of 16

Quota Type	CR Fishery	Pounds Transferred	Total Cost
CPO	BBR	lbs	\$
	BSS	lbs	\$
	EAG	lbs	\$
	WAG	lbs	\$
	EBT	lbs	\$
	WBT	lbs	\$
	SMB	lbs	\$
	PIK	lbs	\$
	WAI	lbs	\$
CVC	BBR	lbs	\$
	BSS	lbs	\$
	EAG	lbs	\$
	WAG	lbs	\$
	EBT	lbs	\$
	WBT	lbs	\$
	SMB	lbs	\$
	PIK	lbs	\$
	WAI	lbs	\$
CPC	BBR	lbs	\$
	BSS	lbs	\$
	EAG	lbs	\$
	WAG	lbs	\$
	EBT	lbs	\$
	WBT	lbs	\$
	SMB	lbs	\$
	PIK	lbs	\$
	WAI	lbs	\$
CDQ	BBR	lbs	\$
	BSS	lbs	\$
	EAG	lbs	\$
	EBT	lbs	\$
	WBT	lbs	\$
	SMB	lbs	\$
	PIK	lbs	\$
	WAI	lbs	\$
ACA-WAG	WAG	lbs	\$

Catcher Vessel Crab EDR  
Page 11 of 16

Figure 1: 2012 Crab Catcher Vessel EDR form, fishing quota cost section<sup>a</sup>

<sup>a</sup> Current (2012) and previous versions of Crab Economic Data Report (EDR) forms are available from Pacific States Marine Fisheries Commission at [http://www.psmfc.org/alaska\\_crab/](http://www.psmfc.org/alaska_crab/).

December 3, 2013

Mr. Eric Olson, Chairman  
North Pacific Fishery Management Council  
605 W. 4<sup>th</sup> Avenue  
Anchorage, AK 99501-2252

Dear Chairman Olson:

Aleutian Island Cooperative, a crab-harvesting cooperative formed pursuant to 50 C.F.R. § 680.21, submits the following report under Council agenda item C-9.

Aleutian Island Cooperative has 9 member entities which hold catcher vessel owner (“CVO”) and catcher vessel crew (“CVC”) quota share (“QS”) units issued under the Bering Sea and Aleutian Islands (“BSAI”) crab rationalization program, which implements Amendments 18 and 19 to the Fishery Management Plan for Bering Sea and Aleutian Islands King and Tanner Crabs.

The following report answers the seven (7) questions derived from the Council’s February 2013 motion concerning measures crab harvesting cooperatives are taking or have taken to facilitate the transfer of QS to active participants, including crew members and vessel owners, and the available measures taken to address high lease rates and crew compensation.

1. What measures is the cooperative taking to facilitate the transfer of quota share to active participants, including crew members and vessel owners?

Aleutian Island Cooperative and our nine members were active members of ICE prior to the 2013-2014 season. We were party to the 2012-2013 ICE Membership Agreement, which included the Right of First Offer (RoFO) provisions. Although Aleutian Island Cooperative is no longer a member of ICE, we have voluntarily follow the RoFO provisions.

2. What is the level of participation from cooperative members regarding these measures?

All members follow the ROFO provisions.

3. How effective have these measures been?

We have had three unique QS transfers from January 30<sup>th</sup> through November 10<sup>th</sup>, 2013. One of the transfers was from a CVO QS holding entity to a newly eligible crewmember that did not receive an initial allocation of QS. The second transfer was from a CVC QS holder to another qualified crewmember. The third transfer was an internal reorganization of a QS holding entity.

4. What measures is the cooperative utilizing to address the issue of high lease rates, as they affect crew compensation?

Aleutian Island Cooperative's members charge the crew industry standard lease rates of 65% of adjusted gross revenues for BBR, 50% adjusted gross revenues for BBS and 30% adjusted gross revenues for EBT/WBT.

5. What is the level of participation from cooperative members regarding these measures?

All members follow these standard industry rates.

6. How effective have these measures been?

Our lease rates ensure crew is equitably compensated consistent with the industry standard.

7. What future measures does the cooperative plan to take to address the Council concerns over active participation and lease rates as they affect crew compensation?

We will continue to use the ROFO guidelines and help facilitate QS transfers for active crewmembers.



Heidi A. Eriksen

Aleutian Island Cooperative  
2157 N. Northlake Way, Suite 210  
Seattle, WA 98103

December 1st, 2013

Eric Olson, Chairman  
North Pacific Fishery Management Council  
605 W. 4th Avenue, Suite 306  
Anchorage, AK 99501-2252

RE: Agenda Item C-9 BSAI Crab Cooperative Reports

Dear Chairman Olson:

During the February, 2013 meeting the Council passed the following motion:

*"The Council requests that each of the BSAI crab rationalization cooperatives voluntarily provide an annual report detailing measures the cooperative is taking to facilitate the transfer of quota share to active participants, including crew members and vessel owners, and available measures which affect high lease rates and crew compensation. The annual reports should convey to the Council the effectiveness of the measures implemented through the cooperatives and the estimated level of member participation in any voluntary measures and include supporting information and data. These reports are requested to be delivered for the October meeting each year."*

These reports are on the agenda for the December Council meeting. Following is the report on behalf of Dog Boat Cooperative.

Dog Boat Cooperative is a smaller affiliated crab cooperative with 21 entities representing 3.18% of the Bristol Bay red king crab (BBR) quota share and 5.22% of the Bering Sea opilio (BSS) quota share. Approximately 2% of the BBR quota share and 2.7% of the BSS quota share is held by one member of Dog Boat, a CDQ group. The remainder, approximately 1.2% of BBR quota share and 2.5% of BSS quota share is held by entities which were all initially issued quota share, other than one crew member who purchased quota share after the program began.

Following are Dog Boat Cooperatives answers to the specific questions from the Council's February motion:

1. What measures is the cooperative taking to facilitate the transfer of quota share to active participants, including crew-members and vessel owners? Dog Boat Cooperative is voluntarily adhering to the Right of First Offer approach developed by Alaska Bering Sea Crabbers and implemented by the Inter-Cooperative Exchange. The definitions and processes followed by Dog Boat Cooperative are similar to those described by the Inter-Cooperative Exchange.
2. What is the level of participation from cooperative members regarding these measures? All members of Dog Boat Cooperative are voluntarily adhering to this approach.

3. How effective have these measures been? This approach has been successful. Recently, one member of Dog Boat Cooperative decided to sell 79,871 lbs of Eastern Aleutian Island golden king crab IFQ (EAG). Ten percent of this quota share, or 8,000 lbs, was offered to active crew and the entire 8,000 lbs was purchased by four individual active crew. One of the purchasing crewmembers had no previous ownership of crab quota share. The remaining 90% of the quota share was purchased by members of Dog Boat who own active fishing vessels. The few non-active Dog Boat Cooperative members have not purchased additional quota share since the Council moved the motion requesting this information at the February 2013 meeting. It is very unlikely that these non-active members will purchase additional quota share as it would first need to be offered to active crew and boat owners. If Dog Boat Cooperative members did not voluntarily adhere to the Right of First Offer approach, it is unlikely that these crew members would have had the opportunity to purchase this quota share.

Finally, Dog Boat Cooperative members generally qualify as active based on the ICE Right of First Offer definition. The following table shows the level of activity of Dog Boat members by quota share for red king crab and opilio:

<b>Dog Boat Cooperative</b>	<b>Red King Crab</b>	<b>Opilio</b>
Not Active	3.3%	11.3%
Works in Industry	4.9%	4.3%
Former Crew	1.6%	2.1%
Active per ICE ROFO Definition	90.2%	82.2%
<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>

4. What measures is the cooperative utilizing to address the issue of high lease rates, as they affect crew compensation? For the 2012-2013 season, the majority of Dog Boat members had their IFQ fished on vessels that pay a flat 50% for opilio and 65% for red king crab. Prior to this, these members were receiving 50% for opilio and 70% for red king crab. The reduction in the red king crab royalty was a result of the voluntary industry effort. One member of Dog Boat (a CDQ entity) is a little more complex. They own a substantial amount of quota share. They also fish some of their IFQ on vessels owned by a subsidiary while other IFQ is leased out. Lease rates for this member during the 2012-2013 season were somewhat above 50% for opilio and 65% for red king crab. However, from a crew perspective, average lease rates for the vessel were 50% or less for opilio and 65% or less for red king crab.
5. What is the level of participation from cooperative members regarding these measures? All non-CDQ members of Dog Boat Cooperative have voluntarily adopted lease rates of 50% for opilio and 65% for red king crab. The one CDQ member of Dog Boat Cooperative modified its harvest contracts so that those vessels fishing this members IFQ did not deduct average lease rates of more than 50% for opilio or more than 65% for red king crab against crew pay.

6. How effective have these measures been? These voluntary measures have effectively reduced all Dog Boat Cooperative average lease rates, as it affects crew, for red king crab from 70% to 65%. In addition, all Dog Boat Cooperative members are now either receiving only 50% lease rates on opilio or ensuring that crew are not deducted more than 50% against crew pay.
  
7. What future measures does the cooperative plan to take to address the Council concerns over active participation and lease rates as they affect crew compensation? Several members have made significant investments in crab vessels during this year. As a result, there are few Dog Boat members who are either not active crew or active vessel owners. However, many members of Dog Boat Cooperative (both active and non-active members) are pursuing additional opportunities to invest in Bering Sea crab vessels. Finally, Dog Boat members intend to continue with the voluntary measures described in this report in the future.

Sincerely,

Edward Poulsen, President  
Dog Boat Cooperative



December 2013  
Agenda Item C-9

December 3, 2013

Mr. Eric Olson, Chairman  
North Pacific Fishery Management Council  
605 W. 4<sup>th</sup> Avenue  
Anchorage, AK 99501-2252

Dear Chairman Olson:

The following report is submitted under Council agenda item C-9 by the Alternative Cooperative Exchange ("ACE"), a crab harvesting cooperative formed pursuant to 50 C.F.R. § 680.21.

ACE was formed by previous ICE members with the intent of maintaining and honoring all the commitments concerning active participation and crew compensation we made while we were members of ICE. Specifically, ACE has voluntarily incorporated the ROFO provisions of the ICE Membership Agreement into its ACE Membership Agreement.

1. What measures is the cooperative taking to facilitate the transfer of QS to active participants, including crew members and vessel owners?

ACE was just formed this June and did not participate in the 2012-13 fishing year. For the 2013-14 fishing year, we will continue to advise our membership of the obligation to comply with the ROFO requirement in the ACE Membership Agreement.

2. What is the level of participation from cooperative members regarding these measures? The

The ICE ROFO is incorporated into the ACE Membership Agreement, which each member executes. To the best of the ACE management's knowledge, no ACE member has transferred QS in breach of their ROFO obligations under the ACE Membership Agreement.

3. How effective have these measures been?

Application of the ACE ROFO requirement has resulted in crew members and active fishermen being offered the opportunity to purchase crab QS on a priority basis.

4. What measures is the cooperative taking to address the issue of high lease rates, as they affect crew compensation?

As with ICE, ACE supports ongoing voluntary harvester efforts to address the issue of high IFQ harvest fees. Due to the late formation of ACE, we found most IFQ harvest agreements had already been committed.

5. What is the level of participation from cooperative members regarding these measures?

ACE believes most of its members operate in compliance with the ongoing voluntary harvester efforts to address the issue of high IFQ harvest fee rates. ACE has not taken steps to verify the number of its members, who are or have voluntarily limited their IFQ harvest fee rate ask or offer.

6. How effective have these measures been?

We are hoping to see positive effects in the daily rates of pay received by crab crew members during the 2012-2013 fishing year from the upcoming EDR data.

7. What future measures does the cooperative plan to take to address the Council concerns over active participation and lease rates as they affect crew compensation?

ACE will continue the ACE ROFO requirement in its ACE Membership Agreement and encourage its members to continue to adhere to the voluntary harvester efforts to address the issue of high IFQ harvest fees.

Gretar Gudmundsson  
Executive Director --- ACE

December 2013  
Agenda Item C-9

December 3, 2013

Mr. Eric Olson, Chairman  
North Pacific Fishery Management Council  
605 W. 4<sup>th</sup> Avenue  
Anchorage, AK 99501-2252

Dear Chairman Olson:

The following report is submitted under Council agenda item C-9 by Inter-Cooperative Exchange ("ICE"), a crab harvesting cooperative formed pursuant to 50 C.F.R. § 680.21. ICE is an Alaska cooperative corporation formed to qualify as a fishermen's association under the Fishermen's Collective Marketing Act of 1934, 15 U.S.C. § 521 et seq. (the "FCMA").

ICE has 190 members that hold catcher vessel owner ("CVO"), catcher vessel crew ("CVC"), catcher processor owner, and catcher processor crew quota shares ("QS") issued under the Bering Sea and Aleutian Islands ("BSAI") crab rationalization program implementing Amendments 18 and 19 to the Fishery Management Plan for Bering Sea and Aleutian Islands King and Tanner Crabs. ICE vessels fish approximately 70% of 2013-2014 BSAI crab individual fishing quota ("IFQ").

The following report is framed as answers to questions derived from the Council's February 2013 motion concerning crab cooperative measures taken to facilitate the transfer of QS to active participants, including crew members and vessel owners, and the available measures taken to address high lease rates and crew compensation.

1. What measures is the cooperative taking to facilitate the transfer of QS to active participants, including crew members and vessel owners?

a. ROFO. ICE has implemented a "right of first offer" ("ROFO") in favor of crew members and active fishermen, giving them an opportunity to purchase QS in connection with each transfer made by an ICE member that does not fall within a specific ROFO exemption. The 2012-2013 ICE Membership Agreement ROFO provisions are included as an addendum to this report.

The 2012-2013 ICE Membership Agreement stipulated that ROFO provisions take effect 90 days after the ICE Board provides notice to that effect. The ICE Board issued that notice on February 1, 2013, and the ROFO formally took effect on May 2, 2013. However, ICE members voluntarily complied with the ROFO in connection with QS transactions that took place between February 1 and May 2, 2013.

For purposes of the ICE ROFO, a crew member is an individual who meets the Council's CVC share eligibility requirements, and who did not receive CVO QS at initial allocation. An active fisherman is a crew member or a person that holds a direct or indirect interest in a commercial fishing vessel over 29' in length that was employed in waters off Alaska during the last 12 months.

Under the ICE ROFO, crew members receive a first priority right of offer to 10% of all QS sold by ICE members, unless the transaction falls within one of the ROFO exceptions (which are identified in Section 5.5 of the ROFO provisions). Active fishermen receive a second priority right of offer with respect to the other 90% of the QS being sold. Direct sales to crew members are not subject to the ROFO, and direct sales to active fishermen other than crew members are only subject to the crew member ROFO.

There is no minimum amount of QS a crew member or active fisherman must purchase to exercise the ROFO, and if either crew members' or active fishermen's offers to purchase exceed the amount offered for sale, the amount offered is allocated among the offerors on a pro rata basis.

b. FCMA Eligibility Standard. As a separate matter, ICE has adopted an eligibility standard that limits its membership to persons who work on a U.S. commercial fishing vessel under terms that give them direct exposure to the financial risks of production, or hold a direct (i.e., Coast Guard documented) interest in a U.S. commercial fishing vessel under the same terms.

This standard was adopted as part of an FCMA compliance review, not as a measure to facilitate transfer of QS to active participants. However, QS holders place high value on access to collective price negotiation and binding arbitration, and (to the best of our knowledge) ICE is currently the only crab harvesting cooperative that offers access to these functions and the related sensitive delivery term information. Therefore, it is reasonable to expect that more QS holders will take steps to meet the ICE membership eligibility standard over time. To the extent they do so, the amount of QS held by persons who meet the ICE FCMA active participation requirement will increase.

2. What is the level of participation from cooperative members regarding these measures? The ICE ROFO is incorporated into the ICE Membership Agreement, which each member is required to execute. To the best of the ICE management's knowledge, no ICE member has transferred QS in breach of their ROFO obligations under the ICE Membership Agreement.

3. How effective have these measures been? Application of the ICE ROFO requirement has resulted in crew members and active fishermen being offered the opportunity to purchase crab QS on a priority basis.

A website ([www.crabqs.com](http://www.crabqs.com)) was created to perform several ROFO program functions. Qualified crew members are able to register to receive notification of sales offerings. Brokers are able to easily distribute offerings to the qualified crew. Transfers are tracked to monitor compliance.

During the period January 30, 2013 through November 10, 2013, there were 232 unique transfers of QS of all types from 44 unique QS holding entities. Forty-six (18.9%) of the transfers were to qualified crewmembers, and forty-two of those were transfers of CVC QS. As noted above, the transfers to qualified crewmembers were not subject to ROFO.

Of the remaining 190 transfers, 130 transfers were made by 27 ICE members, 45 were made by nine Alternate Crab Exchange ("ACE") member entities, nine were made by one member of the Dog Boat Cooperative and seven were made by two members of Alaska King Crab Harvesters Cooperative.

ICE members transferred a total of 27,180,621 QS units. Of these, 9,372,859 were subject to ROFO, and 17,807,762 were exempt from ROFO. Of all QS transferred, 1,703,618 units (or approximately 6.2% of all QS transferred and 18% of the QS transferred subject to ROFO) were purchased by six qualified crew members.

Members of all crab cooperatives transferred a total of 58,248,720 QS units since Jan 20, 2013. Of those units, 6,705,770 units (or approximately 11.5%) were purchased by qualified crew members. When sorted for quota type, and transfers from CVC holders are removed from the data set, the amount of CVO transferred is 57,157,782 QS units. Of that amount, 2,420,996 QS units (4.2%) were purchased by qualified crew.

4. What measures is the cooperative taking to address the issue of high lease rates, as they affect crew compensation? ICE has notified its members that the Council is concerned about the potential impact of high lease rates on crew compensation, and has asked that ICE members consider voluntarily capping their lease rate asks and offers at 65% of adjusted gross revenues for Bristol Bay red King crab and 50% of adjusted gross revenues for Bering Sea Snow crab. ICE will continue to notify its members accordingly.

5. What is the level of participation from cooperative members regarding these measures? ICE has not taken steps to verify the number of its members who have voluntarily limited their lease rate asks or offers.

6. How effective have these measures been? ICE has not taken steps to verify how effective these measures have been for the 2012-2013 crab fishing year. ICE believes the effectiveness of these measures is best evaluated by comparing the daily rate of pay received by crab vessel crew members prior to rationalization (adjusted to include pre and post season employment) to EDR data concerning the daily rates of pay received by crab crew members during the 2012-2013 fishing year. ICE looks forward to receiving that data, and will follow up with its members accordingly.

7. What future measures does the cooperative plan to take to address the Council concerns over active participation and lease rates as they affect crew compensation? ICE plans to continue developing and promoting the ROFO program it has adopted. ICE will continue to notify its members regarding the Council's sensitivity to high lease rates as they may affect crew compensation, and will continue to request that members consider voluntarily restricting their lease rate asks and offers per paragraph 4, above. ICE will also continue to monitor EDR data as it becomes available, and will inform its members if crew member daily rates of pay reflected in that data suggest that the voluntary lease rate asks and offers are proving ineffective.

Addendum

Right of First Offer ("ROFO") Provisions  
from the  
ICE 2012-2013 Membership Agreement

5. Quota Share Right of First Offer. **The provisions of this Section 5 shall not take effect unless and until the ICE Board of Directors takes affirmative action to that effect. The provisions of this Section 5 shall take effect without further Member approval or action being required upon the ICE Board of Directors taking action to that effect and providing each Member with not less than ninety (90) days advance notice.**

5.1 Definitions. For purposes of this Agreement, the following terms shall have the following meanings.

5.1.1 "Active Fisherman" means a person that either: (i) holds a direct or indirect ownership interest in a Commercial Fishing Vessel as of the Annual Record Date, provides ICE or its agent with the information and documents that ICE requests as evidence of such ownership interest, and is named on the "Active Fisherman" list that ICE maintains; or (ii) is a Crab Crewmember.

5.1.2 "Annual Record Date" means the annual date selected and announced as such by the ICE Board of Directors from time to time.

5.1.3 "Commercial Fishing Vessel" means a vessel not less than twenty-nine (29) feet in length overall that has been employed in commercial fishing in Alaska state waters or in the Federal Fishery Conservation Zone off Alaska during the twelve (12) month period prior to the Annual Record Date. For purposes of this definition, a vessel that is employed in support of commercial fishing as a tender or research vessel shall be considered a Commercial Fishing Vessel.

5.1.4 "Crab Crewmember" means an individual who (i) meets the Program "C" share recent participation requirements as of the Record Date, as the same may be amended from time to time; (ii) did not receive catcher vessel owner ("CVO") or catcher processor owner ("CPO") QS under the Program at initial allocation; and (iii) is named on the Crab Crewmember list that ICE maintains.

5.1.5 "Person" means an individual, corporation, partnership, limited liability company or other form of business entity.

5.2 Restrictions on Transfer. No Member shall sell any portion of his, her or its QS other than in strict compliance with the terms of this Agreement. Any sale of QS by a Member that is not made in strict compliance with the provisions of this Agreement shall be a material breach of this Agreement. For purposes of this Agreement, selling an ownership interest in an entity that holds QS and does not hold an interest in a Commercial Fishing Vessel shall be considered a QS sale, and an amount of

the QS held by the entity proportionate to the ownership interest being transferred shall be subject to the rights of first offer set forth in this Section 5.

5.3 Sales to Crab Crewmembers. A Member may sell some or all of such Member's QS directly to one or more Crab Crewmembers on such terms as the Member and the purchasing Crab Crewmember(s) may agree. Such sales shall not be subject to the rights of first offer granted under this Agreement.

5.4 Rights of First Offer. A Member who wishes to sell some or all of his, her or its QS to a person who is not a Crab Crewmember (a "Selling Member") may only do so in strict compliance with the procedure set forth in this Section 5.4, unless the transaction is exempt from the Crab Crewmember and Active Fisherman right of first offer pursuant to Section 5.5, below.

5.4.1 Before offering QS for sale to a person who is not a Crab Crewmember, the Selling Member shall notify ICE of the amount of QS offered for sale (the "Offered QS"), and the associated sale terms (the "Offer Terms").

5.4.2 Upon receiving notice from a Selling Member, ICE shall notify the Crab Crewmembers that ten percent (10%) of the Offered QS is available for purchase on the Offer Terms (such 10% being the "Crew Offer QS"). Each Crab Crewmember shall have fifteen (15) days from receiving such notice during which he or she may irrevocably agree to purchase some or all of the Crew Offer QS on the Offer Terms. If the Crab Crewmember(s) agreeing to purchase Crew Offer QS (the "Purchasing Crewmembers") collectively agree to purchase an amount of QS in excess of the Crew Offer QS, ICE shall allocate the right to purchase Crew Offer QS among the Purchasing Crewmembers pro rata, according to the amount of the Crew Offer QS each of them has agreed to purchase.

5.4.3 Upon expiration of the 15-day Crab Crewmember offer period, ICE shall determine the amount of the Offered QS available for purchase, net of the amount that Crab Crewmembers have agreed to purchase (such remaining amount being the "Fisherman Offer QS"). The Selling Member may sell the Fisherman Offer QS to one or more Active Fishermen on such terms as the Selling Member and the Active Fishermen may agree. If the Selling Member wishes to sell some or all of the Fisherman Offer QS to one or more persons who are not Active Fishermen, the Selling Member shall first notify ICE, and ICE shall notify the Active Fishermen of the amount of Fisherman Offer QS that the Selling Member proposes to sell to persons other than Active Fishermen (the "Third Party QS") and the Offer Terms on which the Third Party QS can be purchased. The Active Fishermen shall have five (5) days during which one or more of them may agree to purchase some or all of the Third Party QS on the Offer Terms. If the Active Fishermen agreeing to purchase Third Party QS (the "Purchasing Fishermen") collectively agree to purchase an amount of QS in excess of the Third Party QS, ICE shall allocate the right to purchase the Third Party QS among the Purchasing Fishermen pro rata, according to the amount each of them has agreed to receive.

5.4.4 Upon expiration of the 5-day Active Fisherman offer period, ICE shall determine the amount of the Offered QS that the Crab Crewmembers and the Active Fishermen have agreed to purchase on the Offer Terms, and shall notify the Selling Member. The Selling Member

shall then have the right to offer the balance of the Offered QS in excess of the amount that the Crab Crewmembers and Active Fishermen have agreed to purchase (the “Marketable QS”) for sale to persons other than the Crab Crewmembers and Active Fishermen (the “Third Parties”) on terms no more favorable to the Third Parties than the Offer Terms for a period of one hundred eighty (180) days (the “Market Period”).

5.4.5 If a Selling Member accepts an offer during the Market Period from one or more Third Parties to purchase some or all of the Marketable QS on terms no more favorable to the Third Parties than the Offer Terms (an “Accepted Offer”), the Selling Member shall notify ICE of the Accepted Offer and the proposed closing date for the related transaction, which shall not be earlier than twelve (12) business days from the date of such notice. Within two (2) business days of receiving such notice, ICE shall notify the Purchasing Crewmembers and the Purchasing Fishermen of the Accepted Offer and proposed closing date. Within ten (10) days of receiving such notice from ICE, each Purchasing Crewmember and Purchasing Fisherman shall deposit their share of any cash to be paid to the Selling Member at closing into escrow as directed by ICE, and shall execute and deliver into escrow as ICE directs any financial instruments and other documents consistent with the Offer Terms.

5.4.6 If the Selling Member transfers QS to one or more Third Parties in accordance with the Accepted Offer, the Selling Member shall notify ICE, and ICE shall notify the Purchasing Crewmembers, Purchasing Fishermen and direct the escrow agent with whom their funds and documents have been deposited to proceed with closing of the QS transfers from the Selling Member to the Purchasing Crewmembers and Purchasing Fishermen.

5.4.7 If the Selling Member does not sell any of the Offered QS to a Third Party within the Market Period, the Purchasing Crewmembers’ and the Purchasing Active Fishermen’s offers to purchase Offered QS (if any) shall be void, the Purchasing Crewmembers and the Purchasing Active Members shall have no right or obligation to purchase any of such Offered QS, and the Selling Member shall not offer any QS for sale unless and until the Selling Member has repeated the first offer procedure set forth in Sections 5.4.1 through 5.4.3, above.

5.5 Transactions Exempted from Right of First Offer. Notwithstanding the foregoing, the following QS sales and transfers of interest in QS holding entities shall not be subject to the rights of first offer in favor of Crab Crewmembers or Active Fishermen described above.

5.5.1 QS sales made in connection with a foreclosure of a security interest or pursuant to a court order.

5.5.2 QS sales made in connection with the sale of a Bering Sea or Aleutian Islands crab fishing vessel, or as part of the sale of an entire commercial Bering Sea or Aleutian Islands crab fishing business. For purposes of this provision, a “crab fishing business” shall mean a fishing business that owns QS and one or more fishing vessel(s) that were employed to harvest crab in a Program crab fishery during the year prior to the sale of the business. For purposes of this provision, “sale” of an entire Bering Sea or Aleutian Islands crab fishing business shall mean a sale of all or

substantially all assets of such business, or sale of all or substantially all of the ownership interest in such business.

5.5.3 QS transfers or sales between affiliated business entities. For purposes of this provision, business entities in which the same person holds a ten percent (10%) or greater voting interest or ownership interest are “affiliated”.

5.5.4 Notwithstanding the provisions of Section 5.2 to the contrary, transfers of a direct or indirect ownership interest in a business entity between or among existing owners.

5.5.5 QS transfers or transfers of ownership interest in QS holding entities that are made pursuant to a contract that was in effect as of May 29, 2012.

5.6 Termination of Crab Crewmember and Active Fisherman Rights for Failure to Perform. In consideration for the benefits extended to Crab Crewmembers and Active Fishermen under this Agreement, each of them shall have an obligation of strict performance in connection with the closing and purchase of any QS they agree to purchase under the right of first offer that is extended to them under this Agreement. ICE reserves the right in its sole discretion to permanently remove a person from the Crab Crewmember or Active Fisherman lists maintained by ICE in response to any single breach by such person of his, her or its obligations under this Agreement.

5.7 Breach by a Member. A Member’s breach of the provisions of this Section 5 shall constitute a material breach of the ICE Membership Agreement. Because the damages associated with a breach of this Section 5 are not possible to quantify, a Member in breach of this Section shall be liable for such liquidated damages as the ICE Board of Directors adopts and announces to the Members from time to time, provided no such liquidated damages shall take effect until the next ICE membership period following their adoption and announcement. In addition to imposing liquidated damages in connection with a breach of this Agreement, the ICE Board of Directors may in its sole discretion take all actions and seek all remedies otherwise available to ICE and its members in connection with a breach of this Section 5.

5.8 Assignment. The rights granted to Crab Crewmembers and Active Fishermen under this Section 5 are personal, and may not be assigned. Any purported assignment of such rights shall be void. ICE may assign any or all of its rights and obligations under this Section 5 to such persons as ICE selects in its sole discretion.



**R & B Cooperative**

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rmezich@comcast.net

North Pacific Fishery Management Council

605 W. 4<sup>th</sup> Ave, Ste. 306

Anchorage, AK 99501

RE: BSAI Crab: OMB 0648-0678

December 2, 2013

Voluntary Cooperative Letter for Dec. 2013 Council meeting

Dear council members:

R & B Cooperative is a small cooperative with only a few members. The majority of our members are either active crew members or active fishing vessels. All the remaining members have owners that are active participants indirectly through their ownership in another active R & B Cooperative member.

Our Cooperative utilizes two active crab fishing vessels, both members. We have lowered the lease fees paid for BBR IFQ by 2% the past two seasons. In addition, we have removed a few of the crew share settlement deductions (crew were previously charged for their share of lube and hydraulic oil, and cooperative and fishing association dues), increasing the net crew share amount. Both our active crab fishing vessels own crab QS in all the crab fisheries they participate in and do not pay lease fees on their own QS, also benefiting the net crew share.

Our cooperative member all agree and support these measures.

R & B Cooperative member, Shishaldin LLC, has offered to sell QS to one of our active Captain's who currently does not own any. He applied for a loan through NMFS program for quota share purchase, but was denied. He plans to reapply for the loan. If denied again, the coop will look at internal financing arrangements.

Kind Regards,

Mary Mezich

R & B Cooperative- Manager

425-308-5586 cell



Subject: BSAI Crab Coop Voluntary Responses To NPFMC Request- December 2013

From: Rob Rogers <ROBR@IcicleSeafoods.com>

Date: 12/5/2013 9:23 PM

To: "sarah.marrinan@noaa.gov" <sarah.marrinan@noaa.gov>, "gail.bendixen@noaa.gov" <gail.bendixen@noaa.gov>

CC: Pat Hardina <PatH@IcicleSeafoods.com>, Rob Rogers <ROBR@IcicleSeafoods.com>, Kris Norosz <KrisN@IcicleSeafoods.com>

North Pacific Fishery Management Council  
605 West 4th Avenue  
Suite 306  
Anchorage, AK 99501

Dear Council Members,

I represent the Crab Producers and Harvesters LLC, a BSAI Crab Cooperative. This coop is not associated with ICE or ACE. Its comprised mainly of independent BSAI Crab QS holders, crab boat owners and it is affiliated with Icicle Seafoods Inc. The main purpose of the coop is to ensure that its members can efficiently and safely harvesting their crab.

Rather than sending one email representing the coop's position attached are 4 individual emails to the Council regarding the issues of QS lease rates and transfer of QS to active participants. These represent 3 different views. Two from active crab captains, one from an initial recipient QS holder that is actively fishing in other AK fisheries but not for crab, and one from a crab boat owner representative & coop manager.

Sincerely,

Rob Rogers

Crab Producers and Harvesters LLC  
P.O. Box 79003  
Seattle, WA 98119  
206-281-5365

1. What measures are you taking to facilitate the transfer of quota share to active participants? This includes both crew members and vessel owners.

*As Crab Producers and Harvesters LLC Coop President I am in contact with all members and generally familiar with when there are active buyers or sellers of crab QS in the coop. I contact coop members that I know are buyers if I know of quota available for sale. This is true whether it's IFQ in the coop or on the open market. The C share QS that has been available for purchase in the coop has been purchased by active captains/crew in the fishery. It has been priced less and there are qualified C share buyers in the coop looking for QS. If prices are reasonable, based on the current market, purchases usually occur quickly.*

*For A and B share QS that I know of for sale I contact all coop members that have expressed an interest in buying more quota. Usually these buyers are well informed on their own about available quota for sale outside of the coop.*

2. How effective have these measures been?

*These informal measures worked well when there was considerable amounts of QS available in the first 3-4 years or so of the program. In the last 2-3 years there has been less QS available for sale of any kind. In recent years prices have been considerably higher and fewer buyers, both active or inactive participants, can make the economics work.*

3. What measures are you taking to address the issue of how high lease rates affect crew compensation?

*The boat owners in our coop have individually chosen to not charge lease rates for the initial issuance of crab QS. Some boat owners choose not to lease additional QS and some do. It's an individual decision. Also, leases are generally confidential arrangements within the coop. However, I am generally aware of what most of the lease rates are since members often contact me about what the market lease rates are doing. When crab prices are lower and crab is harder to catch, the lease rates are lower, and conversely they are higher when crab prices are higher and crab is easier to catch. Some of the crew on the boats in the coop have QS that they lease for the same market rates to the boat owners as any other QS leases. My perception is that it's best for lease rates to be set market conditions rather than by some independent standard.*

4. What future measures do you plan to take to address the council's concerns over active participation and lease rates as they affect crew compensation?

*To contact active participants that are members of the coop and make sure they are aware of QS that may become available for purchase. However, at current QS prices and concerns about future BSAI Crab TACs, there are few buyers.*

Rob Rogers  
Crab Producers and Harvesters  
P.O. Box 79003  
Seattle, WA 98119

Laferriere response.txt  
Subject: Request for Voluntary Annual Report to the NPFMC

NPFMC Members,

I don't have any exact answers on any of these questions. All I know is that there are not many transfers of quota shares going on because there are not many for sale any more. If I did sell my CPC shares, I would go to our coop first to help the situation out. IFQ share holders should consider the crew fishing their shares first if selling any IFQ's. On another thought, what is preventing me from buying anymore CPC shares is the uncertainty of the new rules and unfortunately, I have not made a crab delivery in the last 365 days, so currently I can not buy anymore at this time. I do try to buy more of all IFQ crab shares when they come up for sale.

I have concerns and don't want to loose my CPC shares because I am not considered an "active participant" in the crab fishery anymore per say. I have been a commercial fisherman all my life and have been fishing crab in Alaska since 1973. I have been buying crab shares since the start of IFQ program in 2005. I am no longer fishing crab myself physically, just leasing my shares as we have sold our crab boat. However, with the new owners, I am now fishing for bottom fish in Alaska. I do still consider myself a fisherman and pay taxes accordingly. In the old days, we participated in all fisheries to stay alive and just pay our bills. I would hate to see myself not considered an "active participant" just because I don't crab fish exclusively anymore.

I would like to see the "active participant" as those fishing in any fishery, not just the crab fishery to qualify. Why should I be penalized for being diversified in other fisheries? I still buy an Alaska fishing license each year and consider myself an "active" fisherman. Hopefully this will be considered and will be another option so I won't have to sell my CPC shares in the future. I have spent several hundred thousand dollars buying crab quotas in my 3-entities and would hate to have to sell any because I was considered not "active".

I know the lease rates are high, but if you have to buy them they are very expensive and it takes lots of money to pay back the bank. Most of the time you have to reach in your pocket for extra money as the payment is more than the lease for the first 10-years. The long time crewmembers are making more money now and know what they will be making. These are the new times for the fisheries and it was the industry came up with these lease rates, not myself.

I hope the council, IFQ holders, boat owners etc. will be considerate for all in any aspect of the fishery as this rationalized program is a great solution for the future of all fisheries.

You can call me anytime. 206-683-7198

Thanks!

Louis P. Laferriere Captain - CPC shares L&M Enterprises Inc. President -  
CPO & CVO shares LPL Quotas LLC President - CPO shares.  
47550 SE 162nd St.  
North Bend, WA 98045  
E-mail: loubobjr@yahoo.com<mailto:loubobjr@yahoo.com>

Morton Response.txt

From: RICHARD & SANDRA [lofoten@comcast.net]  
Sent: Wednesday, December 04, 2013 3:32 PM  
To: Rob Rogers

To: NPFMC, I am a C share holder in the Bering Sea, Bristol Bay, and St. Mathew crab fisheries and a member of the Crab Producers and Harvesters Co-operative. I operate the F/V Adventure and am asked by the crew about being able to buy shares for the fishery. They see very few shares on the open market and only hear of private sales after the fact. The pool of A and B shareholders need to held to the same standards as C shareholders as far as participation in order for any quantity of shares to change hands. On the subject of lease rates, I see that the attitude and low turnover of crew goes hand in hand with a smaller lease rate, this also makes for safer operations having a crew returning each season.

Contact: Capt. Richard Morton / 425-239-1233 / lofoten@comcast.net

weaver response.txt

From: Jimmy Weaver [inletbeauty@yahoo.com]  
Sent: Thursday, November 28, 2013 8:32 PM  
To: Rob Rogers  
Subject: council letter

Dear Council,

My name is Jim Weaver, I am 51 years old, 50 of those year as an Alaska resident. I have been actively participating in crab fisheries through out the state of alaska for the past 33 years. I have fished crab in Cook Inlet, Kodiak, Ak Peninsula and Bearing Sea, starting as a deckhand and working through the ranks to captain. From 1995-2005 I was a partner in a crab vessel, we sold the vessel in the buy back program in 2005 . After the buy-back/rationalization of the crab fishery I have worked deck and recently asked to run a crab boat again. I currently work for Icicle Seafood's and share the skipper duties with another captain. I was issued skipper shares (c-shares) during rationalization,I have since bought more quota.I have, and currently fish these shares on the Adventure.

Quota shares are hard to buy most changing hands by word of mouth a never making it to the open market. There is also not alot of crew quota, 3 % doesn't leave alot to go around for 500 crew members and skippers. A program that allows crew (active-participates) to join a list if there interested in buying quota could be handled at the co-op level. Not sure what the exact definition of (active- participation) is but seems to me that making one trip every three years or so is not active. Active are the crews working every year to harvest the quota.

High lease rates have affected crew shares since the inception of crab rationalization, crews may be making more but their working months catching more crab for less pay/pound then before rationalization. Some vessel owners have choosen not to charge their crew lease fees on original issued quota, most have NOT, choosing to charge crews lease rates on quota that was given to them. Greed is a funny thing, one boat owner put it to me this way, if I charge high lease rates, in 10 years all the deckhands will be gone that remember non-lease crabbing and the new generation of crew will know no difference.

I was am still in support of crab rationalization, it is no doubt a safer fishery, there are still good jobs to be had but there are alot of crews working to make a few absentee owners alot of money.

Jim Weaver

po box 664

homer, alaska 99603 cell#907-299-1870

December 2013  
Agenda Item C-9

December 9, 2013

Mr. Eric Olson, Chairman  
North Pacific Management Council  
605 W. 4<sup>th</sup> Avenue  
Anchorage AK 99501-2252

By email to [npfmc.comments@noaa.gov](mailto:npfmc.comments@noaa.gov)

Dear Chairman Olson:

The following report is being submitted under Council agenda item C-9 by the Alaska King Crab Harvesters Cooperative ("AKHC"), a crab harvesting cooperative that participates in the crab program administered by the Council. AKHC is a cooperative corporation organized under Alaska law.

AKHC currently has 16 members that hold catcher vessel owner quotas ("CVO"), catcher vessel crew quotas ("CVC"), catcher processor owner quotas ("CPO") and catcher processor crew quotas (CPC) issued under the BSAI crab rationalization program. This year 2013-2014 AKHC members are holding approximately 4.5% of the major Bristol Bay Red King Crab ("BBR") and Bering Sea Opilio ("BSS") fishery Quota Share. In 2012 AKHC had six members representing about 3.5% of the BBR and BSS quota.

AKHC is currently being reorganized and expects that in 2014-2015 its membership will be similar to 2012-2013 when it had six members. Coop management is currently being transferred to an individual representing one of those six entities.

The following report is intended to answer questions from the Council's February 2013 motion involving crab cooperative measures taken to facilitate the transfer of QS to active participants, including crew members and vessel owners, and available measures taken to address crew compensation including lease rates.

1) What measures is the cooperative taking to facilitate the transfer of QS to active participants including crew members and vessel owners, and vessel owners.

AKHC is following the lead of the Inter Cooperative Exchange by asking that its members voluntarily participate in the "right of first refusal" ("ROFO") in favor of captains, crew and active participants. Please see detailed description provided by ICE in their report. At present, all AKHC coop members are supporting the ROFO program and in 2013 sales were placed through the ROFO.

In addition AKHC is recommending to its members that they aid skippers and crewman who are working on vessels harvesting member crab with down payments and or interim financing for NOAA loans. Such assistance was provided to a vessel skipper.

AKHC believes that these measures will help achieve some of the goals the Council is seeking to achieve and will continue similar work in the future.

2. What measures are being taken to address the issue of crew compensation and the possible effect of higher lease rates on crew compensation?

AKHC is sharing the concerns of the Council on this issue with its members, especially as to the issue of crew compensation on catcher vessels. AKHC is asking that its members voluntarily follow the ICE lead and try to get their quota harvested on vessels that are not deducting more than 65% of adjusted gross revenues for BBR and 50% of adjusted gross revenues for BSS.

AKHC is aware that several of its members have frozen and or reduced the deductions taken for lease payments on harvest vessels utilizing member quota. AKHC believes that these actions will help stabilize and increase crew compensation on COOP vessels and looks forward to reviewing the EDR data, and as with ICE especially the daily rates of pay being received by crew members to help evaluate this issue.

In the future AKHC will continue to keep its members informed about the Council's concerns in this area and will continue recommending to its members that they have their crab harvested on vessels that are not deducting more than the described lease rates from crew compensation.

Respectfully submitted by Alaska King Harvesters Coop by

A handwritten signature in black ink, appearing to read 'Leonard Herzog', with a long horizontal flourish extending to the right.

Leonard Herzog  
Interim Manager



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**Crab 13-003

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**Agenda Date:** 12/9/2013

**Agenda Number:** D-1

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

Rights of First Refusal (ROFR)

**ESTIMATED TIME:**

8 hours (all Other Issues)

**ACTION REQUIRED:**

Review ROFR discussion paper on contractual agreements and provide direction as necessary.

**BACKGROUND:**

In June 2013 the Council heard from community representatives requesting clarification of the use of private contractual agreements, including contract provisions that would limit the assets to which a ROFR would apply. In consultation with NOAA GC, Council staff prepared the attached discussion paper which will be presented at this meeting.

The discussion paper is attached as **Item D-1(a)**.

DRAFT Discussion Paper  
Right of First Refusal (ROFR) contract provisions

November 12, 2013

**Overview:**

At its February 2013 meeting, the Council considered six separate actions that would modify various aspects of the right of first refusal provisions created to benefit community interests under the Bering Sea and Aleutian Islands crab rationalization program (Program). To protect community interests, the Program required holders of most processor shares to enter into agreements granting community-designated entities a right of first refusal on certain transfers of those shares. Since implementation of the Program in 2005, community representatives and fishery participants have suggested that some aspects of the rights of first refusal may inhibit their effectiveness in protecting communities. To address these shortcomings, the Council elected to modify current provisions with respect to three of the six actions (Action 1, Action 2, and Action 5).<sup>1</sup> Under Action 1, the Council recommended that the time available for a community entity to exercise a right of first refusal be increased from 60 days to 90 days, and the time for a community entity to perform under the contract be increased from 120 days to 150 days. Under Action 2, the Council recommended: (1) removal of an existing provision that states the rights lapse if a processor uses its share allocation outside the protected community for three consecutive years, and (2) creation of a new right of first refusal in the event a community fails to exercise the right, once it is triggered. Under this second provision, the processing share holder would designate the community entity that will be the holder of the right. Under Action 5, the Council recommended the creation of several notice requirements from the processing share holder to the right holder and NOAA Fisheries. These notices are intended to ensure the rights have their intended effect by providing better information concerning the use of the processing shares and the status of the right.

The Council elected to maintain the status quo with respect to Action 3 and Action 4. Under the status quo, the rights of first refusal apply to all assets in a transaction that includes processor shares subject to the right of first refusal and processor shares may be used in any location (subject to any applicable regional use restrictions). With Action 3, the Council considered alternatives that would have applied the right to either: (1) the processor shares only or (2) the processor shares and assets based in the protected community. With Action 4, the Council considered alternatives that would have required community entity consent for any use of processor shares outside of the community that is protected by the right. Although the Council decided to maintain the status quo on Actions 3 and 4, it suggested that it may be receptive to changes if stakeholders reached a consensus on appropriate measures.

During staff tasking at its June 2013 meeting, the Council received public testimony from some community right holders in regards to the Council's February 2013 decision on Actions 3 and 4. These right holders indicated that PQS and ROFR holders were considering the use of private contractual agreements to address remaining community protection issues, including contractual provisions that

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<sup>1</sup> The Council elected to take no action on Action 6, which would have allocated up to 0.55 percent of the Bristol Bay red king crab processing quota share pool to the Aleutia Corporation (a right holding entity) to address a grievance concerning a right of first refusal that it formerly held on shares in that fishery. The Council urged the parties to that dispute to work to resolve their issues prior to further Council consideration of the matter at a future meeting.

would limit the assets to which the right of first refusal would apply, and asked the Council to clarify whether flexibility exists for private contractual agreements that may contain provisions that differ from the required ROFR contract terms. In response to this testimony, the Council requested that staff prepare a discussion paper examining this question.

**Discussion:**

Further discussion of this issue involves a combination of logic, legal, and policy considerations. Previous analyses (the original analysis of community protection provisions from August 2004, and the February 2013 analysis of specific ROFR provisions) noted the tradeoffs between community protection and interests of the processor entity, as well as overall efficiency in the fisheries. These analyses also described the generally accepted definition of ROFR – i.e., a ROFR generally provides an entity with the right to purchase an item from a seller for the same price and subject to the same terms and conditions as offered by the seller in an open market. To use a simplistic example, if a seller is offering a car for \$1,000, the ROFR holder typically could not elect to buy the car for \$800, or elect to only purchase the tires for \$200. In 2004 the Council adopted the recommendations of its Community Protection Committee, which attempted to strike a reasonable balance of community and industry interests. Those provisions are also now in the crab FMP, pursuant to Section 313(j) of the MSA, and include the following (A through I):

Contract Terms for Right of First Refusal based on Public Law 108-199

- A. The right of first refusal will apply to sales of the following processing shares:
  - 1. PQS and
  - 2. IPQs, if more than 20 percent of a PQS holder's community based IPQs (on a fishery by fishery basis) has been processed outside the community of origin by another company in 3 of the preceding 5 years.
- B. Any right of first refusal must be on the same terms and conditions of the underlying agreement and will include all processing shares and other goods included in that agreement.
- C. Intra-company transfers within a region are exempt from this provision. To be exempt from the first right of refusal, IPQs must be used by the same company. In the event that a company uses IPQs outside of the community of origin for a period of (two options):
  - 1. 3 consecutive years
  - 2. 5 consecutive yearsThe right of first refusal on those processing shares (the IPQ and the underlying PQS) shall lapse. With respect to those processing shares, the right of first refusal will not exist in any community thereafter.
- D. Any sale of PQS for continued use in the community of origin will be exempt from the right of first refusal. A sale will be considered to be for use in the community of origin if the purchaser contracts with the community to:
  - 1. use at least 80 percent of the annual IPQ allocation in the community for 2 of the following 5 years (on a fishery by fishery basis), and
  - 2. grant the community a right of first refusal on the PQS subject to the same terms and conditions required of the processor receiving the initial allocation of the PQS.
- E. All terms of any right of first refusal and contract entered into related to the right of first refusal will be enforced through civil contract law.
- F. A community group or CDQ group can waive any right of first refusal.

- G. The right of first refusal will be exercised by the CDQ group or community group by providing the seller within 60 days of receipt of a copy of the contract for sale of the processing shares:
1. notice of the intent to exercise and
  2. earnest money in the amount of 10 percent of the contract amount or (two options)
    - a. \$250,000 or
    - b. \$500,000whichever is less

The CDQ group or community group must perform all of the terms of the contract of sale within the longer of:

1. 120 days of receipt of the contract or
  2. in the time specified in the contract.
- H. The right of first refusal applies only to the community within which the processing history was earned. If the community of origin chooses not to exercise the right of first refusal on the sale of PQS that is not exempt under paragraph D, that PQS will no longer be subject to a right of first refusal.
- I. Any due diligence review conducted related to the exercise of a right of first refusal will be undertaken by a third party bound by a confidentiality agreement that protects any proprietary information from being released or made public.

Notably, provision B states that “*Any right of first refusal must be on the same terms and conditions of the underlying agreement and will include all processing shares and other goods included in that agreement*”. This appears consistent with the generally accepted definition of ROFR as described above. It also appears consistent with the original analyses prepared for this issue, in 2004. Among other things that analysis noted that “*paragraph B provides that the ROFR would apply to the transaction involving processor shares as a whole and would require the community group exercising that right to agree to all the terms of the agreement. This provision would be intended both to make the ROFR workable and to limit the disruption to a processor’s transaction that might be caused by the exercise of the ROFR....exercise of the right would require the community group to perform the contract in its entirety. The requirements of the contract should be clear to the community. The provision is thought to protect the selling processor’s interests by requiring that the transaction that is acceptable to the processor be adopted*”.

That analysis also noted that the provision could limit the effectiveness of the right from the perspective of the ROFR holder. For this reason, additional options were developed by the Council and analyzed in the February 2013 ROFR amendment package including (1) applying the ROFR to the processor shares only or (2) applying the ROFR to the processor shares and assets based in the protected community. Based on the 2013 analysis, both of these options posed significant process, timing, cost, and administrative difficulties, including determination of a process for defining “*assets based in a community*”, and a process for mutually agreeable valuation of PQS in the scenario where PQS is separated from other assets in the sale. For these reasons the Council chose not to take action deviating from the status quo.

It is critical to the discussion at hand to understand whether and how a ROFR is triggered in the case of crab PQS. A ROFR situation only exists when and if there is an *underlying agreement* between a seller and a third (non-ROFR) party, and that agreement intends to take the underlying PQS out of the community or origin. If a PQS holder simply announces that PQS (and potentially associated assets) are for sale on the open market, and there does not exist an *underlying agreement* (contract) with another

party, then there is no ROFR triggered, and therefore no restrictions exist on contract provisions which may be negotiated and agreed to by the seller and a ROFR entity. If during this process the seller does develop an agreement with a potential third (non-ROFR) party, at that point the ROFR would be triggered.

In the presence of an underlying agreement as described above, a ROFR is triggered and the eligible ROFR entity is entitled to exercise its right to that deal, as stipulated in provision B (under the same terms and conditions). I could be argued, logically, that this provision was intended to protect the interests of the seller, and therefore it should be the seller's prerogative to alter the terms and conditions for the ROFR entity. However, provision B does not require them to do so, and in fact, on its face, requires the transaction to be completed on the same terms and conditions as the existing, *underlying agreement*. On its face, the question posed to the Council in Attachment A appears to be a simple "No". Unless the regulations are amended in some manner, provision B does not provide for a re-negotiation of the terms and conditions of the *underlying agreement*.

However, there does not appear to be any prohibition on a ROFR entity and a PQS seller negotiating a separate agreement, which would provide the ROFR entity some remuneration for NOT exercising its ROFR right. However, there appears to be no compelling incentive for the PQS seller to do so. If the *underlying agreement* only refers to PQS, and does not refer to 'other goods' (as stipulated in Provision B), then the ROFR holder would have the ROFR option on the PQS, and 'other goods' would be the subject of a separate contractual agreement.

Simply amending the FMP to alter provision B, which is allowed under Section 313(j)(3) of the MSA, (for example, to allow flexibility for the ROFR entity and the seller to negotiate an agreement which has different terms and conditions than the *underlying agreement*), would not appear to provide any compelling incentive for the PQS seller to do so, unless there were specific provisions included which required the PQS seller to negotiate towards the contract terms desired by the ROFR holder. Defining or quantifying the degree to which a potential PQS seller must re-negotiate would likely be a challenging policy determination. However, simply amending the FMP to allow for such a re-negotiation would provide for that possibility.



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**GF 13-019

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**Agenda Date:** 12/9/2013

**Agenda Number:** D-2

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

Discussion paper on GOA pot gear for sablefish.

**ESTIMATED TIME:**

8 hours (all Other Issues)

**ACTION REQUIRED:**

Review discussion paper to allow sablefish pots in the GOA and take action as necessary.

**BACKGROUND:**

In October 2013, the Council reviewed recommendations from its Gulf of Alaska Sablefish Gear Committee on a range of issues to allow the use of pot gear in the GOA sablefish IFQ fishery. Options for area management (entire GOA or Southeast area only) and pot gear restrictions (single pots or pot longlines; gear configurations; gear markings) are under consideration. While many committee recommendations were unanimous (allow pot longline gear only in entire GOA), whether to require pot gear to be removed from the fishing grounds when not being fished requires additional consideration. The committee comments and recommendations were incorporated into an expanded version of a May 2013 discussion paper, which also addresses halibut bycatch issues, whale depredation, acoustic deterrent devices, social/economic effects in the context of the original design of the program, and lessons learned from the use of pot gear in the Bering Sea, Aleutian Islands, British Columbia, and the west coast. The status of the GOA sablefish stock is addressed under Agenda item C-6.

The paper has been available since early November 2013 and was mailed out in a Council Mailing.

# Petersburg Vessel Owners Association

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November 25, 2013

Mr. Eric Olson, Chair  
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605 West 4th Avenue, Suite 306  
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[npfmc.comments@noaa.gov](mailto:npfmc.comments@noaa.gov)

## RE: SABLEFISH POT DISCUSSION PAPER, ITEM D-2.

Dear Chairman Olson and members of the Council,

The Petersburg Vessel Owners Association (PVOA) is a diverse group of commercial fishermen that participate in a variety of fisheries statewide with our foremost interest being the commercial halibut and sablefish fisheries managed by the North Pacific Management Council. PVOA appreciates the opportunity to comment on the **Sablefish Pot Discussion Paper, item D-2**.

PVOA appreciates the work of the Gulf of Alaska Sablefish Gear Committee and the thoroughness of the Sablefish Pot Discussion Paper for your consideration at the upcoming meeting. Although PVOA is **not** taking a position in support or opposition to the use of pots in GOA IFQ Sablefish fisheries at this time, we are in support of advancing the discussion paper for full analysis.

PVOA supports analysis of the items identified in the Discussion Paper but we want to ensure and emphasize that the following items are and should be included in further analysis:

1. **Limits on the number of pots allowed per string.** The greater the number of pots, the more difficult it will be to retrieve longline gear entangled with pot gear.
2. **The “footprint” for pots should be no greater than for longline gear.** The amount of bottom area taken up with pot gear needs to be equal to or less than that normally taken up by longline gear. This would likely require a limit on the number of pots per set/string or fished at any given time.
3. **Pots must be removed from the grounds when done fishing and during deliveries.** No deep water pot storage. If unattended pots then grounds will be preempted by pots, lost gear, gear entanglements and ghost fishing will

- become a significant problem and the resultant ghost fishing could result in greater loss than that due to whale depredation.
4. **Disposition of lost gear and how will lost gear be accounted for and removed.** One suggestion may be to require a “pot fee” to pay for independent/3<sup>rd</sup> party removal of lost gear. This also goes together with #1, in that having only a few pots/string may still allow for longline gear retrieval if entangled with pot gear. A string with a large number of pots would be virtually impossible to retrieve with longline gear. Large amounts of lost gear could render the grounds virtually unfishable for either longline or pot gear.
  5. **The effects of items #1 and #3 on delivery behavior.** The requirements for limiting the number of pots/string and the necessity for removing pots from the grounds during delivery could result in more small deliveries being made to outer coast communities, such as Sitka and fewer deliveries being made to “inside” communities such as Petersburg.
  6. **The effects of items #1 and #3 on consolidation.** Consolidation may occur when QS holders fish pots from larger vessels because their vessels cannot accommodate pots. Consolidation would result in fewer crew member jobs and loss of employment opportunities in small coastal communities.

Thank you for your time and attention to this important matter. If we can provide further information or answer any questions as you make this important decision, please feel free to contact us.

Sincerely,



Brian Lynch  
Executive Director



ASSOCIATION



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**Catch 13-004

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**Agenda Date:** 12/9/2013

**Agenda Number:** D-3

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

Amendment 80 Program 5-year Review

**ESTIMATED TIME:**

8 hours (all Other Issues)

**ACTION REQUIRED:**

Examine and provide direction concerning draft work plan for Amendment 80 5-year review.

**BACKGROUND:**

Amendment 80, implemented in 2008, enabled the formation of fishery cooperatives for non-AFA trawl catcher processors. As part of the Amendment 80 program developed by the Council and section 303(A) of the Magnuson-Stevens Fishery Conservation and Management Act (MSA), a 5-year review of the Amendment 80 program is required to determine progress in meeting the goals of the program and the MSA. A draft work-plan of the 5-year review is attached. The draft work-plan summarizes the specific requirements that a 5-year review be developed, possible issues to examine, and an annotated table of contents of the review. At this meeting, the Council may provide further direction to the analysts on contents of the 5-year review.

# Work-plan for the 5-Year Review of Amendment 80

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## 1 Organization and Overview of the Work-Plan

This document is a draft work-plan for a 5-year review of Amendment 80 (AM80) to the Bering Sea/Aleutian Islands (BSAI) groundfish Fishery Management Plan (FMP).

AM80 was approved by the North Pacific Fishery Management Council (Council or NPFMC) in June of 2006, and enabled the formation of fishery cooperatives for trawl catcher/processors (CPs) that are not eligible under the American Fisheries Act (AFA) to participate in directed pollock fisheries. This group of Trawl CPs is hereafter referred to as the AM80 CPs or the AM80 Sector.

This work-plan is organized into several sections.

- Section 2 summarizes the requirements that a 5-year review of AM80 be developed. The conclusion from Section 2 is that AM80 is a Limited Access Privilege Program (LAPP) and that a 5-year review must be developed. The issues that need to be included in the 5-year review should be drawn from the goals and objectives of AM80 along with the goals, objectives and National Standards of the Magnuson-Stevens Fishery Conservation and Management Act (MSA).
- Section 3 contains four subsections which provide for the basis for inclusion of particular issues within the 5-year review:
  - Section 3.1 examines the stated goals of AM80.
  - Section 3.2 reviews the goals and requirements of LAPPs as stated in the MSA as amended by Congress on January 12, 2007.
  - Section 3.3 examines the MSA National Standards for 5-year review issues.
  - Section 3.4 looks at the Council's June 10, 2006 motion approving AM80 for any additional elements that are candidates for inclusion in the 5-year review.
- Section 4 contains an annotated table of contents that is proposed for the 5-year review based on the elements discussed in Section 3.

The work-plan also has two attachments:

- Attachment 1 is the Council June 10, 2006 motion approving AM80.
- Attachment 2 contains Section 303A of the MSA.

## 2 Requirements for a 5-year Review

The Council's AM80 motion provides the first reference to a 5-year review of AM80. (The Council motion from June 10, 2006 is included as Attachment 1.) Component 6 of the Council motion established PSC allowances of halibut and crab. The language in Component 6 further states that "the halibut and crab PSC levels shall be reviewed by the Council during the fifth year of the program (implemented in 2008) and adjusted as necessary (through the normal amendment process)".

Additional guidance for development of 5-year reviews comes from the MSA. The MSA defines LAPPs in Section 303A. (Attachment 2 contains the full text of Section 303A—elements of the text in the attachment that are particularly relevant to the 5-year review are highlighted.) The requirements for LAPPs are listed in § 303A(c)(1) and include a requirement to ...

(G) include provisions for the regular monitoring and review by the Council and the Secretary of the operations of the program, including determining progress in meeting the goals of the program and this Act, and any necessary modification of the program to meet those goals, with a formal and detailed review 5 years after the implementation of the program and thereafter to coincide with scheduled Council review of the relevant fishery management plan (but no less frequently than once every 7 years);

While the Council did not specifically use the term “LAPP” in their motion approving AM80,<sup>1</sup> it is clear that the Council was creating a program that conveyed harvesting privileges to an exclusive set of vessels, i.e. a LAPP. Further, when the National Marine Fisheries Service (NMFS) developed and approved the regulations implementing AM80 in September 2007, it makes the assertion that the AM80 has the effect of creating a Limited Access Privilege Program (LAPP).

The MSA does contain language at § 303A(i) exempting existing programs from certain LAPP Requirements if the action was approved by the Council no later than 6 months after the enactment date of the amended MSA. While the Council took its final action nearly seven months prior to enactment of the MSA, the MSA requires that LAPPs that are otherwise exempt from LAPP rules, **are not exempt** from the requirement to develop a 5-year review. Specifically, §303A(i)(1)(B) indicates that even though AM80 is exempt from other MSA requirements for LAPPs ...

(B) the program shall be subject to review under subsection (c)(1)(G) of this section not later than 5 years after the program implementation

**For the reasons described above therefore, it is presumed that the MSA guidelines regarding 5-year reviews of LAPPs apply to the AM80 fishery—specifically that a “formal and detailed review” to determine “progress in meeting the goals of the program and this Act” (the MSA) will be required.**

### 3 Issues to Study in the 5-Year Review

In the following sections we examine the stated goals of AM80, language regarding LAPPs in the MSA, the 10 National Standards of the MSA, and finally specific AM80 program components, in order to develop comprehensive list of issues that could be included in the 5-Year review of AM80. The discussion of particular 5-year review issues in this section will be relatively general. Additional details on the assessment of particular issues will be provided in Section 4.

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<sup>1</sup> The term “Limited Access Privilege Program” is not found in any of the draft versions of the EA/RIR/IRFAs developed for Amendment,80, nor was the term contained in Final Secretarial Review version of the EA/RIR/FRFA published on September 7, 2007.

### 3.1 5-Year Review Issues from the Goals of Amendment 80

This section will summarize both stated and implicit goals of AM80 as determined from the September 2007 EA/RIR/FRFA for the Amendment. It is presumed that issues arising from these goals will be addressed in the 5-year review.

In December 2004, the Council approved the following Problem Statement for AM80:

*The Council's primary concern is to maintain a healthy marine ecosystem to ensure the long-term conservation and abundance of the groundfish and crab resources. To this end, the Council is committed to reducing bycatch, minimizing waste, and improving utilization of fish resources to the extent practicable in order to provide the maximum benefit to present generations of fishermen, associated fishing industry sectors, including the CDQ sector, communities, and the nation as a whole, while at the same time continuing to look for ways to further rationalize the fisheries. Focusing on reduction of bycatch and the attendant benefits of cooperatives and CDQ allocations in meeting bycatch reduction objectives are initial steps towards rationalization of the BSAI groundfish fisheries. Bycatch reduction measures for the Non-AFA trawl Catcher Processor sector is a priority focus in this step toward rationalization given this sector's historical difficulty in achieving acceptable bycatch levels. Allocations to this sector associated with cooperative management of catch and bycatch provide the opportunity for participants in this sector to mitigate the cost, to some degree, associated with bycatch reduction. In addition to reducing bycatch in one sector, assurance should be provided to minimize negative impacts on others.*

Six specific goals are articulated in the AM80 Problem Statement. Below we summarize the goal, and indicate briefly whether and how the attainment of goal could be addressed in the 5-year review.

**Goal 1:** To maintain a healthy marine ecosystem to ensure the long-term conservation and abundance of the groundfish and crab resources

*Discussion:* AM80 has led to the near elimination of the race for fish in the BSAI non-pelagic trawl fisheries. No longer forced by the race for fish to maximize catch and revenue per unit of time, participants in these fisheries have been much more amenable to gear changes and other behavioral changes that have reduced negative impacts of non-pelagic trawling on the ecosystem. Examples include the use of modified trawl doors and sweeps, and ongoing experiments with gears modifications and excluders and to reduce bycatch. The 5-year review will review these issues in qualitative manner.

**Goal 2:** To reduce bycatch—this a priority focus of AM80.

*Discussion:* AM80 subdivided the halibut PSC allocation to the trawl sectors; 875 mt are allocated to the BSAI Trawl Limited Access (TLA) sector with the remainder assigned AM80 Sector. AM80 also reduced the total PSC allocated to the trawl sector in general and the AM80 sector in particular. The AM80 Sector was allocated 2,525 mt in 2008, and the amount was reduced 50 mt each year through 2012. In years 2012 and beyond the AM80 PSC allocation of halibut PSC would be 2,325. AM80 also establishes a halibut prohibited species quota (PSQ) for CDQ harvests. The 5-year review will summarize halibut PSC in both the BSAI TLA and AM80 Sectors and in CDQ fisheries for AM80 species.

AM80 also sets an initial AM80 Crab PSQ percentage based on historical usage from 1995 – 2002 in all groundfish fisheries. The crab PSQs have been reduced 5 percent per year from 2009 – 2012, such that by 2012 PSQs for crab species are set at 80 percent of historical

usage. The 5-year review will summarize crab PSC in the BSAI TLA and AM80 Sectors, and in CDQ fisheries for AM80 species. The Crab PSQs under AM80 are abundance based limits. The 5-year review will document Crab PSC limits and use in both the AM80 and BSAI TLA sectors and in CDQ fisheries for AM80 species.

**Goal 3:** Minimize waste and improve utilization to the extent practical.

*Discussion:* Improving retention and utilization of the flatfish species was a major driver of AM80 and will be assessed in the 5-year review. A more detailed discussion of the issue follows the discussion of Goal #6 below.

**Goal 4:** To provide maximum benefit to present generations of fishermen, including CDQ groups, communities, and the nation as a whole.

*Discussion:* The primary benefits of the AM80 fisheries include:

- 1) incomes and employment to vessel owners, operators, crew-members, and CDQ groups;
- 2) income and employment to community members in related industries;
- 3) tax revenues to local and state governments; and
- 4) consumer benefits resulting from the production and supply of seafood products.

The 5-year review will document these benefits to the extent that they can be assessed using existing data, and secondary sources.

**Goal 5:** To further rationalize the fishery as a means to mitigate costs of achieving the goals of bycatch reduction and other program objectives.

*Discussion:* Reducing or eliminating the “race for fish” and its deleterious effects on the AM80 fisheries can be accomplished by rationalizing the fishery. The 5-year review will summarize the extent to which rationalization of AM80 fisheries has occurred. The review will also summarize (at least qualitatively) the benefits (and mitigation of costs) that can be attributed in whole or in part to the rationalization of the fishery.

**Goal 6:** To minimize negative impacts on other fisheries.

*Discussion:* The Council AM80 action included provisions that limit via sideboards the activities of AM80 vessels in the Gulf of Alaska. The 5-year review will include a summary of AM80 vessel activities in the GOA relative to their sideboards.

### **Improved Retention/Improved Utilization in AM80**

Section 1.2 of the EA/RIR/FRFA for AM80 provides a summary of actions leading up to AM80 with an emphasis on the Council’s objectives to improve retention and improve utilization (IR/IU) of the groundfish resources in the BSAI and GOA. In January 1998 NMFS implemented Amendment 49 to the BSAI Groundfish FMP (approved by the Council in September 1996). IR/IU required 100 percent retention of pollock and Pacific cod by all vessels fishing in the BSAI. IR/IU also required retention of all rock sole and yellowfin sole beginning January 1, 2003.

The Council recognized in 2000 that the Non-AFA Trawl CP sector would not be able meet the IR/IU standards for flatfish in the BSAI by 2003. In October 2002, the Council approved Amendment 75 which would delay the implementation of flatfish retention rules until June 2004. NMFS approved the delay, but disapproved of the date, and implemented regulations that removed references regarding rock sole and yellowfin sole with respect to IR/IU. This had the effect of creating an indefinite delay of the IR/IU program for flatfish. In June 2003, the Council approved Amendment 79—Groundfish Retention Standards (GRS)—as a replacement for the

IR/IU program for flatfish. GRS would require individual Non-AFA Trawl CPs, if they were > 125', to meet standards for retention of BSAI groundfish each year. The GRS for 2008 was set at 65 percent and by 2010 it would increase to 80 percent. In 2011 and each subsequent year, the GRS would be set at 85 percent.

In February 2013, NMFS implemented a regulatory amendment that removed the GRS in the BSAI. As part of the regulatory amendment, each AM80 cooperative is required to calculate and relate in its annual cooperative report its annual aggregate groundfish retention rate using the methodology initially established in regulation at § 679.27(j)(3). The additional reporting requirement was intended to provide information on the GRS rates achieved by the AM80 fleet. In addition, each AM80 cooperative must have a third party audit of the cooperatives GRS calculations.

A major goal of AM80 is facilitating bycatch reductions and retention improvements in the H&G trawl CP sector. To this end, it was presumed that multispecies cooperatives could lead to greater retention improvements, and could provide cost effective means for the sector the means to meet the GRS. The regulations implementing AM80 have the effect of superseding regulations proposed for implementation of The GRS. Under AM80 regulations the retention standards set by GRS will still apply to any AM80 cooperative as an aggregate. Vessels that do not join a cooperative must comply with GRS percentages on an individual basis.

With respect to the 5-year review, it is clear an assessment should include an accounting of groundfish retention and utilization based on GRS accounting rules for the years before and after implementation of AM80.

### 3.2 5-Year Review Issues from General Goals for LAPPs as Stated in the MSA

In §303A(c)(1) of the MSA, as amended, establishes requirements for LAPPs including the requirement for a 5-year review for all LAPPs. While AM80 is exempt from all of these requirements, except for the requirement to conduct a 5-year review, it may be reasonable to include assessments of applicable MSA requirements for LAPPs. The full text of §303A of the MSA is found in Attachment 2. The following list of questions summarizes issues derived from language in §303A that appear relevant to a 5-year review.

*Has the LAPP ...*

- 1) promoted capacity reductions?*
- 2) promoted fishing safety?*
- 3) promoted fishery conservation and management?*
- 4) promoted social and economic benefits?*
- 5) precluded attainment of excessive shares*

**Capacity Reductions:** Section 303A(c)(1)(B) addresses the issue of LAPPs role in reducing excess capacity. The 5-year review will provide an assessment of capacity measures for the five years before and after implementation of AM80. Capacity measures will include summaries of the number of vessels operating in AM80 fisheries as well as measures of capacity utilization such as number of actual operating weeks as a percentage of potential operating weeks. The 5-year review will also assess consolidation of the AM80 Sector as well as expansion of operations in the BSAI TLA Sector. The review will examine the effects of consolidation on vessels and

operations that remain in the AM80 fishery and on vessels and operations that are no longer participating.

**Fishing Safety:** Section 303A(c)(1)(C) addresses the issue of LAPP's role in improving fishing safety. While measures of fishing safety are not part of NMFS primary data collection process, it may be possible to assess changes in fishing safety using incident report data from the U.S. Coast Guard. The issue can also be assessed qualitatively based on interviews with vessel owners and operators.

**Fishery Conservation and Management:** Section 303A(c)(1)(C) address the issue of LAPP's role in promoting fishery conservation and management. This goal is considered too broad-based to include as a separate item in the 5-year review. It is likely that this goal can be assessed as an aggregate of other more discrete issues.

**Social and Economic Benefits:** Section 303A(c)(1)(C) address the issue of LAPP's role in promoting social and economic benefits. As with the fishery conservation and management, this goal is considered too broad-based to include as a separate element of the 5-year review. It is likely that this general goal can be assessed as an aggregate of other issues.

**Excessive Shares:** In §303A(c)(5)(D) the MSA addresses the question of excessive shares. AM80 includes provisions to preclude attainment of excessive shares—no person can hold more than 30 percent of the overall allocation to the AM80 Sector, and no vessel may harvest more than 20 percent of the AM80 Sector's total allocation in a given year. Owners or vessels that exceeded these caps in the initial allocation are "grandfathered" at those levels. Because data regarding initial allocations and QS allocations are published by NMFS, and these data report ownership information it is possible to track and report the shares assigned to a single person and to determine whether an excessive ownership share has been attained. However, due to confidentiality restrictions, it appears that the 5-year report will not be able to report on excessive shares of harvest at the vessel level except in a qualitative manner.

### 3.3 5-Year Review Issues Derived From MSA's National Standards

In this section we list the ten National Standards contained in the MSA and discuss whether any add potential issues to the 5-year review that haven't already been addressed.

**National Standard 1** - Conservation and management measures shall prevent overfishing while achieving, on a continuing basis, the optimum yield from each fishery.

*Discussion:* Following implementation of AM80, the Council has taken several additional actions to improve management of the BSAI bottom trawl fisheries. One of these is a proposed Flatfish Flexibility amendment to the BSAI FMP. The amendment addresses concerns that the attainment of the OY for three species of flatfish—rock sole, yellowfin sole, and flathead—could be improved if NMFS implemented the proposed amendment. The fact that the flatfish flexibility issue has arisen provides sufficient reason to address the issues in the 5-year review. The 5-year review will include summaries of harvests of AM80 species relative to TACs as an indicator of progress toward achieving optimum yield.

**National Standard 2** - Conservation and management measures shall be based on the best scientific information available.

*Discussion:* The Council's action in approving AM80 has had meaningful impacts on the use of the best scientific information available.

AM80 expands the amount of “scientific information” collected with its provisions to collect operating cost data in the form of an annual Economic Data Report (EDR) from the operators of all vessels eligible to participate in cooperatives under AM80 (i.e. the AM80 CPs). The 5-year review will examine these data, summarize them to the extent reasonable, and describe the ways that these data have been used.

In addition, any cooperatives that form under AM80 must provide to Regional Administrator of NMFS an Annual AM80 Cooperative Report. The Annual AM80 Cooperative Reports submitted to NMFS are considered confidential by NMFS because among other elements, they include vessel-by-vessel catch and discard information. AM80 Cooperatives have also been providing the Council a “public” version of the Cooperative Reports on a voluntary basis. It is intended that the 5-year review will examine both versions of the cooperative reports and describe in a qualitative manner their contribution to conversation and management of the AM80 fisheries.

While AM80 has increased the amount of “scientific” data that is collected with EDRs and Cooperative Reports, the formation of AM80 cooperatives combined with NMFS standards regarding confidentiality appears to have the potential to compromise the use of the “best scientific information available” in the management of fisheries by the Council. The following bullets summarize the issue:

- 1) NMFS confidentiality and disclosure standards hold that a minimum of three reporting entities must be included in any data point, if it is to be disclosed to the public, e.g. in a Council analysis.
- 2) NMFS has determined that data **submitted by a cooperative** is to be treated as if it is a single entity with respect to confidentiality. (For this reason, vessel-by-vessel catch data reported in an Annual AM80 Cooperative Report is considered Confidential.)
- 3) For catcher processors and the AM80 fishery in general, NMFS treats catch data submitted to the catch accounting system (CAS) as being submitted by the vessel on which the harvest was made, with the exception that vessel level data in a mothership fishery **may** be considered as being submitted by the mothership and not by the harvesting vessels.
- 4) For purposes of disclosure, it appears that NMFS does not have a hard-and-fast rule regarding the interplay between data submitted in one data collection and data submitted in another.

The use of the best available scientific information could be compromised under AM80 if an analyst chooses not to disclose certain data because information submitted in publically available cooperative reports combined with data submitted by the analyst would allow computation of the harvest amount for a single company.

The following example demonstrates the issue.

Data in the Pollock Conservation Cooperative report lists vessel-by-vessel harvests and PSC bycatch of AFA-CPs in the target fishery for yellowfin sole. Since these data are submitted by the cooperative they are considered to be from a single reporting entity. However, it appears that all of the remaining harvests in the BSAI TLA target fishery for yellowfin sole have been submitted by a single mothership operation, a single reporting entity from the disclosure perspective. If the 5-year report provides the total harvest or total halibut bycatch in the BSAI TLA target fishery for yellowfin sole, then using the cooperative report, it may be possible to determine the precise amount that the mothership operation has harvested. On the other hand, if the total halibut bycatch or target fishery amounts in the yellowfin sole

fishery are not reported, then the best available scientific data could not be utilized by the Council in their decision-making process.

In general, the AM80 5-year review are intending to provide information if three or more distinct permit holders submit the information, regardless of the whether “insider” information or anecdotal information would indicate that the distinct permit holders are in fact the same person. Further the 5-year report will presume that cooperatives do not submit CAS system information, and that data in cooperative reports will not influence whether or not CAS data is disclosed in the 5-year report. The analysts are however seeking the advice of the Council and NMFS in this matter.

**National Standard 3:** To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

*Discussion:* Nothing in AM80 changes this aspect of fishery management and therefore nothing related to this standard will appear in the 5-year review.

**National Standard 4:** Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various U.S. fishermen, such allocation shall be (A) fair and equitable to all such fishermen, (B) reasonably calculated to promote conservation, and (C) carried out in such a manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.

*Discussion:* The initial allocation of catch history under AM80 was determined to comply with this standard, and therefore no additional review of the fairness and equity of the allocation would appear to be relevant to a 5-year review. As indicated in Section 3.2 an assessment of excessive shares will be included in the review.

**National Standard 5:** Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources, except that no such measure shall have economic allocation as its sole purpose.

*Discussion:* The 5-year review will examine the question of efficient utilization of the fishery resources in many of the issues already described. For example, the relative efficiency of halibut PSC use would compare the groundfish value per unit of PSC. In addition, the EDR data can be used as an additional element in efficiency assessments. With the EDRs we can assess whether operating costs relative to revenues have changed during the years since implementation of AM80 (2008 – 2012). Since EDRs do not exist for years prior to implementation, alternative measure of operational efficiency will be utilized to compare pre-AM80 efficiency to post AM80 efficiency.

**National Standard 6:** Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

*Discussion:* AM80 contains provisions that allow unused allocations of Atka mackerel and Yellowfin sole to rollover from the BSAI TLA Sector to the AM80 Sector. There are also provisions approved under Amendment 85 to the BSAI FMP to rollover unused Pacific cod allocations among sectors. The 5-year review will summarize rollovers of applicable species.

**National Standard 7:** Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

*Discussion:* This standard does not appear to generate issues relevant to the 5-year review. However, if the Council does wish to examine particular provisions with respect to this standard, the Council should specify the issue(s) of concern.

**National Standard 8:** Conservation and management measures shall, consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities.

*Discussion:* This standard implies that a review of community impacts of AM80 should be included in the 5-year review. AM80 regulations (incorporating changes included in the MSA) increased the amount of CDQ allocations from 7.5 percent of the TAC to 10.7 percent of the TAC for the AM80 species (Atka mackerel, yellowfin sole, rock sole, flathead sole, and Pacific Ocean perch) and for arrowtooth flounder, Greenland turbot in the Bering Sea, and Pacific cod in the BSAI. CDQ allocations for sablefish and pollock are unchanged. AM80 also establishes and allocates a prohibited species quota (PSQ) to CDQs for halibut, crab and Chinook. The 5-year review will include a summary of CDQ harvests of AM80 species, plus arrowtooth and Greenland turbot.

In addition to an assessment of CDQ harvests, this standard implies that the 5-year review should summarize levels of involvement by particular communities important to the AM80 fisheries. For example, all of the AM80 vessels use Dutch Harbor as an operational base. The 5-year review will interview operators to verify this, and then at a minimum provide a qualitative assessment of the interactions between the AM80 fleet and this community. Similarly it appears most of the “headquarters offices” of the AM80 fleet are located in Seattle. This will be verified in the 5-year report and a summary of the types of activities and interactions that occur in Seattle will be summarized.

In addition it may be reasonable to utilize findings from an economic base analysis of the AM80 fleet that is nearing completion. The research is funded by NMFS Alaska Fisheries Science Center (AFSC), and investigators include Dr. Ed Waters an independent consultant from Beaverton OR, Dr. Chang K Seung (AFSC) and Marcus L. Hartley of Northern Economics. The paper uses available economic data from the 2008 – 2010 fisheries to assess direct and multiplier impacts of the AM80 fleet in Alaska, in the Pacific Northwest and in the rest of the US.

**National Standard 9:** Conservation and management measures shall, to the extent practicable, (A) minimize bycatch, and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

*Discussion:* An assessment of bycatch of prohibited species in the AM80 fisheries including harvests of the BSAI TLA sector will be included in the 5-year review. (See the discussion in Section 3.1 above for more details.) In addition to the incidental harvests of prohibited species, the 5-year review will summarize incidental harvest of groundfish species in each AM80 target fisheries.

**National Standard 10:** Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

*Discussion:* This issue can be included in the 5-year review and was addressed previously in Section 3.2 above.

### **3.4 5-Year Review Issues Drawn from the Council's AM80 Motion**

In this sub-section we describe one additional issue that should be included in the 5-year review derived from language in the Councils AM80 motion from June 2006.

#### **The Apportionment of Yellowfin Sole between the AM80 Sector and the BSAI TLA Sector**

Component 3 of the Council's AM80 motion provides a schedule for apportioning the ITAC of yellowfin sole between the AM80 and BSAI TLA Sectors. If the ITAC is greater than 125,000 mt then the AM80 Sector is allocated 60 percent and the BSAI TLA Sector is allocated 40 percent. At ITACs less than 125,000 mt the AM80 sector receives an increasing apportionment. If the ITAC is less than 87,500 mt, the AM80 Sector is allocated 93 percent of the ITAC.

The 5-year review will include an assessment of the effects of the apportionment of the yellowfin sole ITAC between the AM80 and BSAI TLA Sectors. In particular the 5-year review will discuss the re-entry of AFA-CPs into the yellowfin sole fishery, as well as the development of BSAI TLA mothership operations. It should be noted that because of confidentiality issues, the 5-year review will not be able to use data from NMFS Catch Accounting System (CAS) to disclose actual targeted yellowfin sole harvest amounts of the BSAI TLA Sector,<sup>2</sup> nor will it be able to report bycatch of halibut and crab in the fishery. As indicated earlier, NMFS treats vessels that are part of a cooperative as a single operator with respect to confidentiality. Therefore it appears that BSAI TLA harvests of yellowfin sole are made by only two operators: 1) members of the Pollock Conservation Cooperative (aka AFA-CPs); and 2) a single-owner mothership operation.

## **4 Proposed Table of Contents for the 5-Year Review of AM80**

In this section we take the issues raised in the previous section and develop a proposed table of contents for the 5-Year Review. The scope and the amount of detail that could be presented in a 5-year review has the potential to be extensive. The scope of work proposed here is quite broad, but is not exhaustive. It is intended that the review address the issues of concern in a relative straightforward manner, but given constraints on time and budget, the review will not be able to pursue all of the potential avenues from which any given issue could be approached. At this point it is anticipated that the main body of the 5-Year Review of AM80 will comprise approximately 100 pages.

### **o. Executive Summary**

The Executive Summary of the document will be developed so that it can be a "stand-alone" document. It will include summaries of the key finding of the 5-year review.

### **1. Introduction**

The introduction to the 5-year review would contain content similar to that provided in Section 2 and 3 of this work-plan. The introduction, as envisioned, would summarize the requirements to prepare the 5-year review and then step through the goals and objectives of Amendment 80, the

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<sup>2</sup> It may be possible using AFA and AM80 cooperative reports, and other secondary reports that have already been published to calculate and report these amounts.

MSA, and the National Standards to develop the set of issues that are included in the 5-year review.

The introduction would also include a road-map showing the organization of the remainder of the 5-year review. The order of items discussed in the 5-year review will be hierarchical in nature. For example, the Section 2 of the 5-year review will summarize the use and collection of scientific data in the AM80 fisheries. The information provided in this section has implications for almost all of the later sections. Section 3 will examine rationalization and the elimination of the race for fish. Rationalization has implications for discussions in later sections on fishing safety, and the goal to maintain a healthy ecosystem.

It should also be noted that the 5-year review will address the efficient utilization of fishery resources (National Standard 5) in many different sections. For example collection of EDRs, discussed in Section 2, allows the estimation of costs of AM80 harvests. Since harvest cost can be used to assess relative efficiency, Section 2 will contain a discussion related to efficient utilization of fishery resources. Similarly, Section 8 will contain a discussion and assessment of bycatch of halibut and crab in the AM80 fisheries. That section will summarize measures of the relatively efficiency of the use of halibut and crab resources within the AM80 harvest of groundfish.

## **2. The Use and Collection of Scientific Data in AM80 Fisheries**

This section will discuss new data collections under AM80, including economic data reports and Annual AM80 Cooperative reports. The section will also provide a review NMFS rules on the disclosure of scientific data, and the impact those rules may have on the ability of the Council to use the best scientific information available in their management decisions.

### **2.1. A review of disclosure rules and AM80 Cooperative data**

This issue is addressed before any of the others because, as indicated in the discussion of National Standard 2 in Section 3.2 above, disclosure rules have the potential to affect the data available in the 5-year review. It is currently the intent of the analysts to treat disclosure of CAS information independently from data in any of the Annual Cooperative Reports. However, because this is a sensitive and unsettled issue the 5-year review will describe the interpretation of the disclosure rules as they exist at the time of publication of the review.

### **2.2. Review of EDRs**

This section would provide a summary of EDR data and report yearly fleet-wide averages and trends for selected EDR elements. The review would also provide a qualitative summary of at least some of the analyses in which the AM80 EDRs have been used, as well as an assessment of the accuracy and usability of these data.

### **2.3. Review of Annual Cooperative Reports**

This section would summarize information provided in the Annual AM80 Cooperative Reports. The review would encompass the “confidential reports” submitted to NFMS Regional Administrator that include vessel-by-vessel data and the public versions that have been voluntarily supplied to the Council. It is envisioned that the summary would be qualitative in nature, and in particular would assess actual usage of these reports in the management of the AM80 fisheries.

## **3. Rationalization and Elimination of the Race for Fish**

This section of the 5-year review will focus on the rationalization impacts of the AM80. In general AM80 has led to the rationalization and the elimination of the race-for-fish in fisheries for which AM80 vessels have an exclusive allocation. Conversely, the separate allocation of

yellowfin sole for the vessels in the BSAI TLA Sector has led to a new “race-for-sole” between AFA-CPs and new mothership operations.

### **3.1. Rationalization and Consolidation Effects in the AM80 Sector**

In this section, the 5-year review will summarize the transition from a race for fish during the years prior to implementation of AM80; to partial rationalization from 2008 – 2010; and to full rationalization beginning in 2011.

#### **3.1.1. Numbers of Vessels and Owners Participating in the AM80 Fisheries**

In this section, the review will summarize the number of Non-AFA Trawl CP participating in the AM80 fisheries from 2002 – 2012. The review will also track ownership interests and consolidation of operations. Data from permits and the CAS along with interviews of current and past owners will be utilized.

#### **3.1.2. Outcomes for Owners and Crew no Longer Participating in the AM80 Fisheries**

In this section, the review will summarize, to the extent information are readily available, the outcomes for owners, operators and crew-members of vessels that left the fishery during the consolidation. Data from permits and the CAS, along with interviews of past owners and crewmembers, will be utilized.

#### **3.1.3. Capacity and Utilization of Capacity**

In this section, the review will assess the capacity and utilization of AM80 vessels from 2002 – 2012. The focus here will be on the potential capacity to harvest and process fishery resources compared to the actual utilization of that capacity. While there are many potential ways to measure capacity and utilization, the quantitative assessment in the 5-year review proposes to focus on the number of weeks that AM80 vessels reported harvests during the year. Other more qualitative measures will also be explored.

#### **3.1.4. Excess Capacity**

In this section the review will examine the question of excess capacity from the regulatory perspective. The Council’s AM80 motion and implementing regulations at § 679.92(a) state that a single person may not individually or collectively hold or use more than 30 percent of the AM80 Quota Shares (QS) units initially assigned to the AM80 sector. Persons that were initially allocated more than the QS use cap limit are grandfathered in and need not sell their excess QS. Similarly there is an ITAC use cap that limits a single vessel from harvesting more than 20 percent of the combined ITACs of the AM80 groundfish species in a given year.

The 5-year review will examine initial allocations of AM80 QS to persons as well as the QS ownership amounts reported at the beginning of the year. These data are available from NMFS at <http://alaskafisheries.noaa.gov/sustainablefisheries/amds/80/default.htm>. The 5-year review will also examine the question of whether any individual vessel has reached the 20-percent ITAC use cap using CAS data. However, because of disclosure rules it is unlikely that the 5-year review will be able to report actual amounts that have been attained, instead the assessment will be qualitative in nature.

#### **3.1.5. Other Impacts of Rationalization**

In this section, the 5-year review will utilize interviews with owners and operators to summarize other impacts of rationalization. Potential areas of interest include changes in harvesting strategies of vessels and cooperatives as well as the decision processes utilized

to determine harvest strategies. For example, one of the questions that would be addressed in this section would be whether operations have changed their approach to harvesting flathead sole; another might be how the operations determine when to switch from harvesting rock sole with roe to fishing for another species.

### **3.2. Creation of a Race for Yellowfin Sole in the BSAI TLA Sector**

Implementation of AM80 coupled with TACs in excess of 125,000 mt mean that sideboards on yellowfin sole harvests of AFA-CVs and AFA CPs have not been enforced since 2008. Elimination of the sideboards allows the AFA vessels to expand their operations in the yellowfin sole fishery if desired. In addition, at least one company with multiple AM80 CPs has developed a mothership operation that operates in the BSAI TLA sector. Apparently the operation utilizes non-AFA CVs with valid trawl licenses and endorsements to harvest yellowfin sole. The harvests are delivered to the mothership (which is also an AM80 CP, but only when it is harvesting the fish). Because the harvests are made by CVs the harvests are assigned to the BSAI TLA sector.

The 5-year review will provide additional details on these operations, including total yellowfin sole harvests in the target fishery for BSAI yellowfin sole, as well as total halibut and crab bycatch in the target fishery for yellowfin sole.

In any case, the fact that neither the AFA-CPs, or the mothership operation have an exclusive privilege to harvest a predetermined quantity means that the various operations must engage in a race-for-fish, if they want to maximize their revenues from the fishery.

#### **3.2.1. Numbers of vessels and owners participating in the fishery**

This section will summarize the number of non-AM80 vessels that were actively targeting yellowfin sole from 2002 – 2012. The report will also provide a qualitative summary of the other activities in which the active vessels are engaged. As indicated in earlier sections there may be issues with confidentiality in this assessment.

It should be noted that the total catch of yellowfin sole by vessels in the BSAI TLA sector includes incidental harvests of vessels targeting Pacific cod and pollock. There do not appear to be any constraints on reporting total catch of yellowfin sole in the BSAI TLA, but the number of vessels that either targeted yellowfin sole or had incidental harvests of yellowfin sole in the BSAI TLA is likely to be quite high, and is unlikely to be a meaningful measure of capacity.

## **4. Safety in AM80 Fisheries**

The 5-year review will examine the question of fishing vessel safety. The U.S. Coast Guard maintains the Online Incident Investigation Report that provides information regarding maritime incidents investigated by the U.S. Coast Guard under Part D of Title 46 of the U.S. Code. These published reports are limited to reportable marine casualties, as defined in Section 4.05 of Title 46 of the Code of Federal Regulations, that were closed after October 2002. It is believed that the 5-year review can provide a review of incidents from these data that are related to AM80 fisheries. In addition the 5-year review will utilize interviews with owners and operators of AM80 vessels to generate a qualitative assessment of changes in fishing vessel safety that may have occurred under AM80.

## **5. Maintain a Healthy Marine Ecosystem**

This section will discuss gear changes and experimental research into bycatch reductions that have been facilitated by the reduction and elimination of the race for fish following implementation of AM80.

## **6. Attainment of the Optimum Yield and the Ability to Account for Variations and Contingencies**

This section will examine the AM80 fisheries through the lens of National Standard 1 that requires FMPs to achieve optimum yield of fishery resources; and National Standard 6 that requires FMPs to account for variations and contingencies in the use of fishery resources. Information will be developed to compare total harvests from 2002 – 2012 by sector and species (AM80, BSAI TLA and CDQ) to the ABC, TAC, and to each sector apportionment.

In addition, this section will include a discussion of the flatfish flexibility plan that the Council approved in June 2013, along with the potential implications of the plan to aid in achieving optimum yield.

### **6.1. Yellowfin Sole Apportionments and Harvests**

The section would summarize AM80 and BSAI TLA Sector as well as CDQ harvests of yellowfin sole over the 10-year period from 2003 – 2012, consistent with current guidance on the disclosure of CAS data. The section would also include a summary of any rollovers of yellowfin sole from the BSAI TLA Sector to the AM80 Sector.

### **6.2. Harvests of Other Allocated AM80 Species**

This section would summarize AM80 Sector and CDQ harvests of Atka mackerel, Pacific Ocean perch, flathead sole, and rock sole. Total harvests would be compared to ABCs, TACs, while AM80 Sector harvests would be compared to the ITACs, and CDQ harvests would be compared to the CDQ apportionment. The section would also include a summary of rollovers if any have occurred.

### **6.3. Pacific Cod Apportionments**

This section would summarize Pacific cod harvests by sector across each of the Pacific Cod apportionments including the CDQ and fixed gear sectors. Attainment percentages would be calculated and the section would include a summary of rollovers. It should be noted that Amendment 85 to the BSAI FMP altered that allocation percentages of Pacific cod to the various sectors,<sup>3</sup> and included a specific allocation to the AM80 sector. Some of the changes in harvest amounts of Pacific cod after 2007 can be attributed to Amendment 85, but AM80 has also had impacts.

### **6.4. Harvests of flatfish species that are not specifically allocated to the AM80 sector**

This section would summarize total and targeted harvests and attainment levels of flatfish species that are not specifically allocated to the AM80 sector, but which no other trawl sector may target for lack of PSC apportionments. The following species would be examined in this section: 1) arrowtooth flounder; 2) Kamchatka flounder; 3) Alaska plaice; 4) other flatfish; and 5) Greenland turbot.

### **6.5. Sideboards on Expansion in the Gulf of Alaska**

This section will summarize harvests of the AM80 vessels in the Gulf of Alaska (GOA) using CAS data. Currently the intent of the analysts is that information reported in cooperative reports will have no bearing on the disclosure of CAS data used in the 5-year review.

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<sup>3</sup> Amendment 85 was approved by the Council at its April 2006 meeting. The Final Rule implementing the Amendment was published on September 4, 2007.

## **6.6. A Summary of the Flatfish Flexibility Plan**

The flatfish flexibility plan was approved by the Council in June of 2012. The amendment addresses concerns that the attainment of the OY for three species of flatfish—rock sole, yellowfin sole, and flathead—could be improved if NMFS implemented the proposed amendment. The 5-year review will provide a qualitative summary of the amendment.

## **7. Retention and Utilization of Harvested Resources**

This section of the report will summarize total, retained, and discarded catch in the AM80 target fisheries by year from 2002 – 2012. The report will include data on incidental catches of other groundfish with the AM80 target fisheries. The report will also summarize the production by product type and 1<sup>st</sup> wholesale values as a means measuring the utilization of harvested resources. The overall value generated per ton of groundfish harvest by fishery (and over all fisheries) will provide measures of the “efficient use of fishery resources” relative to National Standard 5.

### **7.1. Groundfish Retention Standards**

The 5-year review will include summaries of groundfish retention as measured by the formula used to assess attainment of GRS requirements. These data are reported in the Annual AM80 Cooperative Reports that are voluntarily provided to the Council. In the years prior to formation of the second cooperative (2008 – 2010) calculations of GRS equivalents for the AM80 limited access fleet will be estimated by the analysts, although confidentiality restrictions may preclude release of the estimates.

## **8. Bycatch of halibut and crab in the AM80 and BSAI TLA Sectors**

This section of the AM80 5-year review will summarize PSC of halibut and crab in the AM80 fisheries from 2002 – 2012. It is anticipated that at a minimum total PSC, and PSC rates as a percentage of target catches will be reported for each target fishery. For crab, total PSC and rates will be reported in the various crab bycatch management zone. The review will also include a summary of PSC limits, rollovers of PSC limits, and overall usage of PSC limits. The 5-year report will also include estimates of the 1<sup>st</sup> wholesale value of groundfish products per unit of PSC in each of the AM80 target fisheries.

As mentioned in earlier discussions regarding confidentiality, it may not be possible to report all PSCs in the BSAI TLA Sector in the yellowfin sole target fishery. For yellowfin sole fisheries, it does appear that the 5-year review will be able to provide information for the two sectors combined, but it may not be able to report totals for the BSAI TLA and the AM80 Sectors individually.

## **9. Maximization of Benefits Generated by the AM80 Fishery**

This section will summarize measures of benefits generated by the AM80 fisheries. It is anticipated that calculations of net revenues to AM80 vessels can be provided for the years 2008 - 2012. These would be developed for the fleet as a whole using EDR data and estimates of total 1<sup>st</sup> wholesale value developed in Section 7. Whether or not the 5-year review can provide these estimates will depend of the review of EDR data (see Section 2) and the analyst’s assessment usability and accuracy of the cost data. Concerns and caveats regarding these estimates will be clearly stated.

The section will also report estimates of total employment and payments to labor on AM80 vessels from 2002 - 2012. These estimates will utilize observer reports of crew complements, EDR data and interviews with vessel owners and operators.

## **10. Community Impacts of AM80**

This section will describe in general terms the community impacts of the AM80 fisheries in Dutch Harbor—the community out of which the vessels operate during the fishing year; and in Seattle—the community in which most of the vessels undertake maintenance and shipyard work and the community in which most of the company are based. Additionally, the 5-year review will assess whether other communities in Alaska or the Lower 48 States are affected by activities of the AM80 or the BSAI TLA Sectors. It is known, for example, that the owners of one of the AM80 companies are based Rockland, ME, and that Adak has been utilized by vessels from one or both of these sectors.

This section will also provide estimates of fishery business taxes paid to the State of Alaska by AM80 vessels

### **10.1. Economic Impact Model Results**

This section will summarize estimated economic impacts (multiplier effects) of the AM80 fleet from a soon to be released report funded by the AFSC. Investigators included Dr. Ed Waters an independent consultant from Beaverton OR, Dr. Chang K Seung of AFSC, and Marcus Hartley of Northern Economics. The paper uses EDR from the 2008 – 2010 fisheries in conjunction with a previously developed input/output model to assess direct and multiplier impacts of the AM80 fleet in Alaska, the Pacific Northwest and in the rest of the US.

## Amendment 80 – Council Motion (Final Action) – June 10, 2006

The Council adopts the following components and options for analysis as a Preferred Alternative:

***Issue 1: Sector Allocation of BSAI Non-Pollock Groundfish to the Non-AFA Trawl Catcher Processor Sector and CDQ Program***

**Component 1** Allocate only the following primary target species to the Non-AFA Trawl CP sector: yellowfin sole, rock sole, flathead sole, Atka mackerel, and Aleutian Islands Pacific Ocean perch. Species could be added or deleted through an amendment process.

**Component 2** CDQ allocations for each primary target (Component 1) species in the program shall be removed from the TACs prior to allocation to sectors at percentage amounts equal to 10%

For Amendment 80 species, the reserves would be set at 10% of the TAC and all would be allocated to the CDQ reserves.

CDQ allocations for secondary groundfish species (except Pacific cod) taken incidental in the primary trawl target fisheries shall be removed from the TACs prior to allocation to sectors at percentage amounts equal to 10%.

**Component 3** Identifies the sector allocation calculation (after deductions for CDQs, ICAs, and other existing fishery allocations, i.e., Atka mackerel jig) for the Non-AFA Trawl CP sector. The remaining portion of the primary species TAC included in this program would be allocated to the BSAI trawl limited access fishery.

For purpose of allocation to the Non-AFA Trawl CP sector, each primary species allocation is:

Yellowfin Sole	<u>ITAC (mt)</u>	<u>H&amp;G/Limited Access</u>
	< = 87,500	93% / 7%
	87,500 – 95,000	87.5% / 12.5%
	95,000 – 102,500	82% / 18%
	102,500 – 110,000	76.5% / 23.5%
	110,000 – 117,500	71% / 29%
	117,500 – 125,000	65.5% / 34.5%
	>125,000	60% / 40%

AFA Yellowfin sole sideboards are removed when the Yellowfin sole ITAC is 125,000 mt or greater. Rock Sole 100%

Flathead Sole 100%

Atka Mackerel	98% in 541/EBS and 542, in the first year of the program, decreasing by 2% increments over 4-yr period to 90%. 100% in 543.
AI POP	95% in 541 and 542 in the first year of the program, decreasing to 90% in the second year of the program. 98% in 543.

Allocations would be managed as a hard cap for the H&G sector, and for the Non H&G sector, an ICA would be taken off the top to accommodate incidental bycatch by the non-H&G sector. AFA vessel sideboard amounts will be determined after CDQ reserve amounts are deducted from TAC.

Legal landing means, for the purpose of initial allocation of QS, fish harvested during the qualifying years specified and landed in compliance with state and federal permitting, landing, and reporting regulations in effect at the time of the landing. Legal landings exclude any test fishing, fishing conducted under an experimental, exploratory, or scientific activity permit or the fishery conducted under the Western Alaska CDQ program.

Target species, PSC, and ICA rollover: any unharvested portion of the Amendment 80 target species or unharvested portion of PSC or ICA in the limited access fishery that is projected to remain unused shall be rolled over to vessels that are members of Amendment 80 cooperatives.

Any roll over of halibut PSC to the Non-AFA Trawl CP sector shall be discounted by 5%. That is, if 100 mt of halibut is available for roll over, then 95 mt of halibut would be re-allocated to the Non-AFA Trawl CP sector. Once the initial allocation has been determined, the Non-AFA Trawl CP sector may re-allocate the PSC among the target species.

NMFS shall perform a review on or before May 1 and August 1 each year, and at such other times after August 1 as it deems appropriate. In making its determination, NMFS shall consider current catch and PSC usage, historic catch and PSC usage, harvest capacity and stated harvest intent, as well as other relevant information.

**Component 4** Elements of Component 4 were integrated in Component 3 with selection of percentages.

***Issue 2: PSC Allowance for the Non-AFA Trawl Catcher Processor Sector and the CDQ Program***

**Component 5** Increase PSQ reserves allocated to the CDQ program (except herring, halibut, and Chinook salmon) to levels proportional to the CDQ allocation of primary species under Component 2.

**Component 6** PSC allowances of halibut and crab to the Non-AFA Trawl CP Sector. The halibut and crab PSC levels shall be reviewed by the Council during the fifth year of the program and adjusted as necessary (through the normal amendment process).

***Halibut PSC***

BSAI Trawl limited access sector: 875 mt

Non-AFA Trawl CP sector: 2525 mt initial allocation with a 50 mt reduction in the second, third, fourth and fifth year after program implementation. In the sixth year and

subsequent years, the allocation would be 2325mt unless adjusted. In the third year only, the 50 mt reduction would be reallocation to the CDQ/PSQ reserve program.

*Crab PSC*

Allocation of crab PSC to the non-AFA Trawl CP sector shall be based on the % of historic usage of crab PSC in all groundfish fisheries from 2000-2002 for red king crab (62.48%) and from 1995 to 2002 for opilio (61.44%) and bairdi (zone 1: 52.64% and zone 2: 29.59%) (resulting percentages are reported in the far right column in Table 3-43 May 5, 2006 EA/RIR/IRFA). The initial allocation will be reduced by 5% per year starting in the second year until the Non-AFA Trawl CP sector is at 80% of their initial allocation. Trawl limited access sectors shall receive an allowance of the sum of the combined AFA CV/CP sideboards. (Note – basing usage on a % of annual PSC limits, results in a calculation that is crab abundance based.)

If Amendment 85 is implemented prior to Amendment 80, the Non-AFA Trawl CP sector would receive an allocation of PSC in accordance with Amendment 85. Upon implementation of Amendment 80, no allocation of PSC will be made to the Non-AFA Trawl CP sector under Amendment 85. ).

***Issue 3: Cooperative Development for the Non-AFA Trawl Catcher Processor Sector***

**Component 7** The BSAI non-pollock groundfish CP buyback legislation establishes the vessels eligible to participate as a catcher processor in the BSAI non-pollock groundfish fisheries. The members of the Non-AFA Trawl Catcher Processor subsector are defined as the owner of each trawl CP:

- a.) that is not an AFA Trawl CP
- b.) to whom a valid LLP license that is endorsed for BSAI Trawl CP fishing activity has been issued;
- and
- c.) that the Secretary determines who has harvested with trawl gear and processed not less than a total of 150 mt of non-pollock groundfish during the period January 1, 1997 – through December 31, 2002.

This definition establishes the vessels that can participate in the Amendment 80 program.

Restrict LLPs that are used for eligibility in Amendment 80 (either to be included in the Non-AFA CP sector or to be used in Amendment 80 cooperative formation) from being used outside of the Amendment 80 sector, except that any eligible vessel which is authorized to fish Pollock under the AFA would still be authorized to fish under the statute.

Only history from eligible vessels will be credited in the program. The catch history credited to an eligible vessel will be catch history of that vessel. The catch history credited to an eligible vessel for the first license assigned to that vessel will only be the catch history of the eligible vessel. In the event of the actual total loss or constructive total loss of a vessel, or permanent inability of a vessel to be used in the Program as documented by the vessel owner and NMFS either before or after the qualifying period, the vessel owner may transfer the catch history of the vessel that meets the non-AFA and catch criteria of Component 7 from that vessel to the LLP license that was originally issued for that vessel. Any such license assigned to an eligible vessel will be credited with the catch history during the Component 10 period of the eligible non-AFA trawl CP from which the license arose, except that no history can be assigned to more than one vessel at a given time. Once the catch history has been assigned to the license, that license must be used on an eligible Non-AFA Trawl CP vessel.

**Component 8** Component 8 establishes the number of vessels required before the cooperative is allowed to operate. No later than November 1 of each year, an application must be filed with NOAA fisheries by the cooperative with a membership list for the year.

In order to operate as a cooperative, membership must be comprised of at least three separate entities (using the 10% AFA rule) and must be:

- Option 8.2 At least 30% of the eligible vessels, including LLP licenses with associated catch history for an eligible vessel that has been transferred to that LLP license under Component 7.

**Component 9** Determines the method of allocation of PSC limits and groundfish between the cooperative and eligible Non-AFA Trawl CP participants who elect not to be in a cooperative.

Option 9.1 Catch history is based on total catch

Assign PSC within the sector to allocated target species and Pacific cod based on the average use of PSC in each target species from the years 1998-2004, expressed as a percent of the total PSC allocation to the sector.

Each eligible vessel will then receive an allocation percent of PSC for catch of allocated target species and Pacific cod equal to its proportion of the catch history of the allocated fishery.

This PSC allocation will not change from year to year (i.e., will not fluctuate annually with the TAC).

**Component 10** Determines which years of catch history are used for establishing cooperative allocations. The allocation of groundfish between the cooperative and those eligible participants who elect not to join a cooperative is proportional to the catch history of groundfish of the eligible license holders included in each pool. Applicable PSC limits are allocated between the cooperative and non-cooperative pool in same proportions as those species that have associated PSC limits. The catch history as determined by the option selected under this component would be indicated on the Sector Eligibility Endorsement, which indicates the license holder's membership in the Non-AFA Trawl CP sector. The aggregate histories would then be applied to the cooperative and the non-cooperative pool.

Notwithstanding the qualifying history of the vessel, a qualified vessel that has not fished after 1997 will receive an allocation under the program of no less than:

0.5 percent of the yellowfin sole catch history

0.5 percent of the rock sole catch history

0.1 percent of the flathead sole catch history

For all other qualified vessels, the allocation will be based on 1998 – 2004, but each vessel drops its two lowest annual catches by species during this period.

For AI POP, all vessels will receive their allocation equally in 541, 542 and 543.

Each vessel will receive its historic share of the sector's Atka mackerel allocation based on component 10 (all areas combined). Vessels less than 200' in length having less than 2% of the sector's Atka mackerel history ("Non-mackerel vessels") will receive their allocation distributed by area according to each individual vessel's catch distribution during the component 10 years. The remainder of EBS/541, 542 and 543 sector allocation after "Non-mackerel vessels" have been removed will be allocated to vessels that are greater than 200' in length or have more than 2% of the sector's Atka mackerel allocation ("mackerel vessels"). Mackerel vessels will receive their respective percentages (adjusted to 100%) equally in each area.

In the event that the Non-AFA Trawl CP sector receives an exclusive allocation of Pacific cod, that allocation will be divided between cooperatives and the sector's limited access fishery in the same manner (and based on the same history) as the division of the other allocated species within the sector.

**Component 11** Determines if excessive share limits are established in the Non-AFA Trawl CP sector.

Option 11.2 Consolidation in the Non-AFA Trawl Catcher Processor sector is limited such that no single person (using the individual and collective rule) can hold catch history more than a fixed percentage of the overall sector apportionment history. The cap would be applied on an aggregate basis at 30%, of the sector's allocation).

Suboption 11.2.2 Persons (individuals or entities) that exceed the cap in the initial allocation would be grandfathered based on catch history held at the time of final Council action.

Option 11.3 No vessel shall harvest more than 20% of the entire Non-AFA Trawl CP sector allocation.

Suboption 11.3.1 Vessels that are initially allocated a percentage of the sector allocation that is greater than the vessel use cap shall be grandfathered at their initial allocation based on catch history held at the time of final Council action.

If a buyback program proceeds, any person or vessel that exceeds a cap due to the buyback removing catch history would be grandfathered in at that new level.

**Component 12** Establishes measures to maintain relative amounts of non-allocated species until such time that fisheries for these species are further rationalized in a manner that would supersede a need for these sideboard provisions. Sideboards shall apply to eligible licenses and associated vessels from which the catch history arose.

Option 12.3 In the BSAI, Pacific cod will be managed under existing sector apportionments, with rollovers, until new Pacific cod sector allocations are implemented. Pacific cod will be allocated between the cooperative and non-cooperative sub-sectors based on the same formula as Component 10.

In the BSAI, management of unallocated species should remain status quo. Option 12.4 GOA sideboard provisions

Sideboard provisions for Amendment 80 qualified non-AFA trawl CP sector with valid GOA LLP with appropriate area endorsements are as follows:

Suboption 12.4.1 Vessels associated with LLPs that have Gulf weekly participation of greater than 10 weeks in the flatfish fishery during the years defined in Component 10 will be eligible to participate in the GOA flatfish fisheries.

Suboption 12.4.2 Non-AFA trawl CP vessel(s) that fished 80% of their weeks in the GOA flatfish fisheries from January 1, 2000 through December 31, 2003 will be exempt from GOA halibut sideboards in the GOA. Vessel(s) exempted from Amendment 80 halibut sideboards in the GOA and may participate fully in the GOA open-access flatfish fisheries. Vessel(s) will be prohibited from directed fishing for all other sideboarded species in the GOA (rockfish, Pacific cod, and Pollock). The history of this vessel will not contribute to the Non-AFA Trawl CP sideboards and its catch will not be subtracted from these sideboards.

Suboption 12.4.2.1 Vessel(s) exempted from Amendment 80 GOA sideboards may lease their BSAI Amendment 80 history.

Suboption 12.4.3 Gulf-wide halibut sideboards for the deep and shallow complex fisheries would be established by season based on the actual usage of the Amendment 80 qualified non-AFA trawl sector for the years defined in Component 10. That calculation results in the following percentages, less the percentage attributed to GOA PSC sideboard exempt vessel:

GOA Halibut PSC Sideboard Limits for Non-AFA Trawl CP Sector (as percent of GOA total sideboard limit, ie, 2,000mt in 2006)						
	Season 1	Season 2	Season 3	Season 4	Season 5	Total
Deep Water Trawl Fisheries	2.84%	11.92%	11.60%	n/a	Combined w/shallow water	26.36
Shallow Water Trawl Fisheries	0.85%	1.92%	2.06%	1.73%	5.15%	11.71%

Note: The F/V Golden Fleece data still needs to be deducted from the above table.

Suboption 12.4.4 GOA Pollock, Pacific cod, and directed rockfish species (POP, NR and PSR) sideboards for the Amendment 80 qualified non-AFA trawl CP sector would be established using the years defined in Component 10, where catch is defined as retained catch by Gulf area as a percentage of total retained catch of all sectors in that area.

Suboption 12.4.5 While the CGOA rockfish demonstration program is in place, the CGOA rockfish demonstration program takes precedence. The demonstration program would remove the need for catch sideboards for the CGOA directed rockfish species. The Amendment 80 CPs deep halibut mortality sideboard cap for the

3rd seasonal allowance (in July) will be revised by the amount of the deep complex halibut mortality allocated to the rockfish demonstration program for the Amendment 80 qualified non-AFA trawl CP sector while the demonstration program is in effect.

- Suboption 12.4.6 Sideboards apply to vessels (actual boats) and LLPs used to generate harvest shares that resulted in allocating a percentage of the Amendment 80 species TACs to the non-AFA trawl CP sector. The intent is to prevent double-dipping with respect to GOA history related to sideboards.
- Suboption 12.4.7 On completion of a comprehensive rationalization program in the GOA, any sideboards from the BSAI Amendment 80 plan amendment will be superseded by the allocations in the GOA rationalization program.
- Suboption 12.4.8 GOA PSC and groundfish sideboard limits will be established. An aggregate sideboard limit for each sideboarded species will be established for all vessels subject to sideboards

### ***Other Elements of Amendment 80***

This section provides additional specifics and elements for the Non-AFA Trawl CP cooperative program. These specifics and elements are common for any cooperative program that might be developed.

- The cooperative program developed in Amendment 80 would not supersede pollock and Pacific cod IR/IU programs.
- The Groundfish Retention Standards (GRS) (Amendment 79) would be applied to the cooperative as an aggregate on an annual basis and on those vessels who did not join a cooperative as individuals.
- Non-AFA Trawl CP sector participants that did not elect to join a cooperative would be subject to all current regulations including all restrictions of the LLP and the GRS if approved.
- All qualified license holders participating in the fisheries of the Non-AFA Trawl CP sector for Amendment 80 species would need to have trawl and catcher processor endorsements with general licenses for BSAI and the additional sector eligibility endorsement. Length limits within the license would also be enforced such that any replacement vessel entering the fishery would not exceed the Maximum Length Overall (MLOA) specified on the license.
- Permanent transfers of an eligible vessel, its associated catch history, and its permit would be allowed. Eligible vessels, their associated catch history, and a sector eligibility endorsement would not be separable or divisible. In the event of the actual total loss or constructive total loss of a vessel, or permanent inability of a vessel to be used in the Program, catch history would be attached to the license that

arose from the vessel and would not be separable or divisible. All transfers must be reported to NOAA fisheries in order to track who owns the sector eligibility permit and harvest privileges of a vessel. The purchaser must be eligible to own a fishing vessel under MarAd regulations or any person who is currently eligible to own a vessel.

- Annual allocations to the cooperative will be transferable among Non-AFA Trawl CP cooperative members. Such transfers will not need NOAA Fisheries approval.
- Annual allocations to the cooperative will be transferable among Non-AFA Trawl CP cooperatives. Inter-cooperative transfers must be approved by NOAA Fisheries.
- Any non-trawl or non-BSAI catches by qualified license holders that are considered part of the Non-AFA Trawl CP sector will not be included in the defined cooperative program. In addition, these non-trawl or non-BSAI catches allocated to the Non-AFA Trawl CP sector would not necessarily be excluded from other rationalization programs.
- Catch history used for allocation and eligibility purposes will be legal and documented catch.
- Disposition of groundfish species not allocated to the Non-AFA Trawl CP sector will not change as a result of the cooperative program developed in Amendment 80.
- Bycatch limits for non-specified species or marine resources would not be established. However, if the Council deems that bycatch is unreasonable, specific regulations to minimize impacts would be considered.
- AFA Halibut PSC Sideboard limits will be fixed at the 2006/2007 level. (The intent is to fix the AFA halibut sideboard amounts, in metric tons at the level listed in the 2006/2007 NMFS reports.)
- The allocation of halibut PSC between the AFA trawl CP and trawl CV sector under Amendment 85 will incorporate the reallocation of halibut PSC to the Amendment 80 sector.
- The cooperative(s) would need to show evidence of binding private contracts and remedies for violations of contractual agreements would need to be provided to NOAA Fisheries. The cooperative would need to demonstrate adequate mechanism for monitoring and reporting prohibited species and groundfish catch. Participants in the cooperative would need to agree to abide by all cooperative rules and requirements.
- Specific requirements for reporting, monitoring and enforcement, and observer protocols will be developed in regulations for participants in the Non-AFA Trawl CP sector. These monitoring and enforcement provisions are described in Section 3.3.7 of the April 2006 EA/RIR/IRFA. Revisions to 3.3.7 have been described in March 27, 2006 letter from NMFS to the Council. Modifications to the monitoring and enforcement requirements described in the current version of the EA/RIR/IRFA necessary to accommodate changes in GOA sideboard provisions, or other issues, will be incorporated in the Secretarial review draft of the EA/RIR/IRFA.
- A socioeconomic data collection program as described in section 3.2.12.15 of the May 5, 2006 draft EA/RIR/IRFA for Amendment 80 will be implemented for the non-AFA

trawl CP sector. The program will collect economic data from the non-AFA trawl CP sector similar to the types of cost, revenue, ownership, and employment data included in the draft Cost, Earnings and Employment Survey in Appendix 3 of the May 5, 2006, draft EA/RIR/IRFA prepared for Amendment 80.

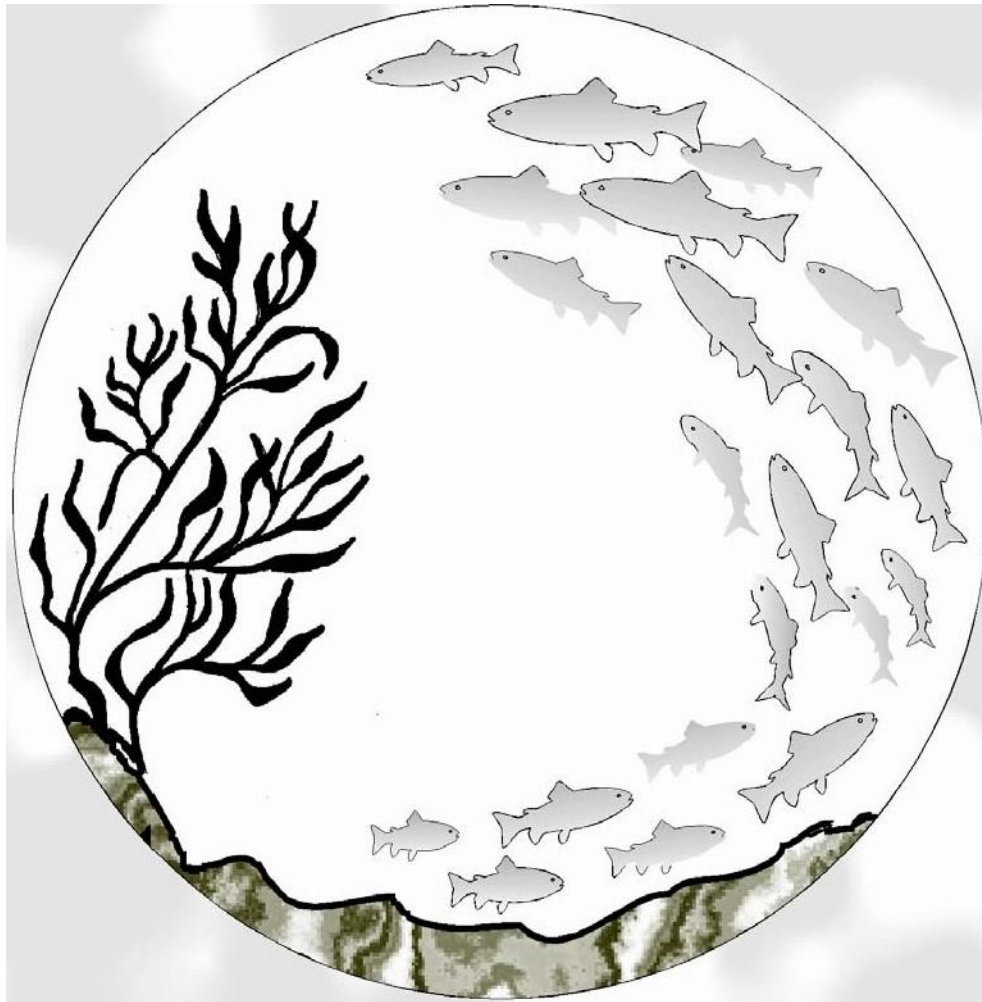
Data will be collected on a periodic basis. The purpose of the data collection program is to understand the economic effects of the Amendment 80 program on vessels or entities regulated by this action, and to inform future management actions. The data is needed to assess whether Amendment 80 addresses some goals in the problem statement to mitigate, to some degree, the costs associated with bycatch reduction. Data will be used by Council and agency staff, recognizing that confidentiality is of extreme importance.

Economic data collected under this program include employment data by vessel collected to determine the labor amounts and costs for the sector. In addition, revenue and cost data by vessel will be collected to evaluate trends in returns to the sector that may be compared with elements of the Amendment 80 program, such as bycatch reduction measures.

Attachment 2



# **Magnuson-Stevens Fishery Conservation and Management Act: Section 303A—Limited Access Privilege Programs**



U.S. DEPARTMENT OF COMMERCE  
National Oceanic and Atmospheric Administration  
National Marine Fisheries Service



P.L. 109-479, sec. 104(b), MSA § 303 note

16 U.S.C. 1853 note

**EFFECTIVE DATES; APPLICATION TO CERTAIN SPECIES.**—The amendment made by subsection (a)(10)<sup>16</sup>—

(1) shall, unless otherwise provided for under an international agreement in which the United States participates, take effect—

(A) in fishing year 2010 for fisheries determined by the Secretary to be subject to overfishing; and

(B) in fishing year 2011 for all other fisheries; and

(2) shall not apply to a fishery for species that have a life cycle of approximately 1 year unless the Secretary has determined the fishery is subject to overfishing of that species; and

(3) shall not limit or otherwise affect the requirements of section 301(a)(1) or 304(e) of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1851(a)(1) or 1854(e), respectively).

**109-479****SEC. 303A. LIMITED ACCESS PRIVILEGE PROGRAMS.****16 U.S.C. 1853a**

(a) **IN GENERAL.**—After the date of enactment of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006, a Council may submit, and the Secretary may approve, for a fishery that is managed under a limited access system, a limited access privilege program to harvest fish if the program meets the requirements of this section.

(b) **NO CREATION OF RIGHT, TITLE, OR INTEREST.**—Limited access privilege, quota share, or other limited access system authorization established, implemented, or managed under this Act—

(1) shall be considered a permit for the purposes of sections 307, 308, and 309;

(2) may be revoked, limited, or modified at any time in accordance with this Act, including revocation if the system is found to have jeopardized the sustainability of the stock or the safety of fishermen;

(3) shall not confer any right of compensation to the holder of such limited access privilege, quota share, or other such limited access system authorization if it is revoked, limited, or modified;

(4) shall not create, or be construed to create, any right, title, or interest in or to any fish before the fish is harvested by the holder; and

(5) shall be considered a grant of permission to the holder of the limited access privilege or quota share to engage in activities permitted by such limited access privilege or quota share.

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<sup>16</sup> Section 104(a)(10) of P.L. 109-479 added section 303(a)(15).

(c) REQUIREMENTS FOR LIMITED ACCESS PRIVILEGES.—

(1) IN GENERAL.—Any limited access privilege program to harvest fish submitted by a Council or approved by the Secretary under this section shall—

(A) if established in a fishery that is overfished or subject to a rebuilding plan, assist in its rebuilding;

(B) if established in a fishery that is determined by the Secretary or the Council to have over-capacity, contribute to reducing capacity;

(C) promote—

- (i) fishing safety;
- (ii) fishery conservation and management; and
- (iii) social and economic benefits;

(D) prohibit any person other than a United States citizen, a corporation, partnership, or other entity established under the laws of the United States or any State, or a permanent resident alien, that meets the eligibility and participation requirements established in the program from acquiring a privilege to harvest fish, including any person that acquires a limited access privilege solely for the purpose of perfecting or realizing on a security interest in such privilege;

(E) require that all fish harvested under a limited access privilege program be processed on vessels of the United States or on United States soil (including any territory of the United States);

(F) specify the goals of the program;

(G) include provisions for the regular monitoring and review by the Council and the Secretary of the operations of the program, including determining progress in meeting the goals of the program and this Act, and any necessary modification of the program to meet those goals, with a formal and detailed review 5 years after the implementation of the program and thereafter to coincide with scheduled Council review of the relevant fishery management plan (but no less frequently than once every 7 years);

(H) include an effective system for enforcement, monitoring, and management of the program, including the use of observers or electronic monitoring systems;

(I) include an appeals process for administrative review of the Secretary's decisions regarding initial allocation of limited access privileges;

(J) provide for the establishment by the Secretary, in consultation with appropriate Federal agencies, for an information collection and review process to provide any additional information needed to determine whether any illegal acts of anti-competition, anti-trust, price collusion, or price fixing have occurred among regional fishery associations or persons receiving limited access privileges under the program; and

(K) provide for the revocation by the Secretary of limited access privileges held by any person found to have violated the antitrust laws of the United States.

(2) WAIVER.—The Secretary may waive the requirement of paragraph (1)(E) if the Secretary determines that—

(A) the fishery has historically processed the fish outside of the United States; and

(B) the United States has a seafood safety equivalency agreement with the country where processing will occur.

(3) FISHING COMMUNITIES.—

(A) IN GENERAL.—

(i) ELIGIBILITY.—To be eligible to participate in a limited access privilege program to harvest fish, a fishing community shall—

(I) be located within the management area of the relevant Council;

(II) meet criteria developed by the relevant Council, approved by the Secretary, and published in the Federal Register;

(III) consist of residents who conduct commercial or recreational fishing, processing, or fishery-dependent support businesses within the Council's management area; and

(IV) develop and submit a community sustainability plan to the Council and the Secretary that demonstrates how the plan will address the social and economic development needs of coastal communities, including those that have not historically had the resources to participate in the fishery, for approval based on criteria developed by the Council that have been approved by the Secretary and published in the Federal Register.

(ii) FAILURE TO COMPLY WITH PLAN.—The Secretary shall deny or revoke limited access privileges granted under this section for any person who fails to comply with the requirements of the community sustainability plan. Any limited access privileges denied or revoked under this section may be reallocated to other eligible members of the fishing community.

(B) PARTICIPATION CRITERIA.—In developing participation criteria for eligible communities under this paragraph, a Council shall consider—

- (i) traditional fishing or processing practices in, and dependence on, the fishery;
- (ii) the cultural and social framework relevant to the fishery;
- (iii) economic barriers to access to fishery;
- (iv) the existence and severity of projected economic and social impacts associated with implementation of limited access privilege programs on harvesters, captains, crew, processors, and other businesses substantially dependent upon the fishery in the region or subregion;
- (v) the expected effectiveness, operational transparency, and equitability of the community sustainability plan; and
- (vi) the potential for improving economic conditions in remote coastal communities lacking resources to participate in harvesting or processing activities in the fishery.

(4) REGIONAL FISHERY ASSOCIATIONS.—

(A) IN GENERAL.—To be eligible to participate in a limited access privilege program to harvest fish, a regional fishery association shall—

- (i) be located within the management area of the relevant Council;
- (ii) meet criteria developed by the relevant Council, approved by the Secretary, and published in the Federal Register;
- (iii) be a voluntary association with established by-laws and operating procedures;
- (iv) consist of participants in the fishery who hold quota share that are designated for use in the specific region or subregion covered by the regional fishery association, including commercial or recreational fishing, processing, fishery-dependent support businesses, or fishing communities;
- (v) not be eligible to receive an initial allocation of a limited access privilege but may acquire such privileges after the initial allocation, and may hold the annual fishing privileges of any limited access privileges it holds or the annual fishing privileges that is [sic]<sup>17</sup> members contribute; and
- (vi) develop and submit a regional fishery association plan to the Council and the Secretary for approval based on criteria developed by the Council that have been approved by the Secretary and published in the Federal Register.

(B) FAILURE TO COMPLY WITH PLAN.—The Secretary shall deny or revoke limited access privileges granted under this section to any person participating in a regional fishery association who fails to comply with the requirements of the regional fishery association plan.

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<sup>17</sup> So in original.

(C) PARTICIPATION CRITERIA.—In developing participation criteria for eligible regional fishery associations under this paragraph, a Council shall consider—

- (i) traditional fishing or processing practices in, and dependence on, the fishery;
- (ii) the cultural and social framework relevant to the fishery;
- (iii) economic barriers to access to fishery;
- (iv) the existence and severity of projected economic and social impacts associated with implementation of limited access privilege programs on harvesters, captains, crew, processors, and other businesses substantially dependent upon the fishery in the region or subregion;
- (v) the administrative and fiduciary soundness of the association; and
- (vi) the expected effectiveness, operational transparency, and equitability of the fishery association plan.

(5) ALLOCATION.—In developing a limited access privilege program to harvest fish a Council or the Secretary shall—

(A) establish procedures to ensure fair and equitable initial allocations, including consideration of—

- (i) current and historical harvests;
- (ii) employment in the harvesting and processing sectors;
- (iii) investments in, and dependence upon, the fishery; and
- (iv) the current and historical participation of fishing communities;

(B) consider the basic cultural and social framework of the fishery, especially through—

- (i) the development of policies to promote the sustained participation of small owner-operated fishing vessels and fishing communities that depend on the fisheries, including regional or port-specific landing or delivery requirements; and
- (ii) procedures to address concerns over excessive geographic or other consolidation in the harvesting or processing sectors of the fishery;

(C) include measures to assist, when necessary and appropriate, entry-level and small vessel owner-operators, captains, crew, and fishing communities through set-asides of harvesting allocations, including providing privileges, which may include set-asides or allocations of harvesting privileges, or economic assistance in the purchase of limited access privileges;

(D) ensure that limited access privilege holders do not acquire an excessive share of the total limited access privileges in the program by—

- (i) establishing a maximum share, expressed as a percentage of the total limited access privileges, that a limited access privilege holder is permitted to hold, acquire, or use; and
- (ii) establishing any other limitations or measures necessary to prevent an inequitable concentration of limited access privileges; and

(E) authorize limited access privileges to harvest fish to be held, acquired, used by, or issued under the system to persons who substantially participate in the fishery, including in a specific sector of such fishery, as specified by the Council.

(6) PROGRAM INITIATION.—

(A) LIMITATION.—Except as provided in subparagraph (D), a Council may initiate a fishery management plan or amendment to establish a limited access privilege program to harvest fish on its own initiative or if the Secretary has certified an appropriate petition.

(B) PETITION.—A group of fishermen constituting more than 50 percent of the permit holders, or holding more than 50 percent of the allocation, in the fishery for which a limited access privilege program to harvest fish is sought, may submit a petition to the Secretary requesting that the relevant Council or Councils with authority over the fishery be authorized to initiate the development of the program. Any such petition shall clearly state the fishery to which the limited access privilege program would apply. For multispecies permits in the Gulf of Mexico, only those participants who have substantially fished the species proposed to be included in the limited access program shall be eligible to sign a petition for such a program and shall serve as the basis for determining the percentage described in the first sentence of this subparagraph.

(C) CERTIFICATION BY SECRETARY.—Upon the receipt of any such petition, the Secretary shall review all of the signatures on the petition and, if the Secretary determines that the signatures on the petition represent more than 50 percent of the permit holders, or holders of more than 50 percent of the allocation in the fishery, as described by subparagraph (B), the Secretary shall certify the petition to the appropriate Council or Councils.

(D) NEW ENGLAND AND GULF REFERENDUM.—

(i) Except as provided in clause (iii) for the Gulf of Mexico commercial red snapper fishery, the New England and Gulf Councils may not submit, and the Secretary may not approve or implement, a fishery management plan or amendment that creates an individual fishing quota program, including a Secretarial plan, unless such a system, as ultimately developed, has been approved by more than 2/3 of those voting in a referendum among eligible permit holders, or other persons described in clause (v), with respect to the New England Council, and by a majority of those voting in the referendum among eligible permit holders with respect to the Gulf Council. For multispecies permits in the Gulf of Mexico, only those participants who have substantially fished the species proposed to be included in the individual fishing quota program shall be eligible to vote in such a referendum. If an individual fishing quota program fails to be approved by the requisite number of those voting, it may be revised and submitted for approval in a subsequent referendum.

(ii) The Secretary shall conduct a referendum under this subparagraph, including notifying all persons eligible to participate in the referendum and making available to them information concerning the schedule, procedures, and eligibility requirements for the referendum process and the proposed individual fishing quota program. Within 1 year after the date of enactment of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006, the Secretary shall publish guidelines and procedures to determine procedures and voting eligibility requirements for referenda and to conduct such referenda in a fair and equitable manner.

(iii) The provisions of section 407(c) of this Act shall apply in lieu of this subparagraph for an individual fishing quota program for the Gulf of Mexico commercial red snapper fishery.

(iv) Chapter 35 of title 44, United States Code, (commonly known as the Paperwork Reduction Act) does not apply to the referenda conducted under this subparagraph.

(v) The Secretary shall promulgate criteria for determining whether additional fishery participants are eligible to vote in the New England referendum described in clause (i) in order to ensure that crew members who derive a significant percentage of their total income from the fishery under the proposed program are eligible to vote in the referendum.

(vi) In this subparagraph, the term ‘individual fishing quota’ does not include a sector allocation.

(7) TRANSFERABILITY.—In establishing a limited access privilege program, a Council shall—

(A) establish a policy and criteria for the transferability of limited access privileges (through sale or lease), that is consistent with the policies adopted by the Council for the fishery under paragraph (5); and

(B) establish, in coordination with the Secretary, a process for monitoring of transfers (including sales and leases) of limited access privileges.

(8) PREPARATION AND IMPLEMENTATION OF SECRETARIAL PLANS.—This subsection also applies to a plan prepared and implemented by the Secretary under section 304(c) or 304(g).

(9) ANTITRUST SAVINGS CLAUSE.—Nothing in this Act shall be construed to modify, impair, or supersede the operation of any of the antitrust laws. For purposes of the preceding sentence, the term ‘antitrust laws’ has the meaning given such term in subsection (a) of the first section of the Clayton Act, except that such term includes section 5 of the Federal Trade Commission Act to the extent that such section 5 applies to unfair methods of competition.

(d) AUCTION AND OTHER PROGRAMS.—In establishing a limited access privilege program, a Council shall consider, and may provide, if appropriate, an auction system or other program to collect royalties for the initial, or any subsequent, distribution of allocations in a limited access privilege program if—

(1) the system or program is administered in such a way that the resulting distribution of limited access privilege shares meets the program requirements of this section; and

(2) revenues generated through such a royalty program are deposited in the Limited Access System Administration Fund established by section 305(h)(5)(B) and available subject to annual appropriations.

(e) COST RECOVERY.—In establishing a limited access privilege program, a Council shall—

(1) develop a methodology and the means to identify and assess the management, data collection and analysis, and enforcement programs that are directly related to and in support of the program; and

(2) provide, under section 304(d)(2), for a program of fees paid by limited access privilege holders that will cover the costs of management, data collection and analysis, and enforcement activities.

(f) CHARACTERISTICS.—A limited access privilege established after the date of enactment of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 is a permit issued for a period of not more than 10 years that—

(1) will be renewed before the end of that period, unless it has been revoked, limited, or modified as provided in this subsection;

(2) will be revoked, limited, or modified if the holder is found by the Secretary, after notice and an opportunity for a hearing under section 554 of title 5, United States Code, to have failed to comply with any term of the plan identified in the plan as cause for revocation, limitation, or modification of a permit, which may include conservation requirements established under the plan;

(3) may be revoked, limited, or modified if the holder is found by the Secretary, after notice and an opportunity for a hearing under section 554 of title 5, United States Code, to have committed an act prohibited by section 307 of this Act; and

(4) may be acquired, or reacquired, by participants in the program under a mechanism established by the Council if it has been revoked, limited, or modified under paragraph (2) or (3).

## (g) LIMITED ACCESS PRIVILEGE ASSISTED PURCHASE PROGRAM.—

(1) IN GENERAL.—A Council may submit, and the Secretary may approve and implement, a program which reserves up to 25 percent of any fees collected from a fishery under section 304(d)(2) to be used, pursuant to section 53706(a)(7) of title 46, United States Code, to issue obligations that aid in financing—

(A) the purchase of limited access privileges in that fishery by fishermen who fish from small vessels; and

(B) the first-time purchase of limited access privileges in that fishery by entry level fishermen.

(2) ELIGIBILITY CRITERIA.—A Council making a submission under paragraph (1) shall recommend criteria, consistent with the provisions of this Act, that a fisherman must meet to qualify for guarantees under subparagraphs (A) and (B) of paragraph (1) and the portion of funds to be allocated for guarantees under each subparagraph.

(h) EFFECT ON CERTAIN EXISTING SHARES AND PROGRAMS.—Nothing in this Act, or the amendments made by the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006, shall be construed to require a reallocation or a reevaluation of individual quota shares, processor quota shares, cooperative programs, or other quota programs, including sector allocation in effect before the date of enactment of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006.

## (i) TRANSITION RULES.—

(1) IN GENERAL.—The requirements of this section shall not apply to any quota program, including any individual quota program, cooperative program, or sector allocation for which a Council has taken final action or which has been submitted by a Council to the Secretary, or approved by the Secretary, within 6 months after the date of enactment of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006, except that—

(A) the requirements of section 303(d) of this Act in effect on the day before the date of enactment of that Act shall apply to any such program;

(B) the program shall be subject to review under subsection (c)(1)(G) of this section not later than 5 years after the program implementation; and

(C) nothing in this subsection precludes a Council from incorporating criteria contained in this section into any such plans.

(2) PACIFIC GROUND FISH PROPOSALS.—The requirements of this section, other than subparagraphs (A) and (B) of subsection (c)(1) and subparagraphs (A), (B), and (C) of paragraph (1) of this subsection, shall not apply to any proposal authorized under section 302(f) of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 that is submitted within the timeframe prescribed by that section.

MSA §§ 303A note, 304

**P.L. 109-479, sec. 106(e), MSA § 303A note**

**16 U.S.C. 1853a note**

**APPLICATION WITH AMERICAN FISHERIES ACT.**—Nothing in section 303A of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.), as added by subsection (a) [P.L. 109-479], shall be construed to modify or supersede any provision of the American Fisheries Act (46 U.S.C. 12102 note; 16 U.S.C. 1851 note; et alia).

**P.L. 104-297, sec. 108(i), MSA § 303 note**

**EXISTING QUOTA PLANS.**—Nothing in this Act [P.L.104-297] or the amendments made by this Act shall be construed to require a reallocation of individual fishing quotas under any individual fishing quota program approved by the Secretary before January 4, 1995.

## SEC. 304. ACTION BY THE SECRETARY

16 U.S.C. 1854

### 104-297

#### (a) REVIEW OF PLANS.—

(1) Upon transmittal by the Council to the Secretary of a fishery management plan or plan amendment, the Secretary shall—

(A) immediately commence a review of the plan or amendment to determine whether it is consistent with the national standards, the other provisions of this Act, and any other applicable law; and

(B) immediately publish in the Federal Register a notice stating that the plan or amendment is available and that written information, views, or comments of interested persons on the plan or amendment may be submitted to the Secretary during the 60-day period beginning on the date the notice is published.

(2) In undertaking the review required under paragraph (1), the Secretary shall—

(A) take into account the information, views, and comments received from interested persons;

(B) consult with the Secretary of State with respect to foreign fishing; and

(C) consult with the Secretary of the department in which the Coast Guard is operating with respect to enforcement at sea and to fishery access adjustments referred to in section 303(a)(6).

(3) The Secretary shall approve, disapprove, or partially approve a plan or amendment within 30 days of the end of the comment period under paragraph (1) by written notice to the Council. A notice of disapproval or partial approval shall specify—

(A) the applicable law with which the plan or amendment is inconsistent;

(B) the nature of such inconsistencies; and

(C) recommendations concerning the actions that could be taken by the Council to conform such plan or amendment to the requirements of applicable law.

If the Secretary does not notify a Council within 30 days of the end of the comment period of the approval, disapproval, or partial approval of a plan or amendment, then such plan or amendment shall take effect as if approved.



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

605 W. 4th Ave. Suite 306  
Anchorage, AK 99501  
(907) 271-2809  
Fax (907) 271-2817

## Action Memo Text

**File Number:**Cons 13-006

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**Agenda Date:** 12/9/2013

**Agenda Number:** D-4

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

Ecosystem Committee

**ESTIMATED TIME:**

8 hours (all Other Issues)

**ACTION REQUIRED:**

Ecosystem Committee report on EBFM/EBM

**BACKGROUND:**

At the October 2013 meeting, the Council concurred with an Ecosystem Committee recommendation to develop an ecosystem vision statement, which was reached during the Committee's September workshop. The Council tasked the Committee with further work to consider the relative merits of two options: refining its current management practice into a cohesive ecosystem-based fishery management policy statement, or developing a more comprehensive ecosystem-based management statement. The Committee was also asked to identify potential implementation plans for each approach. The Ecosystem Committee will be meeting on December 10, 2013, and minutes will be distributed during the meeting.



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**Cons 13-004

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**Agenda Date:** 12/9/2013

**Agenda Number:** D-5

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

~~Review EFP for Electronic Monitoring~~ (POSTPONED)

**ESTIMATED TIME:**

8 hours (all Other Issues)

**ACTION REQUIRED:**

**BACKGROUND:**



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

605 W. 4th Ave. Suite 306  
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## Action Memo Text

**File Number:**HAL 13-006

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**Agenda Date:** 12/9/2013

**Agenda Number:** D-6

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**

IFQ Implementation Committee report

**ESTIMATED TIME:**

8 hours (all Other Issues)

**ACTION REQUIRED:**

Receive IFQ Implementation Committee report and take action as necessary.

**BACKGROUND:**

The Council scheduled a meeting of the IFQ Implementation Committee on Monday, December 9, 2013 to review: 1) a May 2013 discussion paper on increasing the use caps for sablefish "A" (freezer vessel) QS and identify other approaches to maximize use of all sablefish IFQs (**Item D-6(a)**); 2) two proposals previously submitted to the Council to revise Federal regulations to a) calculate maximum retainable allowances at the time of offload rather than during a fishing trip, as currently required (submitted by the Petersburg Vessel Owners Association); and b) increase the halibut and sablefish IFQ vessel caps, as the amount of IFQs each vessel may harvest has declined over time under lower catch limits (submitted by Kodiak Vessel Owners Association, **Item D-6(b)**). A fourth agenda item is to review a proposal to allow clean-up of IFQ trips in multiple regulatory areas as regulatory amendment to the observer program or the IFQ program based on NMFS advice (**Item D-6(c)**).

The committee report will be available during the meeting.

**DISCUSSION PAPER**  
**AMEND THE SABLEFISH CATEGORY A (FREEZER LONGLINER) USE CAP**  
**May 31, 2013**

**INTRODUCTION** The North Pacific Fishery Management Council (Council) called for proposals to amend the commercial halibut/sablefish Individual Fishing Quota (IFQ) Program during summer 2009. The IFQ Implementation Committee convened in November 2009 to review IFQ proposals and recommended that several proposals be advanced for consideration by the Council<sup>1</sup>. The committee reconvened in February 2010 to consider a few late proposals. The Council then recommended that five proposals from the committee recommendations be developed into analyses for Council action. The Council forwarded preferred alternatives for five proposed actions<sup>2</sup> in 2011 and 2012 to NMFS for approval and implementation. Final action was taken on one new proposal<sup>3</sup> in 2013.

In April 2012, the Council also adopted the priorities recommended by the committee on developing four proposals into discussion papers prior to deciding whether to initiate an analysis for potential action. The Council directed that staff prepare the discussion papers as time was available after other higher Council priorities<sup>4</sup>. In April 2013, the Council recommended that the International Pacific Halibut Commission proceed with considering a proposed action based on an expanded discussion paper<sup>5</sup> and the request for another paper<sup>6</sup> was withdrawn by its proposers.

Two proposed discussion papers remain from the 2009 proposal cycle. A separate discussion paper, which also will be reviewed at the Council's June 2013 meeting, reviews information to allow the use of pots to harvest sablefish IFQs in the Gulf of Alaska. Additional proposals have been submitted since 2009 but the Council has deferred consideration of them to the next, as yet unspecified, proposal cycle in order to address current issues and allow staff to promulgate the required Federal regulations.

The proposal addressed in this discussion paper would amend the sablefish IFQ program to revise Category A share use caps; a previous status report on this proposal indicated that perhaps three QS holders would benefit under this proposal. Additional data is reported later in the paper. In April 2013, the Council considered another proposal to increase sablefish IFQs for all QS holders under changes to the sablefish harvest specification process; additional information from the sablefish industry was requested for October 2013.

*Summary: The Council may choose to identify next steps for this proposal at this meeting. To initiate an analysis, the Council's first step is to adopt a statement of purpose and need for the action (problem statement) and alternatives for analysis. The committee recommended the following options if the Council chose to request an analysis: 1.25% to 1.5% of the current use cap. Several implementation issues are raised in the paper for Council consideration.*

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<sup>1</sup> <http://www.alaskafisheries.noaa.gov/npfmc/halibut/sablefish-ifq-program.html>

<sup>2</sup> 1) Revise CQE vessel use caps (October 2011); 2) Allow Area 3A CQEs to purchase category D halibut QS; 3) Set control date for hired skipper program (April 2011); 4) Allow IFQ from category D QS to be fished on Category C vessels in Area 4B (April 2012); and 5) Establish a CQE Program in Area 4B (February 2012).

<sup>3</sup> Allow CQE communities to purchase any size block of halibut and sablefish QS (April 2013)

<sup>4</sup> During the same period, Council staff also organized a halibut bycatch workshop, and prepared analyses of GOA FMP Amendment 95 to reduce halibut bycatch in groundfish fisheries and a revised Area 2C and Area 3A Halibut Catch Sharing Plan.

<sup>5</sup> Allow IFQ halibut to be retained in IFQ sablefish pots in Area 4A.

<sup>6</sup> reasons for unharvested halibut IFQ in Area 4.

**APRIL 2012 COUNCIL MOTION**

**Initiate a discussion paper for removal of the block system for sablefish A shares and increase in the sablefish A share only cap. The A share exemption, would be from the overall sablefish use cap (no catcher vessel QS onboard) and regardless of whether the sablefish harvest was processed. The discussion paper should explore adding a use cap increase to the BSAI**

The proposal by Clipper Seafoods is intended to relieve restrictions on consolidation for all sablefish freezer category (A) quota shares in each of the sablefish regulatory areas in the Gulf of Alaska, Bering Sea, and Aleutian Islands (Appendix 1).

From *IFQ Implementation Team* minutes,

*“Dave Little, Clipper Seafoods, presented his proposal to remove Category A shares from the block program and allow an exception to the sablefish vessel cap for A category shares. The intent of the proposal is to address stranded QS, which can not be transferred by interested parties due to the cap and is not being fully harvested under the current program. Dave suggested that the use cap for sablefish could be set at 5% for Category A shares.*

*Kris Norosz observed that increasing the cap fivefold would be a significant departure from the original program.*

*a) Motion: Recommend that the Council consider removing the block program for sablefish A shares.*

*Failed 3:7:1*

*Bob Alverson recommended that the Council consider exempting Category A shares for the all area use cap at a range between 1.25% and 1.5% of the existing cap for vessels upon which ONLY A shares are fished and regardless of whether harvest was processed. His proposal was for another \$400K gross. Paul Peyton supported the motion; he observed that it would take 2 ¾ percent of the limits to make CDQ vessels economical. He noted that only about 50% of the sablefish (Category A) TAC has been harvested under the current program.*

*b) Motion: Recommend that the Council consider exempting A shares from the overall sablefish use cap and apply a use cap at between 1.25% to 1.5% of the current use cap for vessels that ONLY fish A shares (no catcher vessel QS onboard) and regardless of whether the sablefish harvest was processed.*

*Passed 9:2*

An interagency staff group commented that enforcement of use caps is problematic.

The AP took no action on this proposal.

In February 2010 the Council adopted the motion as noted above. Staff assumes that the committee recommendation for a range of options to analyze for increasing the Category A share cap is included in the Council motion (i.e., 1.25% to 1.5% of the current use cap for vessels that ONLY fish A shares (no catcher vessel QS onboard) and regardless of whether the sablefish harvest was processed for IFQs and CDQs in all areas (cumulatively). In December 2012, the proposer reiterated his interest in Council consideration of this proposal.

## DISCUSSION

This management issue is driven by a Council policy to minimize consolidation of the fishery (National Standard 4 ~ Allocations should be fair and equitable, promote conservation, and *prevent excessive shares*) while achieving optimal yield of the resource (National Standard 1). The IFQ regulations limit the amount of QS that a person may hold (QS Use Caps). The Council is interested in exploring several potential management solutions to the stated problem of some initial recipients of sablefish QS vessel category A shares who are capped for their maximum holdings, which already may exceed the cap under a “grandfather” exemption, when much QS are “stranded” in the hands of holders who are not fishing their IFQs. Potential solutions include: 1) exempt A shares from block program (but keep the use cap) (note that a motion to this effect by the IFQ Implementation Committee failed); 2) exempt A shares from the use cap; or 3) adopt a sablefish use cap for A shares. Under a separate management initiative that was reviewed by the Council in an April 2013 discussion paper, the Council also may consider reapportioning unused trawl sablefish TAC to the fixed gear (i.e., IFQ) sector either 1) using existing management authority under the harvest specification process or 2) through an amendment to the fishery management plans.

Table 1 identifies the two use caps for the sablefish IFQ fishery for all vessel categories and management areas combined. Note the QS use caps are constant, based on the 1996 QSPs. QS use caps are determined “individually and collectively;” that is, by QS held in a person’s name, plus a part of QS held by any entity in which the person is an owner (collectively). Table 2 identifies the quota share pool units, 2013 IFQ allocations (quotas) by area, and their ratio (used later in Table 5). Table 3 illustrates the 2012 sablefish landings by management area; the GOA has a greater percentage of allocation that is landed (91 percent) compared to the BS (54%) and AI (67%).

Table 1. Quota share use caps<sup>a</sup> (Source: RAM)

Species	Applicants %	Size of Relevant	QS Use Cap
Sablefish <sup>b</sup>	1% of Sablefish SE QSPs	68,848,467 QS units	688,485 QS units
	1% of All Sablefish QSPs	322,972,132 QS units	3,229,721 QS units

<sup>a</sup> Vessel IFQ caps are calculated on the IFQ TACs only; CDQ TACs are not included in the calculations.

<sup>b</sup> Halibut weights are in net (headed and gutted) pounds, and sablefish weights are in round pounds.

Table 2. 2013 Sablefish quota share pools and IFQ Total Allowable Catches (Source: RAM)

Sablefish Area	Quota Share Pool (units)	IFQ Pounds TAC	Ratio QS:IFQ
AI	31,932,492	2,830,706	11.28
BS	18,765,280	1,393,307	13.47
CG	111,686,622	9,770,787	11.43
SE	66,120,619	7,032,674	9.40
WG	36,029,579	3,086,440	11.67
WY	53,266,430	3,899,937	13.66
<b>All GOA</b>	<b>317,801,022</b>	<b>28,013,851</b>	<b>11.34</b>

Table 3. Sablefish landings in 2012 by management area.

<b>Sablefish Management Area</b>	<b>Vessel Landings</b>	<b>Total Catch Pounds</b>	<b>Allocation Pounds</b>	<b>Remaining Pounds</b>	<b>Percent Landed</b>
AI	109	1,806,117	2,710,776	904,659	67
BS	159	1,060,884	1,966,503	905,619	54
CG	656	9,762,447	10,158,797	396,350	96
SE	608	6,878,168	6,995,196	117,028	98
WG	202	2,806,219	3,139,350	333,131	89
WY	236	4,237,514	4,356,290	118,776	97
<b>Total</b>	<b>1,970</b>	<b>26,551,349</b>	<b>29,326,912</b>	<b>2,775,563</b>	<b>91</b>

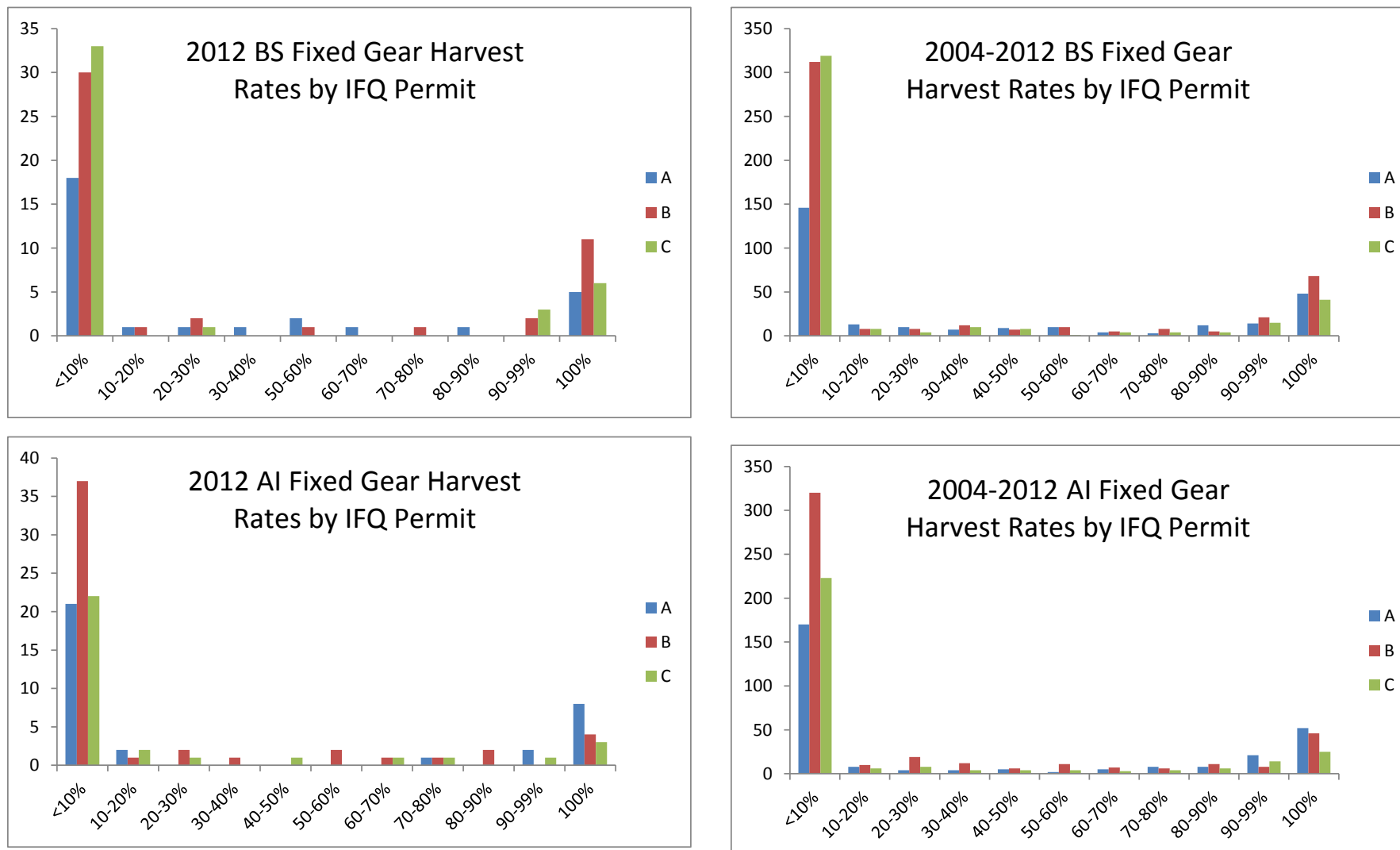
Figure 1 indicates that only a small portion of QS holders are limited by the current use cap; the percent landed of the BS and AI allocation is well below 100% for all QS holders, while the GOA is closer to 90% of the allocation(s). For example, only 3 IFQ holders in the BS are at or over the sablefish use cap from direct QS holdings (3,229,721 QS units); two hold category A QS and one holds category B QS. CDQ holders, who are allocated 20% of the 50% BS fixed gear sablefish apportionment, also do not all attain their entire allocations. The data also show a high percentage and number of IFQ permit holders with very low holdings and rates of harvest to their holdings.

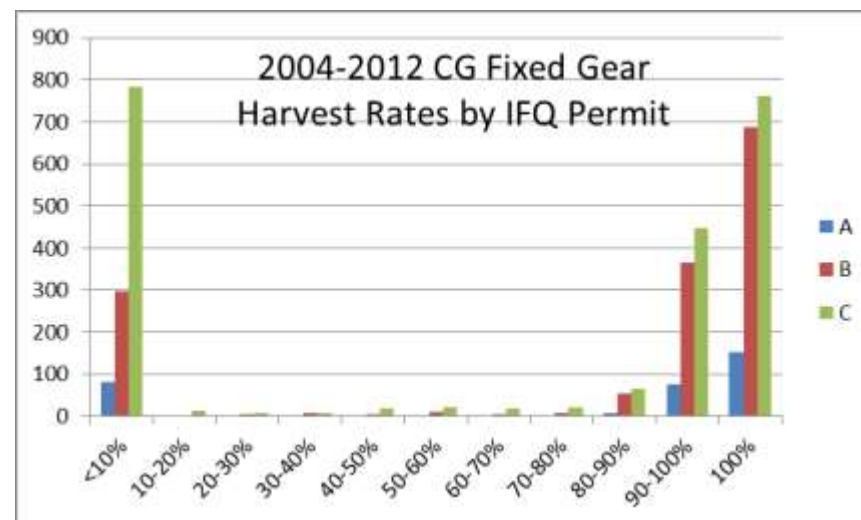
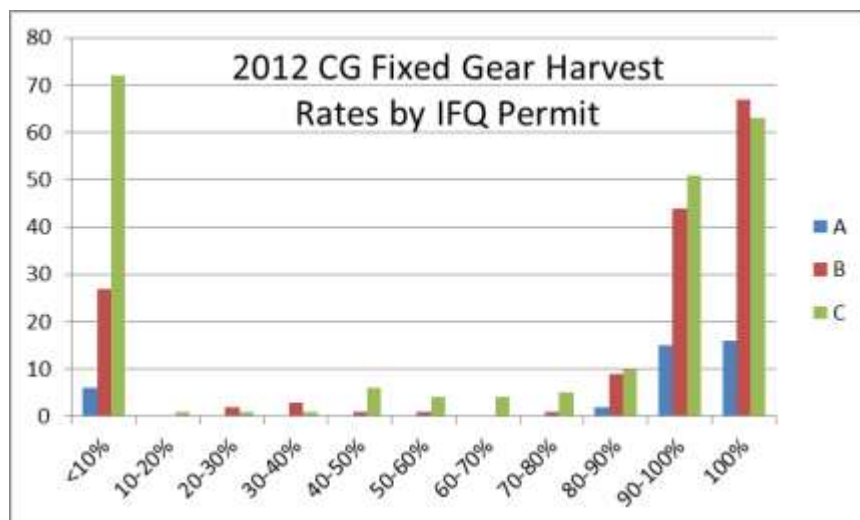
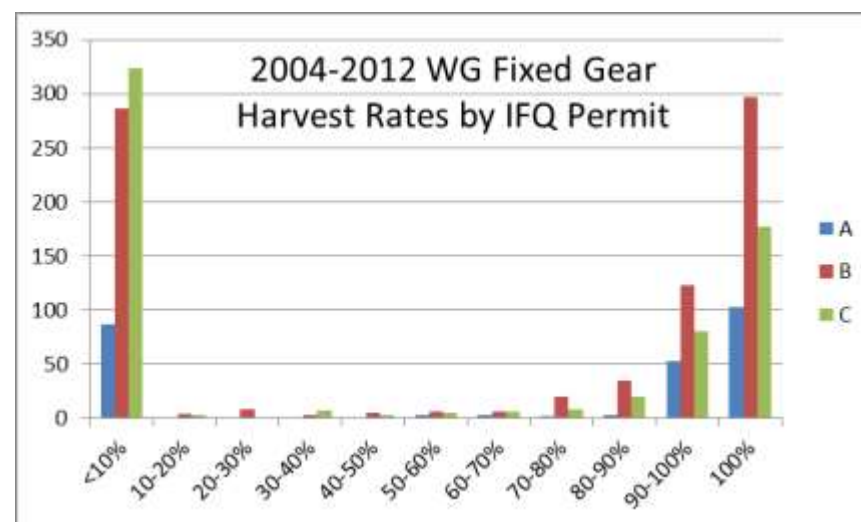
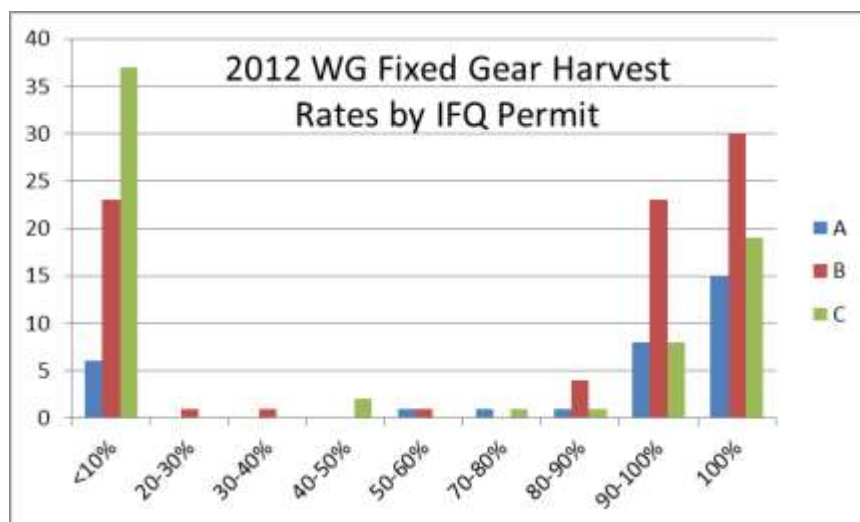
Table 4 reports the percentage of allocations landed by all IFQ permit holders each year between 2004 and 2012 by vessel category and management area. The data indicate that none of the categories are close to landing all their allocations as a whole. However, when that data (same as used in the figure) are examined by permit holder several can be identified as being limited by the use cap; however initial sablefish QS recipients may have been grandfathered at amounts that exceed the use cap. Note that the use cap is cumulative across all sablefish management areas and vessel categories, but the quota share pool and quota are only set by area. Therefore the effect of increasing the use cap will have differential effects by area. And sablefish QS holders may hold IFQ in multiple areas. Table 5 illustrates the potential *maximum* effects of amending the sablefish use cap in pounds for *Category A QS only* (i.e., all QS holdings were Category A QS) and *if all holdings were held in one area*. *It is unlikely that all Category A QS holders would avail themselves of the proposed higher caps*. Table 6 applies the average ex-vessel price per pound for sablefish by management area, as reported by NMFS RAM Division to report a rough estimate of the dollar value associated with the proposed use caps. The same caveats apply, i.e., this assumes all QS are Category A, all holdings are in one area, and not all QS holders would transfer QS to the maximum use cap.

*Intuitively, removing category A sablefish QS from the current (all area) use cap would increase the remaining use cap on Category B and C QS, unless the Council adjusts it downward to reflect that it would cover only the two catcher vessel categories (B and C), instead of the original three categories. A simpler solution that would not affect other QS holders would be to remove the block program for the A shares; however additional analysis likely could indicate that the block program is not as limiting as the use cap and that even exempting A shares from the block program would not allow sufficient increases in QS holdings to meet Council objectives for the action to warrant the regulatory amendment.. Further the IFQ Implementation Committee did not support a motion to exempt A shares from the block program.*

*The proposal also contains two elements that may be problematic. It states a requirement that only A QS be “onboard” the vessel for any change to management of Category A QS. This could result in enforcement difficulty in identifying **when** the A shares exemption would be in effect since both vessel owners and crew may hold fished or unfished catcher vessel QS coincident with Category A QS. Further, an A QS exemption from the use cap “**regardless of whether the sablefish harvest was processed**” would be treated as an underlying assumption in the analysis and not as a decision point. In moving this proposal forward for analysis, the Council should articulate the problem that it wishes to address.*

Figure 1. Comparison of harvest rate of sablefish IFQs relative to use cap by IFQ permit holder for the Bering Sea, Aleutian Islands, and Gulf of Alaska (by subarea) for 2012 (left) and 2004-2012 (right) (Source: AKFIN from RAM data)





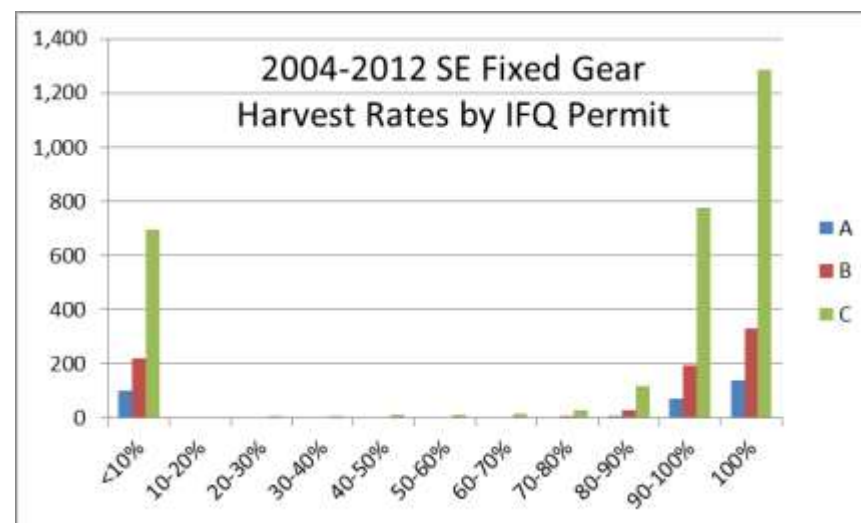
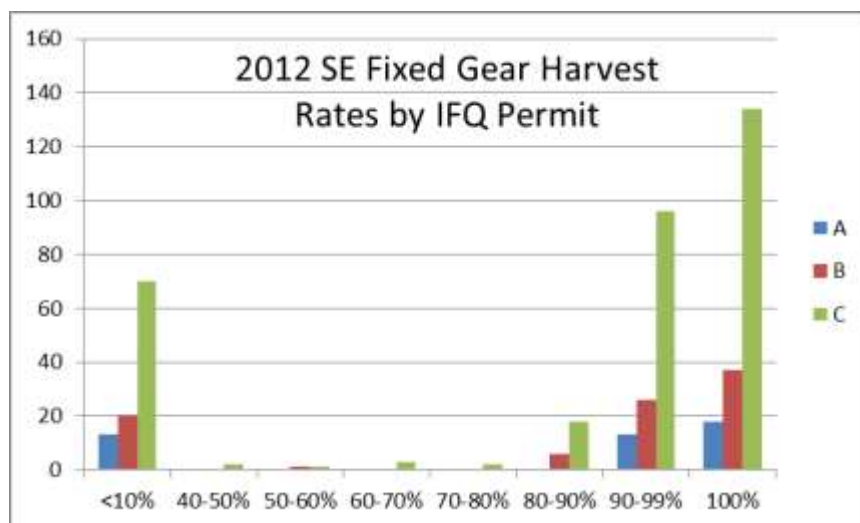
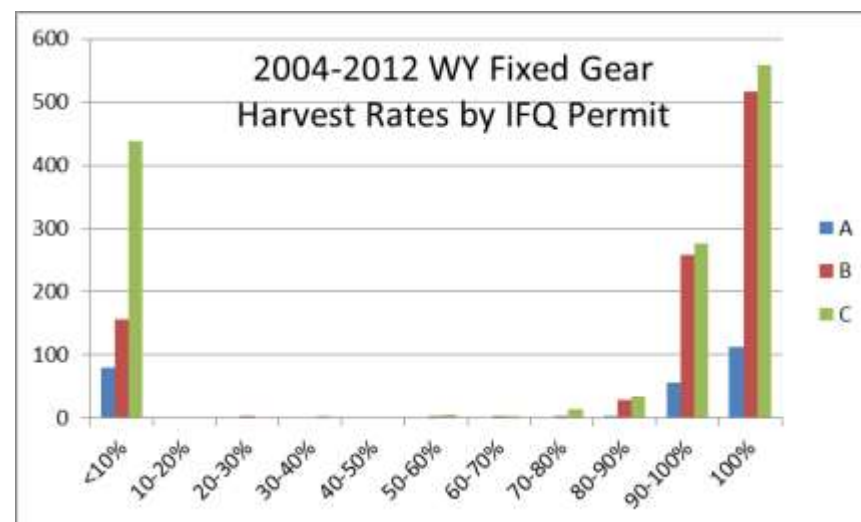
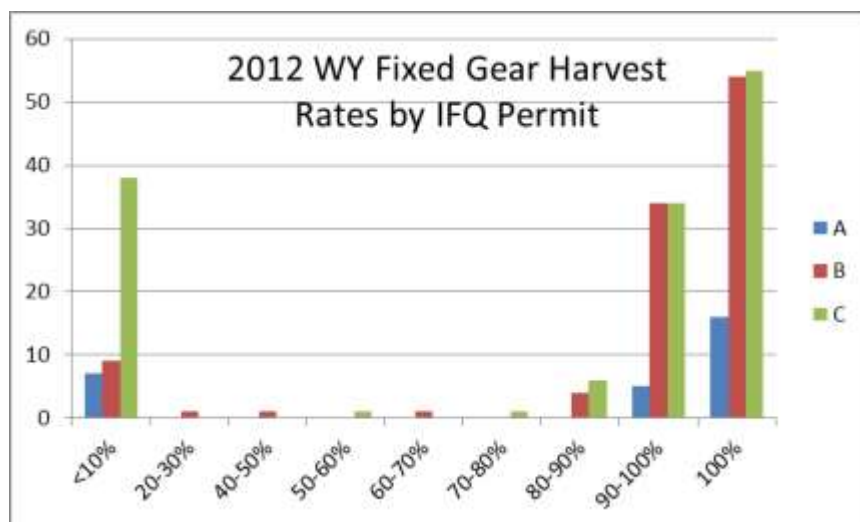


Table 4a. Fixed Gear Sablefish allocation and weight (in mt) posted by Vessel Category in the BS.

	A			B			C		
Year	Initial Quota	Catch Weight	Percent	Initial Quota	Catch Weight	Percent	Initial Quota	Catch Weight	Percent
2004	462	209	45.29%	479	253	52.73%	219	61	27.83%
2005	388	259	66.84%	404	235	58.04%	184	63	34.07%
2006	448	349	77.93%	467	301	64.54%	213	77	36.41%
2007	474	406	85.58%	494	315	63.73%	224	82	36.48%
2008	455	325	71.35%	474	281	59.35%	215	77	35.58%
2009	433	312	72.11%	450	275	61.14%	205	87	42.62%
2010	455	177	38.99%	462	242	52.40%	198	71	35.81%
2011	454	204	44.98%	471	205	43.58%	215	69	31.89%
2012	355	189	53.16%	369	219	59.33%	168	73	43.47%
Total	3,924	2,430	61.94%	4,070	2,326	57.15%	1,840	659	35.81%

Table 4b. Fixed Gear Sablefish allocation and weight (in mt) posted by Vessel Category in the AI.

	A			B			C		
Year	Initial Quota	Catch Weight	Percent	Initial Quota	Catch Weight	Percent	Initial Quota	Catch Weight	Percent
2004	*	*	56.13%	*	*	45.16%	*	*	38.37%
2005	884	542	61.32%	557	343	61.52%	131	61	46.65%
2006	*	*	40.89%	*	*	31.66%	*	*	55.11%
2007	948	414	43.72%	598	273	45.70%	140	42	29.94%
2008	823	409	49.64%	519	191	36.77%	122	44	35.82%
2009	742	443	59.75%	468	275	58.77%	110	34	30.55%
2010	705	431	61.15%	442	181	40.98%	95	29	30.80%
2011	698	521	74.55%	440	222	50.47%	103	21	20.39%
2012	691	510	73.74%	436	276	63.42%	102	33	32.05%
Total	5,491	3,270	59.54%	3,460	1,761	50.91%	804	264	32.78%

Table 4c. Fixed Gear Sablefish allocation and weight (in mt) posted by Vessel Category in the WG.

	A			B			C		
Year	Initial Quota	Catch Weight	Percent	Initial Quota	Catch Weight	Percent	Initial Quota	Catch Weight	Percent
2004	889	832	93.58%	1,014	904	89.14%	440	390	88.71%
2005	771	791	102.65%	879	783	89.06%	382	323	84.60%
2006	810	777	95.82%	924	893	96.63%	401	373	93.07%
2007	750	731	97.52%	855	811	94.76%	371	313	84.27%
2008	574	446	77.75%	655	628	95.89%	284	268	94.30%
2009	498	492	98.86%	568	556	97.97%	246	234	95.20%
2010	504	495	98.28%	575	546	94.90%	249	216	86.66%
2011	492	491	99.92%	561	545	97.09%	243	210	86.47%
2012	540	502	92.98%	616	548	88.85%	267	222	83.23%
Total	5,828	5,559	95.38%	6,648	6,213	93.46%	2,883	2,550	88.43%

Table 4d. Fixed Gear Sablefish allocation and weight posted by Vessel Category in the CG.

	A			B			C		
Year	Initial Quota	Catch Weight	Percent	Initial Quota	Catch Weight	Percent	Initial Quota	Catch Weight	Percent
2004	918	903	98.32%	2,773	2,746	99.04%	2,149	2,115	98.42%
2005	912	891	97.74%	2,755	2,725	98.94%	2,134	2,096	98.22%
2006	801	791	98.78%	2,420	2,409	99.52%	1,875	1,849	98.63%
2007	778	767	98.54%	2,352	2,352	100.02%	1,822	1,799	98.78%
2008	692	578	83.50%	2,090	2,101	100.51%	1,618	1,580	97.66%
2009	628	621	98.90%	1,896	1,875	98.86%	1,468	1,464	99.70%
2010	567	564	99.46%	1,714	1,710	99.80%	1,327	1,318	99.35%
2011	596	592	99.38%	1,801	1,796	99.71%	1,394	1,361	97.60%
2012	724	715	98.68%	2,189	2,136	97.57%	1,695	1,574	92.90%
Total	6,616	6,422	97.06%	19,991	19,851	99.30%	15,480	15,156	97.90%

Table 4e. Fixed Gear Sablefish allocation and weight (in mt) posted by Vessel Category in the WY.

	A			B			C		
Year	Initial Quota	Catch Weight	Percent	Initial Quota	Catch Weight	Percent	Initial Quota	Catch Weight	Percent
2004	183	174	94.85%	1,353	1,355	100.15%	698	681	97.59%
2005	187	189	101.42%	1,377	1,378	100.07%	710	693	97.63%
2006	163	159	97.40%	1,205	1,191	98.79%	621	619	99.61%
2007	164	163	99.19%	1,210	1,208	99.87%	623	619	99.28%
2008	152	139	91.30%	1,122	1,122	100.00%	579	566	97.79%
2009	128	126	98.55%	943	940	99.65%	486	479	98.53%
2010	116	115	98.98%	854	852	99.71%	440	437	99.28%
2011	143	139	97.08%	1,056	1,058	100.12%	544	538	98.86%
2012	162	161	99.44%	1,197	1,170	97.78%	617	589	95.41%
Total	1,399	1,365	97.59%	10,317	10,273	99.57%	5,318	5,220	98.15%

Table 4f. Fixed Gear Sablefish allocation and weight (in mt) posted by Vessel Category in the SE.

	A			B			C		
Year	Initial Quota	Catch Weight	Percent	Initial Quota	Catch Weight	Percent	Initial Quota	Catch Weight	Percent
2004	350	337	96.31%	766	757	98.78%	2,654	2,611	98.36%
2005	331	329	99.21%	725	718	99.05%	2,513	2,486	98.90%
2006	327	325	99.41%	715	719	100.48%	2,478	2,451	98.92%
2007	313	315	100.71%	685	676	98.73%	2,372	2,342	98.74%
2008	299	285	95.49%	654	657	100.35%	2,267	2,251	99.31%
2009	255	254	99.86%	558	556	99.59%	1,933	1,939	100.33%
2010	239	236	98.65%	524	518	98.87%	1,816	1,807	99.49%
2011	273	270	98.86%	597	594	99.39%	2,070	2,055	99.29%
2012	294	293	99.53%	645	632	98.00%	2,234	2,190	98.01%
Total	2,680	2,643	98.63%	5,870	5,826	99.25%	20,338	20,132	98.99%

Notes: \*Confidential, Catch Weight in Product Amounts

Source: NMFS Alaska Region IFQ, data compiled by AKFIN

Table 5. Current and proposed sablefish Category A quota share use caps in pounds.

	Ratio QS:IFQ	Status Quo		Proposed Options			
		1% of Sablefish SE QSPs	1% of All Sablefish QSPs	1.25% of Sablefish SE QSPs	1.25% of All Sablefish QSPs	1.5% of Sablefish SE QSPs	1.5% of All Sablefish QSPs
<b>QS units</b>		688,485	3,229,721	860,606	4,037,151	1,032,728	4,844,582
<b>AI lb</b>	11.28	61,036	286,323	76,295	357,903	91,554	429,484
<b>BS lb</b>	13.47	51,112	239,771	63,891	299,714	76,669	359,657
<b>CG lb</b>	11.43	60,235	282,565	75,294	353,207	90,352	423,848
<b>SE lb</b>	9.40	73,243	343,587	91,554	429,484	109,865	515,381
<b>WG lb</b>	11.67	58,996	276,754	73,745	345,943	88,494	415,131
<b>WY lb</b>	13.66	50,402	236,436	63,002	295,545	75,602	354,655
<b>GOA lb</b>	11.34	60,713	284,808	75,891	356,010	91,069	427,212

Table 6. Range of values (in \$) associated with proposed options for sablefish Category A QS use caps

Area	Estimated Ex-Vessel Price*	Status Quo		Proposed Options			
		1% of Sablefish SE QSPs	1% of All Sablefish QSPs	1.25% of Sablefish SE QSPs	1.25% of All Sablefish QSPs	1.5% of Sablefish SE QSPs	1.5% of All Sablefish QSPs
<b>AI</b>	\$7.85			\$119,783	\$561,908	\$239,566	\$1,123,817
<b>BS</b>	\$7.18			\$91,747	\$430,390	\$183,494	\$860,779
<b>CG</b>	\$6.01			\$90,503	\$424,554	\$181,006	\$849,109
<b>SE</b>	\$5.03			\$92,103	\$432,061	\$184,206	\$864,122
<b>WG</b>	\$7.70			\$113,568	\$532,752	\$227,135	\$1,065,504
<b>WY</b>	\$5.69			\$71,696	\$336,331	\$143,392	\$672,662
<b>All sablefish</b>	\$5.85			\$88,793	\$416,531	\$177,585	\$833,063

\*Source: RAM

**Proposal Summary** In consideration of this proposal, the Council should consider its policy objectives for the IFQ program, consider the national standards, and identify next steps. If the Council initiates an analysis, it should adopt a purpose and need statement (problem statement) for the action, and identify alternatives and options for analysis. For analysis, the IFQ Implementation Committee recommended sablefish QS use cap options of 1.25 percent and 1.5 percent of the status quo (1.0 percent) for the Southeast management area and for sablefish QS in all areas. Additional clarifications are requested regarding other elements of the Council's original motion (i.e., "no catcher vessel QS onboard" and "regardless of whether the sablefish harvest was processed."

**Preparers**

Jane DiCosimo  
Mike Fey

NPFMC  
AKFIN

**Persons Contacted**

IFQ Implementation Committee  
Tracy Buck  
Bob Alverson  
Dave Little

NPFMC  
NMFS RAM  
Fishing Vessel Owners Association  
Clipper Seafoods

## APPENDIX 1.



# Clipper Seafoods, Ltd.

641 W. Ewing Street  
Seattle, WA 98119  
(206) 284-1162 p / (206) 283-5089 f

September 1, 2009

Chris Oliver  
North Pacific Fisheries Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501

Dear Chris:

I am writing to you today to ask that the NPFMC consider changes to the Sablefish IFQ program. It is my understanding that the IFQ committee has been reformed and will meet before the October council meeting. I am proposing two changes to the "A" share Sablefish program:

- Remove the block system for "A" shares
- Increase the "A" share ownership cap

Making these changes to the program would allow "A" share participants to use their vessels more effectively. Under the current system it is marginally practical to catch small amounts of Sablefish on a freezer vessel.

I will gladly provide you with more information and will be available to participate at the committee meeting, if you could put this on the agenda.

Thank you for consideration,



David Little  
Clipper Seafoods, Ltd.

cc. Bob Alverson, Don Iverson

# Petersburg Vessel Owners Association

PO Box 232

Petersburg, AK 99833

Phone & Fax: 907.772.9323

[pvoa@gci.net](mailto:pvoa@gci.net) • [www.pvoaonline.org](http://www.pvoaonline.org)

May 8, 2013

Mr. Eric Olson, Chairman  
North Pacific Fishery Management Council  
605 West 4<sup>th</sup> Avenue, Suite 306  
Anchorage, AK 99501

RECEIVED

MAR 13 2013

**RE: Proposed regulation changes at 50 CFR 679.20(e) governing enforcement of Maximum Retainable Amounts (MRA).**

Dear Chairman Olsen and members of the Council,

The Petersburg Vessel Owners Association (PVOA) is a diverse group of over 100 commercial fishermen and businesses based in Alaska. Our members provide millions of meals to the public annually by participating in a variety of fisheries statewide with our foremost interest being the commercial halibut and sablefish fisheries managed by the North Pacific Fishery Management Council.

PVOA wishes to propose changes in the regulations at 50 CFR 679.20(e) governing the enforcement of Maximum Retainable Amounts (MRA) for catcher vessels and catcher/processors. The existing specific regulations of concern are at §679.20(e)(3)(i) and (ii).

**PROPOSAL §679.20(e)(3) Application:**

- (i) For catcher vessels, the maximum retainable amount for vessels fishing during a fishing trip in areas closed to directed fishing is the maximum retainable amount applicable in any area, and this maximum retainable **[AMOUNT MUST BE APPLIED AT ANY TIME AND TO ALL AREAS FOR THE DURATION OF THE FISHING TRIP.]** is calculated at the end of each offload and is based on the basis species harvested since the previous offload. For the purposes of this paragraph, offload means the removal of any fish or fish product from the vessel that harvested the fish or fish product to any other vessel or to shore.
- (ii) For catcher/processors fishing in an area closed to directed fishing for a species or species group, the maximum retainable amount for that species or species group **[APPLIES AT ANY TIME FOR THE DURATION OF THE FISHING TRIP.]** is calculated at the end of each offload and is based on the basis species harvested since the previous offload. For the purposes of this paragraph, offload means the removal of any fish or fish product from the vessel that harvested the fish or fish product to any other vessel or to shore.

**ISSUE:** The MRA should be calculated at the time of offload, not during a fishing trip. These regulation changes would make the existing regulations more consistent with similar regulations at §679.20(e)(3)(iii) and (iv) governing the Am.80 Pollock and the CGOA Rockfish Program participants.

Under the current regulations, in the federal sablefish longline fishery, for example, any non-target species that had an MRA without a full retention requirement would need to be immediately discarded or the vessel would be in violation, regardless of the condition of the released fish. These regulations, as currently written, actually promote wastage, is an unintended consequence and not the initial intent of the regulations. We do believe that the intent was to prevent intentional excessive bycatch of economically valuable species by limiting the bycatch to a percentage of the weight of the target species at the time of delivery/offloading.

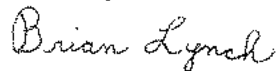
Although we don't know of any specific problems associated with this regulation to the present time, our concerns are directed toward potential problems resulting from implementation of the restructured observer program for the small boat halibut and sablefish longline fisheries. With an increased number of observers being deployed on a larger number of vessels, and the potential for future implementation of electronic monitoring (EM) systems, situations could arise where an observer could report the above scenario as a violation, or the EM system would document the violation, resulting in enforcement action irrespective of the percent species composition at the time of delivery/offload.

**POTENTIAL PROBLEMS:** We believe that implementation of these changes would not functionally change the way the regulations are currently being enforced. It's unlikely that any MRA enforcement actions have ever been initiated on a vessel actively fishing at sea, and are routinely only initiated at the time offload. As such, we don't foresee any obvious potential problems arising from our proposed regulatory changes.

PVOA is also preparing regulatory proposals to the Alaska Board of Fisheries to address similar changes to State of Alaska bycatch retention regulations.

Thank you for consideration of our proposal.

Sincerely,



Brian Lynch  
Executive Director

**KODIAK VESSEL OWNERS' ASSOCIATION**  
**P. O. BOX 2684**  
**KODIAK, ALASKA 99615**  
**Phone: (907) 486-8824 Fax: (907) 486-6963**

May 28, 2013

Mr. Eric Olson, Chair  
North Pacific Fishery Management Council  
Anchorage, Alaska 99510

Sent by Fax: 907-271-2817

Re: Agenda D-2 - Staff Tasking

Chairman Olson:

Attached is a proposal which we would ask that the Council forward to the Halibut/Sablefish IFQ Implementation Team and request that this be added to the agenda for their next meeting.

Also attached is a summary and graph taken from data provided by the Restricted Access Management Division which show the harvest limits/TAC and vessel caps for sablefish and halibut for the years 1997-2013.

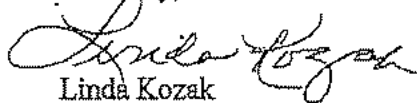
In recent years, we have had discussions about how vessel owners are dealing with the significantly reduced harvest limits and subsequent vessel caps, particularly for halibut. Shown below are the high and low vessel cap limits for halibut in Area 2C and statewide.

2C HALIBUT VESSEL CAPS	STATEWIDE HALIBUT VESSEL CAPS
Highest (2005) 109,300	Highest (02/03) 295,050
Lowest (2011) 23,300	Lowest (2013) 109,054

These numbers clearly show, as the attached documentation details, that the vessel cap has been reduced dramatically over the years. The concern is that the caps may be reduced further due to lowering harvest limits and cause significant hardship to the fishery participants.

This is an issue which we believe should initially be addressed by the IFQ Implementation Team and we thank you for considering our request.

Sincerely,

  
Linda Kozak

**HALIBUT AND SABLEFISH IFQ PROGRAM  
AMENDMENT PROPOSAL  
North Pacific Fishery Management Council  
Fax: (907) 271-2817**

**Name of Proposer:** Linda Kozak

**Date:** May 24, 2013

**Address:** P. O. Box 2684, Kodiak, Alaska 99615

**Telephone:** 907-486-8824

**Brief Statement of Proposal:** To analyze the current IFQ vessel caps and consider modifying the cap based on the annual harvest limits/TAC. While halibut is the primary concern, sablefish should also be examined in the event that the TAC is significantly reduced in the future.

This would not change the caps for quota share, simply the amount of IFQ halibut or sablefish that could be harvested on a single vessel during a given season.

**Objectives of Proposal (What is the problem?):** As harvest limits for halibut have decreased significantly in recent years, the vessel cap is now very restrictive and is creating unnecessary operating and maintenance costs for vessel owners. If the harvest limits continue to decline, it will be difficult to attract a crew to work on a boat, with little return expected. The objective is to consider creating a sliding vessel cap based on harvest limits/TAC that would allow for a reasonable amount of IFQ pounds to be harvested on a single vessel.

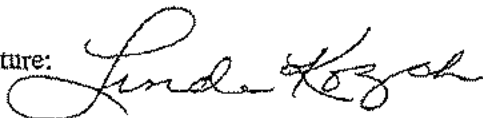
**Need and Justification for Council Action (Why can't the problem be resolved through other channels?):** The proposal, if adopted, would require Council action and a change to the IFQ regulations.

**Foreseeable Impacts of Proposal (Who wins, who loses?):** The winners would be the vessel owners, quota share holders and crew. Potential losses would be crew jobs. However, if the harvest limits are so low that a vessel owner can't attract a crew or afford to harvest the IFQ, then the losers would be the participants in the fishery, processors, communities and the public.

**Are there Alternative Solutions? If so, what are they and why do you consider your proposal the best way of solving the problem?** I cannot think of an alternative solution that would address this problem.

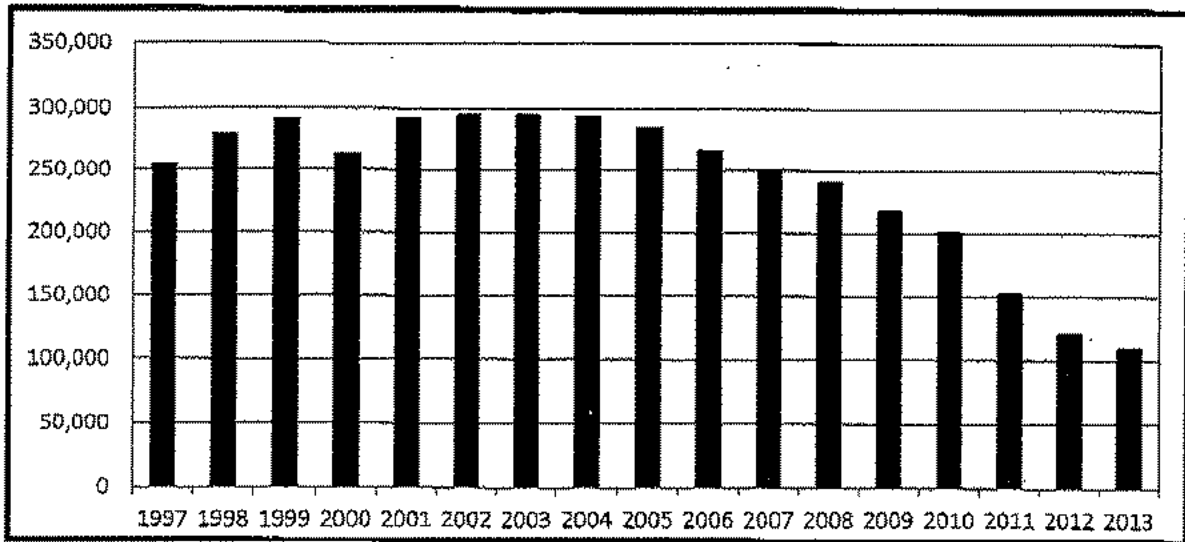
**Supportive Data and Other Information (What data are available and where can they be found?):** Attached is a spread sheet and chart derived from information obtained from the Restricted Access Management Program, which show the harvest limits and vessel caps from 1997-2013.

**Signature:**

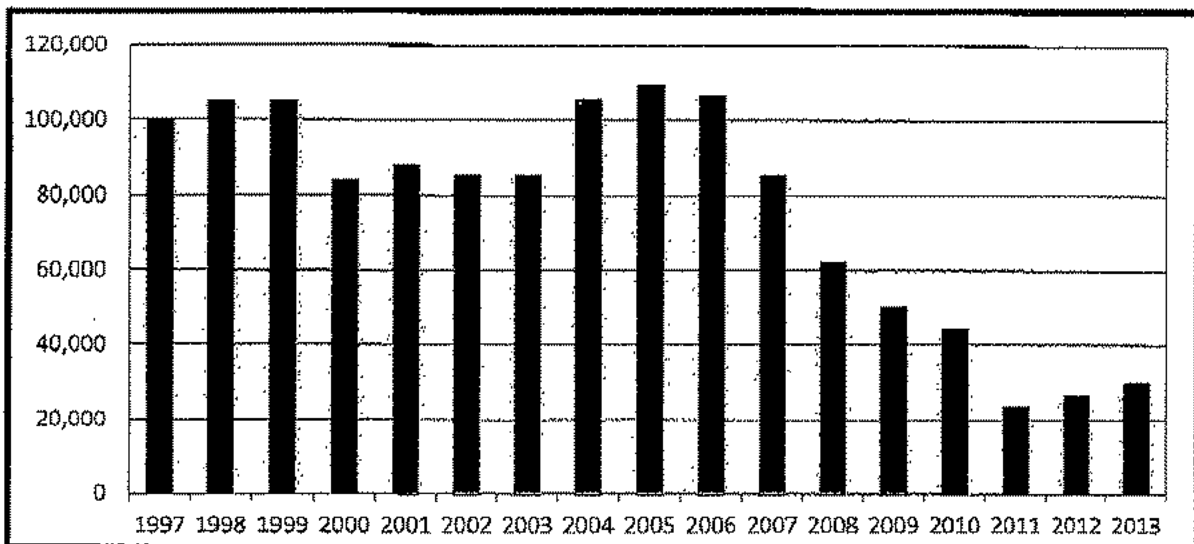


## HALIBUT IFQ VESSEL CAPS 1997 – 2013

Statewide – 1/2% of all IFQ TAC



Area 2C – 1% of IFQ TAC



Information derived from the Restricted Access Management annual cap calculations

**HALIBUT AND SABLEFISH ANNUAL TAC AND VESSEL CAPS FOR 2C/SOUTHEAST AND STATEWIDE - 1997 - 2013**

YEAR	2C HALIBUT IFQ TAC	2C HALIBUT VESSEL CAP	ALL HALIBUT IFQ TAC	ALL HALIBUT VESSEL CAP	SE SABLEFISH IFQ TAC	SE SABLEFISH VESSEL CAP	ALL SABLEFISH IFQ TAC	ALL SABLEFISH VESSEL CAP
1997	10,000,000	100,000	51,116,000	255,580	8,042,381	80,424	30,233,885	302,339
1998	10,500,000	105,000	55,708,000	278,540	7,687,440	76,874	29,845,875	298,459
1999	10,490,000	104,900	58,390,000	291,950	7,054,720	70,547	27,154,059	271,541
2000	8,400,000	84,000	53,074,000	265,370	7,832,944	78,329	29,926,122	299,261
2001	8,780,000	87,800	58,534,000	292,670	7,407,456	74,075	29,120,561	291,206
2002	8,500,000	85,000	59,010,000	295,050	7,076,766	70,768	29,388,199	293,882
2003	8,500,000	85,000	59,010,000	295,050	7,848,376	78,484	34,863,545	348,635
2004	10,500,000	105,000	58,942,000	294,710	8,311,342	83,113	37,936,756	379,368
2005	10,930,000	109,300	56,976,000	284,880	7,870,422	78,704	35,765,226	357,652
2006	10,630,000	106,300	53,308,000	266,540	7,760,192	77,602	34,546,083	345,461
2007	8,510,000	85,100	50,211,800	251,059	7,429,502	74,295	33,450,396	334,504
2008	6,210,000	62,100	48,040,800	240,204	7,098,812	70,988	29,967,127	299,671
2009	5,020,000	50,200	43,548,800	217,744	6,053,832	60,538	26,488,269	264,883
2010	4,400,000	44,000	40,298,000	201,490	5,687,868	56,879	24,876,707	248,767
2011	2,330,000	23,300	30,382,000	151,910	6,481,524	64,815	26,794,708	267,947
2012	2,624,000	26,240	24,003,027	120,015	6,995,196	69,952	29,326,912	293,269
2013	2,970,000	29,700	21,810,800	109,054	7,032,674	70,327	28,013,851	280,139

# IFQ Implementation Committee (12/9/13)

## Background on Fishing IFQ in Multiple Areas

Item D-6(c)  
December 2013

ITEM C-1(c)  
OCTOBER 2013

the release policy makes it difficult to evaluate who will be in the selection pool in a given period. The Committee discussed using a registration system, whereby vessels would notify the agency when they intended to fish, but also reiterated earlier discussions about shortfalls in the reliability of such a system.

The OAC also makes the following comments and recommendations on other aspects of the ADP. **Overall, the majority of the OAC supports the 2014 ADP, while continuing to support the need to improve some aspects of the restructured observer program.** One committee member conveyed they do not support the 2014 ADP because the sampling fraction problem in the vessel selection pool is not being addressed adequately.

The OAC discussed the vessel selection sampling plan for 2014, especially in relation to the difference in anticipated versus actual sampling rate in the vessel selection pool. The agency reported that they will likely only achieve about half of the observed trips that they were hoping for in the vessel selection pool for 2013, even though they are over-selecting vessels for coverage in each period. **The OAC recognizes that the actual sampling rate in the vessel selection pool is a concern.** Members of the Committee offered various suggestions for addressing this issue, both immediately (for 2014) or on a longer term basis. For example, all fixed gear boats could be moved into the vessel selection category, which would address data and fairness issues with having only a few boats (that can accommodate an observer) in the current vessel selection pool representing a very large portion of the data collected. Another solution would be to provide an electronic monitoring alternative in the vessel selection pool, either through the NMFS pilot program, or through an experimental fishing permit if developed and approved. Rescinding the conditional release policy could also address this issue, and perhaps a vessel registration system would help, if designed to provide reliable data. The OAC also discussed whether registration for State water fisheries would provide an additional information source for when and where vessels may be fishing.

**The OAC endorses the alternative salmon genetic sampling approach that is incorporated in the 2014 ADP.** The Committee discussion noted that the new approach probably results in better data, although missing catch from tender deliveries continues to be a problem (see discussion above). A member of the Committee noted that once the non-pollock trawl regulations for full retention of Chinook salmon go into effect, the Council may want to reconsider sampling practices on non-pollock trawl vessels with full observer coverage, so that all Chinook salmon that are encountered are sampled.

Another issue discussed by the OAC relates to the process for making changes to the ADP. There is not much time between the June meeting (where the program review is presented) and the October meeting (for which the draft ADP is prepared) for the agency to respond with detailed evaluations of any Council recommendations. The OAC chair and the agency both noted that this is the first time we are engaging in this process. In order to improve the agency's ability to respond accurately to Council intent, the chair identified the importance of ensuring that the language of OAC recommendations and Council motions is clear. There was additional comment about whether the focus of the Observer Science Committee (OSC), as a science group, is by nature too narrow and not capable of providing a more balanced review of social and economic factors that proposed changes to the ADP are intended to address. It was suggested that the process should be modified to allow a more balanced review of requests.

### Other issues

#### *Voluntary observer coverage for clean up IFQ trips involving multiple regulatory areas*

The OAC discussed the need for a regulatory amendment to address a NMFS IFQ regulation that prohibits a vessel from having more IFQ species onboard than the IFQ holder has remaining quota for in a single regulatory area, unless an observer is onboard. Under the old program, in order to avoid having to

make multiple trips (and engendering prohibitive costs) to conduct clean up fisheries in multiple regulatory areas, a vessel could choose to pay for an observer to come on the trip. This self-selection of observer coverage is not allowed under the restructured program, so if a vessel doesn't get selected for observer coverage, it is unable to fish its remaining quota amounts in multiple regulatory areas on a single trip. The Committee's discussion noted that the observer is primarily a compliance agent in this instance, so other compliance solutions might more appropriately and inexpensively meet this need. For example, the OAC learned that under the IPHC regulations in Area 4A-B-C-D, a vessel can choose to either carry an observer or use VMS in such instances, as long as catch from each regulatory area is clearly distinguishable (e.g., fin clips, colored bands tied around the fish, or fish stored in different bins or holds). **The OAC recommends that this issue be added to this list of potential regulatory amendments in the Council-tasked discussion paper, for further scoping and action.** The Committee notes, however, that this may in fact be as much an issue for the IFQ Implementation Committee, as an observer issue.

#### ***NMFS letter on 2014 EM pilot program***

The Committee had many questions about NMFS' proposal for moving 14 vessels that participate in the 2014 EM pilot program into the zero selection pool. On learning that many of the details of this proposal remain undetermined, and that the agency is looking to the Council for guidance, **the OAC offers the following comments.**

- Noting the Council's existing priority for developing EM is the 40-57.5' fleet that is not restricted by PSC limits, these vessels should be the first priority for the 2014 pilot program. Secondary priorities can be determined by seeing how other fleets would match against pilot program monitoring objectives.
- Focus on vessels that have already been released from the requirement to have a human observer, or go back to the Council's April 2012 comment letter that linked the release from coverage after random selection to the offer of an EM unit. In this way, the EM program would provide data on vessels that would not otherwise be in the program, rather than reducing the pool of vessels that would otherwise have coverage.
- Get as much utility from the camera units during the year as possible, including deployment on multiple vessels. For example, consider deploying in the small boat Pacific cod A season, until vessels switch to salmon fishing. Need to clarify whether only the 14 vessels identified at the beginning of the year will be placed in the zero selection category, or whether that applies to any vessel on which the cameras are placed during the year.
- Be transparent about the objectives of the 2014 EM pilot program, as a way to determine which are the best vessels to participate. For example, is the objective to observe a vessel that is spending most of its time fishing, in order to assess how a lot of data can be processed; to see how easily (or not) cameras can be transferred among vessels; or to see how physically robust the camera systems are when they are used throughout the year in different weather conditions. Prioritize cameras for those vessels whose fishing characteristics are most likely to achieve the stated objectives.

§ 679.7 Prohibitions

the CDQ group's PSQ for *C. bairdi* Tanner crab in Zone 2 is attained.

(C) COBLZ. For the operator of a vessel, to use trawl gear to harvest groundfish CDQ in the *C. opilio* Bycatch Limitation Zone after the CDQ group's PSQ for *C. opilio* Tanner crab is attained.

(ii) Salmon

(A) Discard of salmon. For any person, to discard salmon from a catcher vessel, catcher/processor, mothership, shoreside processor, or SFP or transfer or process any salmon under the PSD Program at § 679.26, if the salmon were taken incidental to a directed fishery for pollock CDQ in the Bering Sea, until the number of salmon has been determined by an observer and the collection of scientific data or biological samples from the salmon has been completed.

(B) Non-Chinook salmon. For the operator of a vessel, to use trawl gear to harvest pollock CDQ in the Chum Salmon Savings Area between September 1 and October 14 after the CDQ group's non-Chinook salmon PSQ is attained, unless the vessel is participating in a non-Chinook salmon bycatch reduction ICA under § 679.21(g).

(C) Chinook salmon.

(1) Overages of Chinook salmon PSC allocations. For a CDQ group, to exceed a Chinook salmon PSC allocation issued under § 679.21(f) as of June 25 for the A season allocation and as of December 1 for the B season allocation.

(2) For the operator of a catcher vessel or catcher/processor, to start a new fishing trip for pollock CDQ in the BS in the A season or in the B season, if the CDQ group for which the vessel is fishing has exceeded its Chinook salmon PSC allocation issued under § 679.21(f) for that season.

(3) For the operator of a catcher/processor or mothership, to catch or process pollock CDQ in the BS without complying with the applicable requirements of § 679.28(j).

(4) For the operator of a catcher/processor or a mothership, to begin sorting catch from a haul from a directed fishery for pollock CDQ in the BS before the observer has completed counting the salmon and collecting scientific data or biological samples from the previous haul.

(5) For the operator of a catcher vessel, to deliver pollock CDQ to a shoreside processor or stationary floating processor that does not have a catch monitoring and control plan approved under § 679.28(g).

(6) For the manager of a shoreside processor or stationary floating processor, to begin sorting a pollock CDQ offload before the observer has completed the count of salmon and the collection of scientific data or biological samples from the previous offload.

(6) For a CDQ group, exceed a seasonal allowance of Pacific cod under § 679.20(a)(7)(i)(B).

(7) For a CDQ group, exceed a seasonal allowance of Alaska mackerel under § 679.20(a)(8)(ii).

(e) [Reserved]

(f) IFQ fisheries.

(1) Fail to submit, or submit inaccurate information on, any report, application, or statement required under this part.

(2) Intentionally submit false information on any report, application, or statement required under this part.

(3) (i) Halibut.

(A) Retain halibut caught with fixed gear without a valid IFQ permit, and if using a hired master, without an IFQ hired master permit in the name of an individual aboard.

(B) Retain halibut caught with fixed gear without a valid CDQ permit and without a CDQ hired master permit in the name of an individual aboard.

(ii) Sablefish. Retain sablefish caught with fixed gear without a valid IFQ permit, and if using a hired master, without an IFQ hired master permit in the name of an individual aboard, unless fishing on behalf of a CDQ group.

(4) Except as provided in § 679.40(d), retain IFQ or CDQ halibut or IFQ or CDQ sablefish on a vessel in excess of the total amount of unharvested IFQ or CDQ, applicable to the vessel category and IFQ or CDQ regulatory area(s) in which the vessel is deploying fixed gear, and that is currently held by all IFQ or CDQ permit holders aboard the vessel, unless the vessel has

→ 10% adjustment policy

\*

**§ 679.7 Prohibitions**

an observer aboard under subpart E of this part and maintains the applicable daily fishing log prescribed in the annual management measures published in the *Federal Register* pursuant to § 300.62 of this title and § 679.5.

(5) Possess, buy, sell, or transport IFQ or CDQ halibut or IFQ sablefish harvested or landed in violation of any provision of this part.

**(6) Landing.**

(i) IFQ permit or IFQ hired master permit. Make an IFQ landing without an IFQ permit or IFQ hired master permit, as appropriate, in the name of the individual making the landing.

(ii) Hired master, CDQ. Make a CDQ halibut landing without a CDQ hired master permit listing the name of the hired master.

(iii) Hired master, CDQ halibut. Make a CDQ halibut landing without a CDQ hired master permit listing the name of the hired master.

(7) Possess on a vessel or land IFQ sablefish concurrently with non-IFQ sablefish, except that CDQ

sablefish may be possessed on a vessel and landed concurrently with IFQ sablefish.

**(8) Discard.**

**(i) In the GOA.**

(A) Rockfish that are taken when IFQ halibut or IFQ sablefish are on board unless rockfish are required to be discarded under subpart B of this part.

(B) Pacific cod that are taken when IFQ halibut or IFQ sablefish are on board unless Pacific cod are required to be discarded under subpart B of this part, or Pacific cod are not authorized to be retained under subpart A of this part.

**(ii) In the BSAI.**

(A) Rockfish that are taken when IFQ halibut or IFQ sablefish are on board unless rockfish are required to be discarded under subpart B of this part.

(B) Pacific cod that are taken when IFQ halibut or IFQ sablefish are on board according to the following table:

If the vessel operator...	Then...
(1) has an LLP groundfish license with a Pacific cod endorsement that meets the requirements of § 679.4(k)(9)	Pacific cod must not be discarded unless Pacific cod are required to be discarded under subpart B of this part, or Pacific cod are not authorized to be retained under subpart A of this part
(2) does not have an LLP groundfish license with a Pacific cod endorsement that meets the requirements of § 679.4(k)(9).	Pacific cod must not be discarded up to the retainable amount specified in Table 11 of this part unless Pacific cod are required to be discarded under subpart B of this part, or Pacific cod are not authorized to be retained under subpart A of this part.

**(iii) In the waters within the State of Alaska:**

(A) Rockfish that are taken when IFQ halibut or IFQ sablefish are on board unless rockfish are required to be discarded by the laws of the State of Alaska.

(B) Pacific cod that are taken when IFQ halibut or IFQ sablefish are on board unless Pacific cod are required to be discarded by the laws of the State of Alaska.

(9) Harvest on any vessel more IFQ halibut or IFQ sablefish than are authorized under § 679.42.

(10) Make an IFQ halibut, IFQ sablefish, or CDQ halibut landing other than directly to (or by) a Registered Buyer.

(11) Discard halibut or sablefish caught with fixed gear from any catcher vessel when any IFQ permit holder aboard holds unused halibut or sablefish IFQ for that vessel category and the IFQ regulatory area in which the vessel is operating, unless:

(i) Discard of halibut is required as prescribed in the annual management measures published in the *Federal Register* pursuant to § 300.62 of chapter III of this title;

(11) A copy of the fish tickets or catch reports referred to in paragraphs (5), (6), and (9) shall be:

(e) retained by the person making them for a period of three years from the date the fish tickets or catch reports are made; and

(b) open to inspection by an authorized officer or any authorized representative of the Commission.

(12) No person shall possess any halibut taken or retained in contravention of these Regulations.

(13) When halibut are landed to other than a commercial fish processor, the records required by paragraph (6) shall be maintained by the operator of the vessel from which that halibut was caught, in compliance with paragraph (11).

(14) No person shall tag halibut unless the tagging is authorized by IPHC permit or by a Federal or State agency.

#### 18. Fishing Multiple Regulatory Areas

(1) Except as provided in this section, no person shall possess at the same time on board a vessel halibut caught in more than one regulatory area.

(2) Halibut caught in more than one of the Regulatory Areas 2C, 3A, or 3B may be possessed on board a vessel at the same time, provided the operator of the vessel:

(a) has a NMFS-certified observer on board when required by NMFS regulations published at 50 CFR 679.7(f)(4); and

(b) can identify the regulatory area in which each halibut on board was caught by separating halibut from different areas in the hold, tagging halibut, or by other means.

(3) Halibut caught in more than one of the Regulatory Areas 4A, 4B, 4C, or 4D may be possessed on board a vessel at the same time, provided the operator of the vessel:

(a) has a NMFS-certified observer on board the vessel as required by NMFS regulations published at 50 CFR 679.7(f)(4); or has an operational VMS on board actively transmitting in all regulatory areas fished and does not possess at any time more halibut on board the vessel than the IFQ permit holders on board the vessel have cumulatively available for any single Area 4 regulatory area fished; and

(b) can identify the regulatory area in which each halibut on board was caught by separating halibut from different areas in the hold, tagging halibut, or by other means.

\* Without an observer, a vessel cannot have on board more halibut than the IFQ for the area that is being fished, even if some of the catch occurred earlier in a different area.

(4) If halibut from Area 4 are on board the vessel, the vessel can have halibut caught in Regulatory Areas 2C, 3A, and 3B on board if in compliance with paragraph (2).

#### 19. Fishing Gear

(1) No person shall fish for halibut using any gear other than hook and line gear, except that vessels licensed to catch sablefish in Area 2B using sablefish trap gear as defined in the Condition of Sablefish Licence can retain halibut caught as bycatch under regulations promulgated by the Canadian Department of Fisheries and Oceans.

(2) No person shall possess halibut taken with any gear other than hook and line gear, except that vessels licensed to catch sablefish in Area 2B using sablefish trap gear as defined by the Condition of Sablefish Licence can retain halibut caught as bycatch under regulations promulgated by the Canadian Department of Fisheries and Oceans.

(3) No person shall possess halibut while on board a vessel carrying any trawl nets or fishing pots capable of catching halibut, except that in Areas 2C, 3A, 3B, 4A, 4B, 4C, 4D, or 4E, halibut heads, skin, entrails, bones or fins for use as bait may be possessed on board a vessel carrying pots capable of catching halibut, provided that a receipt documenting purchase or transfer of these halibut parts is on board the vessel.

(4) All setline or skate marker buoys carried on board or used by any United States vessel used for halibut fishing shall be marked with one of the following:

(a) the vessel's State license number; or

(b) the vessel's registration number.

(5) The markings specified in paragraph (4) shall be in characters at least four inches in height and one-half inch in width in a contrasting color visible above the water and shall be maintained in legible condition.

(6) All setline or skate marker buoys carried on board or used by a Canadian vessel used for halibut fishing shall be:

(a) floating and visible on the surface of the water; and

(b) legibly marked with the identification plate number of the vessel engaged in commercial fishing from which that setline is being operated.

(7) No person on board a vessel used to fish for any species of fish anywhere in Area 2A during the 72-hour period immediately before the fishing period for the directed commercial halibut fishery shall catch or possess halibut anywhere in those waters during that

halibut fishing period unless, prior to the start of the halibut fishing period, the vessel has removed its gear from the water and has either:

(a) made a landing and completely offloaded its catch of other fish; or

(b) submitted to a hold inspection by an authorized officer.

(8) No vessel used to fish for any species of fish anywhere in Area 2A during the 72-hour period immediately before the fishing period for the directed halibut commercial fishery may be used to catch or possess halibut anywhere in those waters during that halibut fishing period unless, prior to the start of the halibut fishing period, the vessel has removed its gear from the water and has either:

(e) made a landing and completely offloaded its catch of other fish; or

(b) submitted to a hold inspection by an authorized officer.

(9) No person on board a vessel from which setline gear was used to fish for any species of fish anywhere in Areas 2B, 2C, 3A, 3B, 4A, 4B, 4C, 4D, or 4E during the 72-hour period immediately before the opening of the halibut fishing season shall catch or possess halibut anywhere in those areas until the vessel has removed all of its setline gear from the water and has either:

(e) made a landing and completely offloaded its entire catch of other fish; or

(b) submitted to a hold inspection by an authorized officer.

(10) No vessel from which setline gear was used to fish for any species of fish anywhere in Areas 2B, 2C, 3A, 3B, 4A, 4B, 4C, 4D, or 4E during the 72-hour period immediately before the opening of the halibut fishing season may be used to catch or possess halibut anywhere in those areas until the vessel has removed all of its setline gear from the water and has either:

(a) made a landing and completely offloaded its entire catch of other fish; or

(b) submitted to a hold inspection by an authorized officer.

(11) Notwithstanding any other provision in these Regulations, a person may retain, possess and dispose of halibut taken with trawl gear only as authorized by Prohibited Species Donation regulations of NMFS.

#### 20. Supervision of Unloading and Weighing

The unloading and weighing of halibut may be subject to the supervision of authorized officers to assure the fulfillment of the provisions of these Regulations.

the mouth closed, to the extreme end of the middle of the tail, as illustrated in Figure 2; or

(b) with the head removed, is less than 24 inches (61.0 cm) as measured from the base of the pectoral fin to its most anterior point to the extreme end of the middle of the tail, as illustrated in Figure 2.

(2) No person on board a vessel fishing for, or tendering, halibut caught in Area 2A shall possess any halibut that has had its head removed.

#### 14. Careful Release of Halibut

(1) All halibut that are caught and are not retained shall be immediately released outboard of the roller and returned to the sea with a minimum of injury by:

(a) hook straightening;  
(b) cutting the gangion near the hook;  
or

(c) carefully removing the hook by twisting it from the halibut with a gaff.

(2) Except that paragraph (1) shall not prohibit the possession of halibut on board a vessel that has been brought aboard to be measured to determine if the minimum size limit of the halibut is met and, if sublegal-sized, is promptly returned to the sea with a minimum of injury.

#### 15. Vessel Clearance in Area 4

(1) The operator of any vessel that fishes for halibut in Areas 4A, 4B, 4C, or 4D must obtain a vessel clearance before fishing in any of these areas, and before the landing of any halibut caught in any of these areas, unless specifically exempted in paragraphs (10), (13), (14), (15), or (16).

(2) An operator obtaining a vessel clearance required by paragraph (1) must obtain the clearance in person from the authorized clearance personnel and sign the IPHC form documenting that a clearance was obtained, except that when the clearance is obtained via VHF radio referred to in paragraphs (5), (8), and (9), the authorized clearance personnel must sign the IPHC form documenting that the clearance was obtained.

(3) The vessel clearance required under paragraph (1) prior to fishing in Area 4A may be obtained only at Nazan Bay on Atka Island, Dutch Harbor or Akutan, Alaska, from an authorized officer of the United States, a representative of the Commission, or a designated fish processor.

(4) The vessel clearance required under paragraph (1) prior to fishing in Area 4B may only be obtained at Nazan Bay on Atka Island or Adak, Alaska, from an authorized officer of the United States, a representative of the

Commission, or a designated fish processor.

(5) The vessel clearance required under paragraph (1) prior to fishing in Area 4C or 4D may be obtained only at St. Paul or St. George, Alaska, from an authorized officer of the United States, a representative of the Commission, or a designated fish processor by VHF radio and allowing the person contacted to confirm visually the identity of the vessel.

(6) The vessel operator shall specify the specific regulatory area in which fishing will take place.

(7) Before unloading any halibut caught in Area 4A, a vessel operator may obtain the clearance required under paragraph (1) only in Dutch Harbor or Akutan, Alaska, by contacting an authorized officer of the United States, a representative of the Commission, or a designated fish processor.

(8) Before unloading any halibut caught in Area 4B, a vessel operator may obtain the clearance required under paragraph (1) only in Nazan Bay on Atka Island or Adak, by contacting an authorized officer of the United States, a representative of the Commission, or a designated fish processor by VHF radio or in person.

(9) Before unloading any halibut caught in Area 4C and 4D, a vessel operator may obtain the clearance required under paragraph (1) only in St. Paul, St. George, Dutch Harbor, or Akutan, Alaska, either in person or by contacting an authorized officer of the United States, a representative of the Commission, or a designated fish processor. The clearances obtained in St. Paul or St. George, Alaska, can be obtained by VHF radio and allowing the person contacted to confirm visually the identity of the vessel.

(10) Any vessel operator who complies with the requirements in section 18 for possessing halibut on board a vessel that was caught in more than one regulatory area in Area 4 is exempt from the clearance requirements of paragraph (1) of this section, provided that:

(a) the operator of the vessel obtains a vessel clearance prior to fishing in Area 4 in either Dutch Harbor, Akutan, St. Paul, St. George, Adak, or Nazan Bay on Atka Island by contacting an authorized officer of the United States, a representative of the Commission, or a designated fish processor. The clearance obtained in St. Paul, St. George, Adak, or Nazan Bay on Atka Island can be obtained by VHF radio and allowing the person contacted to confirm visually the identity of the vessel. This clearance will list the areas in which the vessel will fish; and

(b) before unloading any halibut from Area 4, the vessel operator obtains a vessel clearance from Dutch Harbor, Akutan, St. Paul, St. George, Adak, or Nazan Bay on Atka Island by contacting an authorized officer of the United States, a representative of the Commission, or a designated fish processor. The clearance obtained in St. Paul or St. George can be obtained by VHF radio and allowing the person contacted to confirm visually the identity of the vessel. The clearance obtained in Adak or Nazan Bay on Atka Island can be obtained by VHF radio.

(11) Vessel clearances shall be obtained between 0600 and 1800 hours, local time.

(12) No halibut shall be on board the vessel at the time of the clearances required prior to fishing in Area 4.

(13) Any vessel that is used to fish for halibut only in Area 4A and lands its total annual halibut catch at a port within Area 4A is exempt from the clearance requirements of paragraph (1).

(14) Any vessel that is used to fish for halibut only in Area 4B and lands its total annual halibut catch at a port within Area 4B is exempt from the clearance requirements of paragraph (1).

(15) Any vessel that is used to fish for halibut only in Area 4C or 4D or 4E and lands its total annual halibut catch at a port within Area 4C, 4D, 4E, or the closed area defined in section 10, is exempt from the clearance requirements of paragraph (1).

(16) Any vessel that carries a transmitting VMS transmitter while fishing for halibut in Area 4A, 4B, 4C, or 4D and until all halibut caught in any of these areas is landed, is exempt from the clearance requirements of paragraph (1) of this section, provided that:

(a) the operator of the vessel complies with NMFS' vessel monitoring system regulations published at 50 CFR 679.28(f)(3), (4) and (5); and

(b) the operator of the vessel notifies NOAA Fisheries Office for Law Enforcement at 800-304-4846 (select option 1 to speak to an Enforcement Data Clerk) between the hours of 0600 and 0000 (midnight) local time within 72 hours before fishing for halibut in Area 4A, 4B, 4C, or 4D and receives a VMS confirmation number.

#### 16. Logs

(1) The operator of any U.S. vessel fishing for halibut that has an overall length of 26 feet (7.9 meters) or greater shall maintain an accurate log of halibut fishing operations. The operator of a vessel fishing in waters in and off Alaska must use one of the following logbooks: the Groundfish/IFQ Daily Fishing Longline and Pot Gear Logbook



# NORTH PACIFIC FISHERY MANAGEMENT COUNCIL

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## Action Memo Text

**File Number:**ID 13-022

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**Agenda Date:** 12/9/2013

**Agenda Number:** E-1

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**Eric Olson, Chairman**  
**Chris Oliver, Executive Director**

**SUBJECT:**  
Staff Tasking  
**ESTIMATED TIME:**  
4 hours

**ACTION REQUIRED:**  
Review tasking and committees and provide direction.

**BACKGROUND:**  
Committees and Tasking

The list of Council committees is attached as Item **E-1(a)**. Item **E-1(b)** is the three meeting outlook. An updated work plan for implementing the programmatic groundfish management policy is attached as **Item E-1 (c)**. An updated project and staff workload table is attached as **Item E-1(d)**. The Council may wish to discuss priorities for completing ongoing projects, as well as any new tasks assigned during the course of this meeting.

## NPFMC Committees & Workgroups

(Revised December 4, 2013)

### Council/Board of Fisheries Joint Protocol Committee

Updated: 4/24/13	<u>Council:</u> Roy Hyder Ed Dersham Eric Olson	<u>Board:</u> Karl Johnstone (chair) Sue Jeffrey Tom Kluberton
Staff: Jane DiCosimo		

### Council Coordination Committee

[Designated and renamed by Magnuson Act reauthorization April 2007]

Appointed: 4/05 Updated: 10/28/12	<u>CFMC:</u> C: Carlos Farchette ED: Miguel Rolón  <u>GMFMC:</u> C: Doug Boyd ED: Doug Gregory  <u>MAFMC:</u> C: Richard Robins ED: Chris Moore  <u>NEFMC:</u> C: Rip Cunningham ED: Thomas Nies	<u>NPFMC:</u> C: Eric Olson ED: Chris Oliver  <u>PFMC:</u> C: Dan Wolford ED: Don McIsaac  <u>SAFMC:</u> C: Ben Hartig ED: Bob Mahood  <u>WPFMC:</u> C: Arnold Palacios ED: Kitty Simonds
Staff: Chris Oliver		

### Council Executive/Finance Committee

Updated: 8/10/07	Eric Olson (Chair) Jim Balsiger (NMFS) Dave Hanson (PSMFC) Cora Campbell (ADFG) Roy Hyder (ODFW) Bill Tweit (WDFW)
<u>Status:</u> Meet as necessary	
Staff: Chris Oliver/Dave Witherell/Gail Bendixen	

### Bering Sea Crab Advisory Committee

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

## NPFMC Committees & Workgroups

(Revised December 4, 2013)

### Bering Sea Salmon Bycatch Workgroup

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

Appointed: 12/07 Updated: 2/9/09  Staff: Sam Cunningham	Bruce Berg Michael Catsi Dave Colpo Paula Cullenberg John Henderschedt (Chair)	Brett Reasor Glenn Reed Ed Richardson Mike Szymanski Gale Vick
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### Charter Management Implementation Committee

Appointed: 6/11  Staff: Jane DiCosimo	Gary Ault Seth Bone Ed Dersham (Chair) Ken Dole Tim Evers	Kent Huff Stan Malcolm Andy Mezirow Richard Yamada
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### Crab Interim Action Committee

[Required under BSAI Crab FMP]

Jim Balsiger, NMFS Cora Campbell, ADF&G Phil Anderson, WDF
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### Ecosystem Committee

Updated: 10/22/07  <u>Status</u> : Active  Staff: Diana Evans	Jim Ayers Dave Benton Doug DeMaster Dave Fluharty John Iani	Jon Kurland Stephanie Madsen Tim Towarak Bill Tweit (Chair)
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## NPFMC Committees & Workgroups

(Revised December 4, 2013)

### Enforcement Committee

Updated: 7/03  <u>Status</u> : Active  Staff: Jon McCracken	Roy Hyder (Chair) Nicole Kimball, ADF&G Lisa Lindeman/Garland Walker, NOAA-GC Martin Loefflad, NMFS	Matt Brown, NMFS- Enforcement Glenn Merrill, NMFS Phillip Thorne/Anthony Kenne, USCG Jon Streigel, AK F&W Protection
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### Golden King Crab Arbitration Workgroup

Appointed: 1/12  Staff: Sarah Marrinan	Larry Cotter Duncan Fields (Chair) Mark Johahnson Brett Reasor	Joe Sullivan Dick Tremaine Greg White
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### Halibut Charter Stakeholder Committee

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

Reconstituted: 7/31/03 Updated: 2/17/12  Staff: Jane DiCosimo	Bob Alverson Rick Berns Julianne Curry Tim Henkel Dan Hull (Chair) Jeff Kauffman	Don Lane Dave Little Kris Norosz Paul Peyton Jeff Stephan Phil Wyman
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### Non-Target Species Committee

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

(Revised December 4, 2013)

### Observer Advisory Committee

Reconstituted: 1/20/11 Updated: 2/12 <u>Status</u> : Active  Staff: Chris Oliver/ Diana Evans	Bob Alverson Jerry Bongen Julie Bonney Kenny Down Dan Falvey Kathy Hansen Stacey Hansen Dan Hull (Chair)	Michael Lake Todd Loomis Paul MacGregor Brent Paine David Polushkin Joe Reh fuss Ann Vanderhoeven
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### Pacific Northwest Crab Industry Advisory Committee

Appointed: 12/10 Revised: 2/15/13  Staff: Diana Stram	Keith Colburn Lance Farr (Chair) Mark Gleason Kevin Kaldestad Garry Loncon Steve Minor Gary Painter Kirk Peterson	Rob Rogers (Vice Chair) Vic Scheibert Dale Schwarzmiller Gary Stewart Tom Suryan Elizabeth Wiley Arni Thomson, Secretary (non-voting)
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### Rural Outreach Committee

Appointed: 6/09  Staff: Steve MacLean	Tim Andrew Paula Cullenberg Duncan Fields Tom Okleasik	Ole Olsen Eric Olson (Chair) Pete Probasco
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### Sablefish Gear Committee

Appointed: 8/13 Revised: 9/19/13  Staff: Jane DiCosimo	Paul Clampitt Kurt Cochran Harley Ethelbah Steve Fish	Todd Hoppe Dan Hull (Chair) Jeff Stephan
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### Steller Sea Lion Mitigation Committee

Appointed: 4/12 Updated: 5/12 <i>[formerly SSL RPA Committee; renamed February 2002]</i>  Staff: Steve MacLean	Larry Cotter (Chair) Kenny Down Dave Fraser John Gauvin Todd Loomis	Gerry Merrigan Alvin Osterback Rudy Tsukada Jon Warrenchuk Ernie Weiss
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## DRAFT NPFMC THREE-MEETING OUTLOOK - updated 12/3/13

Dec 9 - 17, 2013 Anchorage, AK	Feb 2 - 10, 2014 Seattle, WA	April 7-15, 2014 Anchorage, AK
Review IFQ proposals: <b>IFQ Implementation Committee report</b> SSL EIS and BiOp: <b>update</b>	Community Fishing Association 'workshop' VMS: Discussion paper/ <b>Enf. Committee Recommendations</b> Observer Electronic Monitoring EFP: <b>Review (T)</b> Observer Program Regulatory Amendments: <b>Discussion paper</b> SSL EIS: <b>Action as necessary</b>	
Final 2014 annual deployment plan: Report	GOA Pcod pot sector participation: <b>Discussion paper</b> Review BOF groundfish proposals	GOA Trawl Bycatch Management: <b>Discussion paper</b>
GOA Pot Gear for Sablefish: <b>Expanded Discussion Paper</b>	AI P.cod CV allocation/delivery: <b>Update/Discussion Paper</b>	
Review BOF scallop and pollock proposals	BSAI Halibut PSC: <b>Updated discussion paper</b>	BS Canyons: <b>AFSC report; Discussion Paper (T)</b>
Amendment 80 program 5-Year review: <b>Develop Workplan</b>	PSEIS SIR: <b>Review Draft (T)</b>	
GOA Rockfish Chinook Cap rollover: <b>Final Action</b>	BSAI Crab bycatch limits: <b>Expanded discussion paper</b>	
Charter Halibut Measures: <b>Cttee report and action as necessary</b>	Round Island Transit: <b>Final Action (T)</b>	Bering Sea Chinook/chum salmon bycatch: <b>Discussion paper (T)</b>
Round Island Transit: <b>Initial Review</b>	Definition of fishing guide: <b>Final Action (T)</b>	Scallop SAFE: <b>Plan Team report and OFL/ABC specifications</b>
Co-op Reporting Requirements: <b>Discussion Paper</b>	CDQ P. cod fishery development: <b>Prelim Discussion paper (T)</b>	
BSAI Crab Cooperative reports; crew provisions, etc. BSAI Crab ROFR contract clarification: <b>Discussion Paper</b>	GOA Tendering: Update/Discussion Paper	Salmon EFH revisions: <b>Initial Review (T)</b>
Ecosystem Committee report on EBFM/EBM Grenadier management: <b>Initial Review</b>	Grenadier management: <b>Final Action</b>	
EGOA skate fishery: <b>Discussion paper; PT recommendation</b> GOA octopus fishery: <b>Discussion paper; PT recommendaiton</b> Groundfish Harvest Specifications: <b>Adopt final specifications</b>	Bering Sea FEP: <b>Discussion Paper</b>  Crab modeling workshop: <b>Report (SSC Only)</b> Chinook Salmon EDR: <b>Report from AFSC (T)</b>  Groundfish and Crab Economic SAFE reports: <b>SSC Review</b>	<b>ITEMS BELOW FOR FUTURE MEETINGS</b> BSAI Crab PSC numbers to weight: <b>Discussion paper</b> ROFR Aleutia PQS: <b>Final Action</b> Greenland Turbot allocation: <b>Initial Review</b> Electronic Monitoring Workgroup Report Charter Halibut Compensated Reallocation Pool: <b>Disc Paper</b> Norton Sound RKC LLPs: <b>Discussion paper (June)</b>

AI - Aleutian Islands  
AFA - American Fisheries Act  
BiOp - Biological Opinion  
BSAI - Bering Sea and Aleutian Islands  
BKC - Blue King Crab  
BOF - Board of Fisheries  
CQE - Community Quota Entity  
CDQ - Community Development Quota  
EDR - Economic Data Reporting  
EFH - Essential Fish Habitat  
EFP - Exempted Fishing Permit  
EIS - Environmental Impact Statement  
FEP - Fishery Ecosystem Plan  
FLL - Freezer longliners

HAPC - Habitat Areas of Particular Concern  
IFQ - Individual Fishing Quota  
IBQ - Individual Bycatch Quota  
LLP - Limited License Plan  
MPA - Marine Protected Area  
PSEIS - Programmatic Supplemental Impact Statement  
PSC - Prohibited Species Catch  
RKC - Red King Crab  
ROFR - Right of First Refusal  
SIR - Supplemental Information Report  
SSC - Scientific and Statistical Committee  
SAFE - Stock Assessment and Fishery Evaluation  
SSL - Steller Sea Lion  
TAC - Total Allowable Catch

**Future Meeting Dates and Locations**

December 9-17, 2013, Anchorage  
February 2-10, 2014, Seattle  
April 7-15, 2014, Anchorage  
June 2-10, 2014, Nome  
October 6-14, 2014 Anchorage  
December 8-16, 2014, Anchorage  
February 2-10, 2015, Seattle  
April 6-14, 2015, Anchorage  
June 1-9, 2015, Sitka  
October 5-13, 2015 Anchorage  
December 7-15, 2015, Anchorage

(T) = Tentative

# Groundfish Workplan

ITEM E-1(c)  
DECEMBER 2013

Priority actions revised in February 2007, status updated to current

General Priority (in no particular)	Specific priority actions	Related to mgmt objective:	Status (updated 12-3-13)	##	2014					
					Dec	Feb	Apr	Jun	Oct	Dec
<b>Prevent Overfishing</b>	a. continue to develop management strategies that ensure sustainable yields of target species and minimize impacts on populations of incidentally-caught species	5	Aggregate ABC/OFL for GOA 'other species' in 2008; BSAI skates TAC breakout in 2009; ecosystem component created in 2010 ACL II discussion paper under preparation							
	b. evaluate effectiveness of setting ABC levels using Tier 5 and 6 approaches, for rockfish and other species	4	AFSC responding to CIE reviews as part of harvest specifications process							
	c. continue to develop a systematic approach to lumping and splitting that takes into account both biological and management considerations	5	report from non-target species committee in Dec 09 Grenadier management initial review in Dec 2013							
<b>Preserve Food Web</b>	a. encourage and participate in development of key ecosystem indicators	10	Ecosystem SAFE presented annually GOA ecosystem assessment for 2014; EBS and AI ecosystem assessments developed in 2010, 2011							
	b. Reconcile procedures to account for uncertainty and ecosystem considerations in establishing harvest limits, for rockfish and other species	11	ACL II discussion paper under preparation							
	c. develop pilot Fishery Ecosystem Plan for the AI	13	FEP and brochure published 2007; AI ecosystem assessment developed in 2011 BS FEP discussion paper in Feb 2014							
<b>Manage Incidental Catch and Reduce Bycatch and Waste</b>	a. explore incentive-based bycatch reduction programs in GOA and BSAI fisheries	15	partially addressed in BS Chinook bycatch EIS, Kodiak Tanner crab closures (2010); GOA pollock and non-pollock Chinook PSC limits (2011, 2013), GOA halibut PSC limit reduction (2012) GOA trawl bycatch mgmt discussion paper in Oct 2013 BS Chinook/chum bycatch review Apr 2014							
	b. explore mortality rate-based approaches to setting PSC limits in GOA and BSAI fisheries	20	partially addressed in BS Chinook bycatch EIS discussion paper on BSAI crab bycatch limits for 4 spp							
	c. consider new management strategies to reduce incidental rockfish bycatch and discards	17	partially addressed in rockfish program							
	d. develop statistically rigorous approaches to estimating bycatch in line with national initiatives	14, 19	National Bycatch Report revised in 2011 restructured observer program to be implemented in 2013							
	e. encourage research programs to evaluate population estimates for non-target species	16	Included in research priorities, adopted in June 2007							
	f. develop incentive-based and appropriate biomass-based trigger limits and area closures for BSAI salmon bycatch reduction, as information becomes available	14, 15, 20	bycatch limits for BS Chinook adopted Apr 09; BS Chinook/chum bycatch review Apr 2014							
	g. assess impact of management measures on regulatory discards and consider measures to reduce where practicable	17	partially addressed by arrowtooth MRA analyses (GOA - 2007, BSAI - 2010)							

# Groundfish Workplan

Priority actions revised in February 2007, status updated to current

General Priority (in no particular)	Specific priority actions	Related to mgmt objective:	Status (updated 12-3-13)	##	2014					
					Dec	Feb	Apr	Jun	Oct	Dec
<b>Reduce and Avoid Impacts to Seabirds and Marine Mammals</b>	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	<i>RPA from final NMFS Biological Opinion implemented by Secretarial action for Jan 2011</i> SSL EIS update - Dec 2013							
	b. recommend to NOAA Fisheries and participate in reconsideration of SSL critical habitat	23								
	c. monitor fur seal status and management issues, and convene committee as appropriate	24, 25	<i>monitoring through the Protected Species Report</i>							
	d. adaptively manage seabird avoidance measures program	22	<i>seabird avoidance measures in 4E in 2008</i>							
<b>Reduce and Avoid Impacts to Habitat</b>	a. evaluate effectiveness of existing closures	26	partially addressed in crab bycatch limits discussion paper							
	b. consider Bering Sea EFH mitigation measures	27	<i>BS habitat closures in 2007; BS flatfish trawl sweep mods required in 2009; EFH 5-year review/omnibus ams approved Apr 2011</i> crab bycatch limits discussion paper addresses BBRKC							
	c. consider call for HAPC proposals on 3-year cycle	27	<i>HAPC cycle changed to 5 years, adopted Apr 2011</i> <i>HAPC skate nurseries, adopted Feb 2013</i>							
	d. request NMFS to develop and implement a research design on the effects of trawling in previously untrawled areas	27	<i>Included in research priorities, adopted in June 2007</i> <i>Development of NBSRA research plan halted</i>							
<b>Promote Equitable and Efficient Use of Fishery</b>	a. explore eliminating latent licenses in BSAI and GOA	32	<i>Trawl LLP recency in 2008; GOA fixed gear latent licenses in 2009</i>							
	b. consider sector allocations in GOA fisheries	32, 34	<i>GOA Pcod sector allocations in 2009; GOA rockfish program renewed in 2010</i> GOA trawl bycatch mgmt discussion paper in Apr 2014							
<b>Increase Alaska Native &amp; Community Consultation</b>	a. Develop a protocol or strategy for improving the Alaska Native and community consultation process	37	<i>protocol approved in 2008</i>							
	b. Develop a method for systematic documentation of Alaska Native and community participation in the development of management actions	37	<i>outreach plans for BSAI salmon bycatch actions</i> Council Outreach Committee meets periodically							
<b>Improve Data Quality, Monitoring and Enforcement</b>	a. expand or modify observer coverage and sampling methods based on scientific data and compliance needs	38, 39	<i>improvements adopted in 2008, restructuring approved in 2010;</i> <i>EM Strategic Plan approved in 2013</i> annual program review in June and deployment plan in Oct EM development discussions ongoing							
	b. explore development programs for economic data collection that aggregate data	40	<i>partially addressed in BS Chinook bycatch in 2009, also Amd 80</i>							
	c. modify VMS to incorporate new technology and system providers	41	<i>VMS exemption for dinglebar Jun 08</i> Enforcement Cttee to advise on advanced features Feb 2014							

## Council Staff Workload and Timeline of Council Actions

Updated 12/2/2013

### GROUND FISH ISSUES

	Council Staff	NMFS Input	Discussion Paper	Initial Review	Final Action	Notes
GOA Trawl Bycatch Management	Darrell Brannan, Sam Cunningham, others	major contributor; GC input	Apr-14			A very big project for council staff, also M&E input from NMFS staff and possible GC input
GOA trawl Data Collection	Darrell Brannan, Sam Cunningham	major contributor; GC input		Jun-13	Oct-13	
Chinook salmon PSC for GOA non-pollock trawl fisheries	Sam Cunningham	sections on M&E		Dec-12	Jun-13	Regulations in preparation
Rockfish program chinook cap rollover	Sam Cunningham	sections on M&E		Oct-13	Dec-13	
BSAI Halibut PSC	Jane DiCosimo, contractor	contributor	Feb-14			Potential major analysis if initiated
SSL EIS	Steve MacLean	lead; GC input		Apr-13	1-Oct-13	EIS and BiOp development
AI cod CV allocation and regional delivery requirements	Jon McCracken	major contributor	Feb-14			
Grenadiers	Jane DiCosimo	AKRO lead	Jun-12	Dec-13		
Octopus fishery	Diana Stram	inseason management input	Dec-13			
Greenland Turbot Allocation	Steve MacLean	tracking	Jun-12			Lower priority. On hold pending 2013 season
CDQ Pacific cod directed fishery	Sarah Marrinan	major contributor	Feb-14			Preliminary discussion paper in February
Round Island Transit Zones	Steve MacLean	M&E input, USFW input	Dec-12	Dec-13		
Groundfish ACL uncertainty	Jane DiCosimo, Diana Stram	AFSC lead				
Crab bycatch limits/closures in BSAI groundfish fisheries	Diana Stram	AFSC, AKRO input on M&E	Feb-13			Expanded discussion paper on PSC and closures for BBRCK, SMBKC, Tanner and snow crab.
BS Chinook&Chum Salmon Bycatch	Diana Stram	AFSC input	Jun-14			Changes to Chinook regulatory and IPA provisions plus management of chum salmon under IPAs

**GROUND FISH ISSUES -  
continued**

	<b>Council Staff</b>	<b>NMFS Staff</b>	<b>Discussion Paper</b>	<b>Initial Review</b>	<b>Final Action</b>	<b>Notes</b>
VMS Requirements	Jon McCracken	tracking	12/12; 12/13			On hold pending 2013 EM deployment results, Enf committee to report in April
PSEIS SIR	Diana Evans	AFSC contributor	Dec-12	Feb-14		Council staff to synthesize AFSC contributions
BSAI Crab PSC to Weight	Diana Stram	input on M&E	on deck			Not yet scheduled; combine with bycatch limits or pursue separately ON DECK
GOA cod pot sector participation	Sam Cunningham	tracking	Feb-14			
EGOA Skate Fishery	Diana Stram	inseason management input	Dec-13			
GOA tendering	Jon McCracken, Diana Evans	AKRO	Feb-14			Issue may involve observer coverage too
Bering Sea Canyons: Science and Fishery Information	Steve MacLean	AFSC report	?			Staff to develop a discussion paper on management measures to be considered for conserving areas of coral conservation. Meet with AFSC and stakeholders.

**CRAB ISSUES**

	<b>Council Staff</b>	<b>NMFS RO Staff</b>	<b>Discussion Paper</b>	<b>Initial Review</b>	<b>Final Action</b>	<b>Notes</b>
BSAI Crab ROFR Aleutia PQS	Chris Oliver, Sarah Marrinan	input from RAM		Feb-13		Parties to work together to resolve issues
BSAI Crab Modeling Workshop	Diana Stram	tracking; AFSC input	Jan-14			January 14-17 in Anchorage.
BSAI crab control rules and uncertainty	Diana Stram	tracking; AFSC input				Ongoing work by Plan Team
BSAI Crab Co-op Provisions for Crew	Sarah Marrinan	major contributor, GC input	Dec-14			Cooperatives to report annually on measures to facilitate share acquisitions by active participants, factors affecting high lease rates and crew compensation.

**HALIBUT/SABLEFISH ISSUES**

	<b>Council Staff</b>	<b>NMFS RO Staff</b>	<b>Discussion Paper</b>	<b>Initial Review</b>	<b>Final Action</b>	<b>Notes</b>
Halibut - federal definition of fishing guide	Jane DiCosimo	major contributor on M&E	Feb-13	Jun-13	Apr-14	Will require coordination with ADF&G and IPHC
Halibut - Recreational Quota Entity common pool	Jane DiCosimo	on M&E				Pending proposal from stakeholders. ON DECK
Allow Sablefish pots in the GOA	Jane DiCosimo	tracking	6/13; 2/14; December 2013			
Increase limits on sablefish A share cap	Jane DiCosimo	tracking	Jun-13			Deferred to IFQ Committee to discuss December 2013

OTHER MANAGEMENT ISSUES						
	Council Staff	NMFS RO Staff	Report	Initial Review	Final Action	Notes
Salmon EFH revisions	Diana Evans	NMFS HD, AFSC science input				Not yet scheduled - awaiting NMFS HD staff availability; originated from EFH 5-yr review
EFH 5-Year Review	Diana Evans	NMFS HD, AFSC science input				Scheduled for 2015
Ecosystem Committee EBFM initiative	Diana Evans	n/a	Oct-13			Long term development of EBFM
MPA nomination process	David Witherell	tracking	Dec-09	n/a	n/a	Awaiting NOAA Guidance on "Avoid Harm" before evaluating sites
Annual Co-op reports: AFA, Am 80, CGOA Rockfish	Jon McCracken Sarah Marrinan	tracking	Dec-13	n/a	n/a	Co-op reporting requirements disc paper in December. Annual Reports from Industry (April)
AM 80 5-year review	Jon McCracken	tracking	Dec-13			Develop workplan in December
Observer Program	Diana Evans, Chris Oliver	lead	Oct-13	n/a	n/a	Updates as needed; Annual performance and deployment plan - Considerable Council staff involvement through 2013; 1.25% observer fee reevaluation in 2015
Observer Regulatory Amendments	Diana Evans	lead	Feb-14	n/a	n/a	Identify main issues to allow prioritization
EFH Consultation Process	Diana Evans	lead	6/13; 12/13	n/a	n/a	Biannual Reports from NMFS (Dec, June); standardized review procedure
Annual Halibut charter recommendations	Jane DiCosimo	tracking	Dec-13	n/a	n/a	At every December meeting; requires ADF&G staff analysis
Research Priorities	Diana Stram Diana Evans	n/a	6/13; 2/14	n/a	n/a	Developing a new tracking report for research priorities
Crab, Scallop, Groundfish plan team and SAFE reports	Diana Stram, Jane DiCosimo	AFSC	most meetings	n/a	n/a	Major Council staff workload
BS Chinook Salmon	Diana Stram	AFSC	Oct-13	n/a	n/a	Report on update AEQ and Chinook bycatch in Bering Sea; action as necessary
Bering Sea Fishery Ecosystem Plan (FEP)	Diana Evans	AFSC	Feb-14			

**Current Other Projects**

Strategic Planning	Chris Oliver, David Witherell	Working with the NMFS RO staff and NOAA GC to improve the analytical and implementation process.
Analytical template (EA/RIR/IRFA)	Diana Evans	We are developing a standardized analytical template to improve our analytical content and speed the regional and GC review process.
MONF 3 follow through	David Witherell	MONF3 review of draft proceedings.
Community Profiles Glossy	Mike Fey, David Witherell	Similar to the groundfish and fleet profiles, we are preparing ing a overview of fishing communities affected by federal fishing regulations.
Protected Species Glossy	Steve MacLean, David Witherell	Similar to the groundfish and fleet profiles, we are preparinging a overview of protected species affected by federal fisheries.
Update Reference Manual, Personnel Rules, other guidance	Chris Oliver, David Witherell	These manuals need updating, but it has been a lower priority to date.
FMP Updates	Jane DiCosimo, Diana Stram	Ongoing updates of our FMPs with recently approved amendment language.
Groundfish FMP Summaries Glossy	Jane DiCosimo	Our 2012 summer intern (Ben Williams) revised groundfish FMP summaries to make them more accessible to the general public. Still needs work

**Ongoing Administrative Work**

**Notes**

Preparation for and attendance of staff at other agency meetings (IPHC, BOF, NPRB, PSMFC, AMSS, Council training, etc)	Liaison staff	Staff gives presentations and participates at meetings of partner agencies, and responds to requests for presentations at various venues.
Preparation and attendance at national and international meetings (IPHC, NPFC, ICC, CCC)	Chris Oliver, et al.	Significant obligations primarily for CCC related activities
Staffing and minutes preparation, briefing book and presentation preparation for Council meetings; preparation of newsletter	All staff	Each Council meeting effectively uses up 3 weeks of each staff persons time. Meeting minutes take several weeks to prepare. Significant workload
Staffing and minutes preparation for standing Council committees (Ecosystem, Enforcement, Charter Implementation, OAC, PNCIAC, SSLMC, ROC, etc.)	All staff	Staff plans and attends meetings of various Council committees, and prepares minutes of these meetings. Significant workload
Document review, staff administration and oversight, correspondence, etc.	Chris Oliver, David Witherell	Administrative duties require a substantial portion of each day.
Website maintenance, Council minutes	Maria Shawback	Maintenance of the website requires regular updates and posting of new information.
Phones, wordprocessing, document compilation, copying, filing, office supplies, etc.	Peggy Kircher	Maintenance of the website requires regular updates and posting of new information.
Response to FOIA Requests and Administrative Records for litigation	Bendixen, Shawback, Kircher, Oliver, Witherell, other staff	Some requests for records can require long search and copying times (for which we are not reimbursed), as well as transcriptions of audio files.
Budgets, finance and operations; biennial audit	Gail Bendixen, Chris Oliver, David Witherell	Bills paid, bank statements reconciled, meeting arrangements/contracts, human resources, etc. Significant workload. Biennial audit April/May 2013
Miscellaneous professional obligations (NPRB reviews, participation on scientific and advisory committees, professional presentations and publications)	All staff	Staff participates on various Scientific/Advisory Committees, peer reviews NPRB proposals, publishes papers and presents at scientific meetings.
Fishery Evaluations, Reviews and Certifications	All staff	Staff contributes to reviews and status evaluations for MSC certifications, Global Trust Certifications, Fish Watch, CIE Reviews, etc.
Public Outreach	All staff	Staff prepares public outreach brochures, provides talks to students and delegations from other countries, and does rural outreach work as needed.
Legislation tracking and response	Chris Oliver, David Witherell	Potential for MSA reauthorization in 2013 - considerable workload in responding to various draft legislation in 2013 and beyond.

Note: While not a legal requirement, the **target** date for release of documents in advance of Council meetings is as follows:

**Short Discussion Papers:** 1 week

**Initial Review Analyses:** 2 weeks

**Final Action Analyses:** 4 weeks

## **North Pacific Fishery Management Council**

216<sup>th</sup> Plenary Session – December 9-16, 2013

Anchorage Hilton Hotel

**Public Comment (12/3/13) by Stephen Taufen, Kodiak AK**

**ID 13-022 Staff Tasking – Future Agenda re GOA Privatization Topics**

**Ref: October 5, 2013 — C-5(a) GOA Trawl Bycatch Management  
& the October 2013 C-5(a): GOA DISCUSSION PAPER.**

Mr. Secretary, Governor, Mr. Chair and Council members:

I am Stephen Taufen of the Groundswell Fisheries Movement, a public advocacy in North Pacific fisheries.

When considering any and all proposals and the upcoming (revised) discussion report by Darrell Brannan and Sam Cunningham; updating— to reflect the new framework, and to move:

- Beyond TIER 1 issues — what species, how is quota allocated, to whom, duration of allocations, and transferability?
- Into the TIER 2 concerns — who may purchase QS/IFQ/IBQ; excessive share limits, limits on use; sideboards to protect other sectors; fit with MSA §303A [provisions and requirements associated with the use of LAPPs]; and State water issues?

**Groundswell believes that all Alternatives and Elements, of all proposals, should pay specific attention to:**

- 1. The Commercial Fishing Vessel Safety Act of 1988 & 46 U.S.C. §10601 Lay Share & Federal contract law.**
  - (a) That captains and crews historical roles as independent contractors be preserved, **and that the USCG do proper boarding inspections to ensure contracts for all covered voyages are on board, provided to crew, and meet federal requirements.**
  - (b) That it be specified any **Leases may only come off the books AFTER the fish settlement portions of trips are computed**, after “net adjusted revenues” and allocative fuel and related direct costs.
  - (i) I.E. crew should not be paying for any costs of quota funding, buyback fees, nor private contractual arrangements between vessel owners and vessel operators.

(ii) Crews are third-parties, not privileged to contract such Leases, and do not receive legally required copies of contracts (cooperatives etc.) to which their incomes are bound.

1. Absent meeting many of the material facts and other requirements for a valid set of crew contracts (in many cases), if the ITQ holders want to have "private contractual agreements" — and not include crew in the negotiation of those leases, nor of ex-vessel ticket prices: by granting them a role in binding arbitrations — then those Sealord excessive rents (50% to 75%) should come off after captains and crews have already received their rightful lay shares.

(c) Accordingly, for GOA groundfish, **that the historical ratio of revenues (ex-vessel) of 35% to 45% be preserved for captains and crews** (see earlier Alaska Groundfish Data Bank testimony) and be maintained into the long future.

2. Sherman and Clayton Act requirements on avoiding antitrust, especially on the level of Restraints of Trade be examined.
3. That the Congressional top ranking World Trade Organization treaty obligations be examined and adhered to, so that no Processor Quotas are awarded.
  - a. It is important to note that Crab Rationalization's IPQs certainly could be ruled internationally in violation of the WTO treaty rights of other nations to act in Alaska as buyers (competitors) from USA fishermen.
4. That State of Alaska CORE reports on ex-vessel values be considered and noted appropriately in regulations, as the greatest and most direct economic regional drivers of healthy coastal communities derives from preserving price bargaining, avoiding price-making plenary power of a government sponsored set of monopolies (a tight oligarchy of processors, mostly foreign owned and controlled).
  - a. The best way to serve Alaskan communities, rather than have them try to get off track in rationalization regime designs, is to simply preserve and enhance the base levels from which local taxes are derived — maximizing both federal and state value from the MSY of USA fisheries under the Council's rein.
5. That, first — other applicable federal laws, then second — MSA statutes, along with National Standards be prioritized and ranked in importance, for consideration and comparisons among potential Alternatives and reaching a preferred alternative.

- i. **I.E. National Standards must be correctly specified by all proposers, not manipulated.** E.G. one proposer writes in public news media that there be “fair and equitable opportunities” while you know the actual wording is “fair and equitable distributions.” Big differences!, especially considering what “fair and equitable” mean for crew (captains and deckhands who actually fish at sea).

We hope these comments assist, for now, in guiding your upcoming efforts. We may submit a proposal with Alternatives and Elements at a later session.

Thank you.

Stephen Taufen, founder

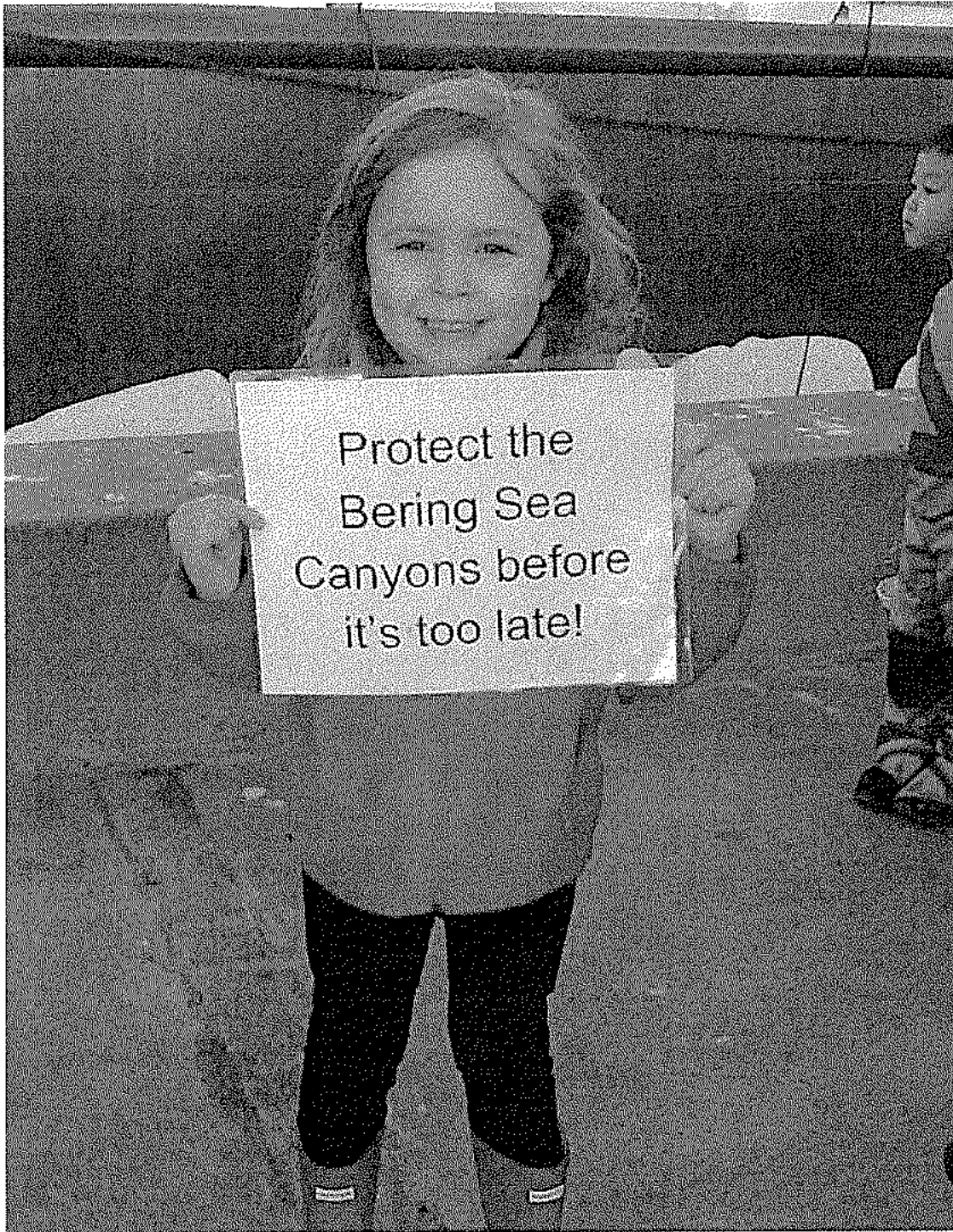
*Groundswell Fisheries Movement* (website: <http://groundswellalaska.com>)

c/o F/V Stormbird; P.O. Box 714; Kodiak, AK 99615.

*SUBMITTED DECEMBER 3, 2013*

December 3, 2013  
Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council

RE: E1 – Staff Tasking



One example of over 700 people from Seattle, Washington voicing their request to the NPFMC.



December 3, 2013

Mr. Eric Olson  
Council Members  
North Pacific Fishery Management Council  
605 West 4th Avenue, Suite 306  
Anchorage, AK 99501-2252

RE: E1 - Staff Tasking

**Dear Chairman Olson and Council Members,**

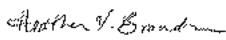
During the past decade, the Council has received white papers, peer-reviewed scientific papers, and thousands of public comments regarding the uniqueness and importance of the Bering Sea shelf break, and in particular Zhemchug and Pribilof canyons. Although much more can be learned about the canyons, enough is known today for you to take action to protect these ecosystems and the organisms contained in them. Ecosystem-based management allows for important fish habitat areas, such as the Bering Sea canyons to be protected as important components of the marine ecosystem, even without derermination of essential habitat for a fishery. Recent scientific studies and modeling, including submarine enabled on-site observation, clearly indicate that a large portion of the Bering Sea's vital coral and sponge habitat occurs within these canyons. In 2006, the Council cited "insufficient information" as the reason to delay protections for these canyons. However, based on the additional scientific information collected over the last six years, the Council acknowledged at the June 2013 meeting that there is now enough scientific information available to move ahead with a plan to protect the canyons. We urge you to do that, today.

The Green Belt habitat, which includes the canyons, is the only major habitat type in the Bering Sea for which no protections have been enacted. As climate change and ocean acidification continue to rapidly alter the fisheries, habitats, and ecosystem dynamics of the Bering Sea, one of the few ways fisheries managers can buffer the marine ecosystem from the impact of global warming is by maintaining the resilience of ecosystems through limiting disturbance to high-value areas.<sup>1</sup> Deep-sea coral and sponge communities are keystone species and hotbeds of biodiversity, and many commercial fish and invertebrate species depend on these ecosystems for survival. A failure to swiftly protect this known habitat – one that took millennia to develop but is vulnerable to complete destruction in a single sweep of bottom tending fishing gear – is not justifiable in light of the Council's mandate to protect and enhance essential fish habitat and to consider what is in the best interest of the ecosystem.

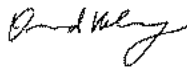
As stakeholders who value the continuing health, resilience and productivity of the Bering Sea ecosystem, we urge the Council to safeguard the future, and not just this year's profits. Please demonstrate your commitment to long-term stewardship by starting the formal process to identify a range of alternatives to protect Zhemchug and Pribilof canyons.

**Sincerely,**

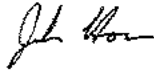
Heather Brandon  
Senior Fisheries Officer  
World Wildlife Fund



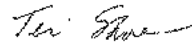
David Helvarg  
President  
Blue Frontier Campaign



John Hocevar  
Oceans Campaign Director  
Greenpeace



Teri Shore  
Program Director  
Turtle Island  
Restoration Network



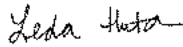
Lance Morgan Ph.D.  
President  
Marine Conservation Institute



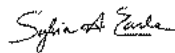
Cindy Shogan  
Executive Director  
Alaska Wilderness League



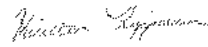
Leda Huta,  
Executive Director  
Endangered Species  
Coalition



Dr Sylvia Earle  
Founder Sylvia Earle  
Alliance,  
Mission Blue



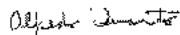
Kiersten Lippmann  
Conservation Biologist  
Center for Biological Diversity




Marcie Keever  
Oceans & Vessels Program Director  
Friends of the Earth




Alfredo Quarto  
Executive Director  
Mangrove Action Project



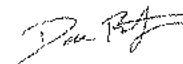
Tina Brown  
President  
Alaska Wildlife Alliance



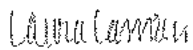
Kevin Harun  
Arctic Director  
Pacific Environment



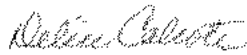
Dan Ritzman  
Alaska Program Director  
Sierra Club



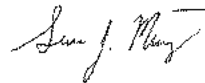
Laura Cassiani  
Chief Operating Officer  
Mission Blue



Delice Calcote  
Executive Director  
Alaska Inter-Tribal Council



Susan Murray  
Deputy Vice President, Pacific  
Oceana



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<sup>1</sup> Micheli F, Saenz-Arroyo A, Greenley A, Vazquez L, Espinoza Montes JA, et al. (2012) Evidence That Marine Reserves Enhance Resilience to Climatic Impacts. PLoS ONE 7(7): e40832. doi:10.1371/journal.pone.0040832

**Subject:** Protect the Bering Sea Canyons  
**From:** Kristian Boose <krisboose@gmail.com>  
**Date:** 10/30/2013 4:05 PM  
**To:** npfmc.comments@noaa.gov

Oct 30, 2013

Mr. Eric Olson  
605 West 4th Avenue #306  
Anchorage, AK 99501-2252

Dear Chairman Olsen and Council members Mr. Olson,

I have only recently learned of this amazing place and what goes on there. With this letter I am joining with hundreds of thousands of individuals who have, over the course of more than a decade, implored you to protect the essential fish habitat in the Bering Sea Canyons.

Last June the Council received a report on the Bering Sea Canyons from NOAA scientists validating the presence of vulnerable coral and sponge fish habitat in Zhemchug and Pribilof Canyons. The report identifies the shelf break and associated canyons the Green Belt as containing a large portion of the coral habitat that exists in the Eastern Bering Sea.

I understand that the Council declared the Bering Sea canyons a high priority research item in 2006, and I appreciate the effort now under way by NOAA scientists to increase the research record on coral areas in the canyons with field work scheduled for the summer of 2014. There will always be more to learn, and policy decisions will, as they always have, benefit from the best available science at the time. Enough is known now, though, to act to protect these crucial habitat areas.

Until the process to identify and implement management measures for the canyons is completed important coral areas that have been identified remain vulnerable, putting at risk long-lived species that provide essential habitat for commercially important fish and other species in this complex ecosystem. I encourage the Council to make needed progress at this Council meeting by initiating the process to develop alternatives, considering by stakeholder input, to protect this habitat while maintaining fishing opportunities that ultimately support productive fisheries.

Sincerely,

Kristian Boose  
1802 N 54th St  
Seattle, WA 98103-6122

**Subject:** Protect the Bering Sea Canyons  
**From:** Dan Schreiber <dschreib@greenpeace.org>  
**Date:** 10/25/2013 4:23 PM  
**To:** npfmc.comments@noaa.gov

Oct 25, 2013

Mr. Eric Olson  
605 West 4th Avenue #306  
Anchorage, AK 99501-2252

Dear Chairman Olsen and Council members Mr. Olson,

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Sincerely,

Dan Schreiber  
1665 Harvard St NW  
San Francisco, CA 94110

**Subject:** Protect the Bering Sea Canyons  
**From:** Yuri Barsukov <ybzpilot@hotmail.com>  
**Date:** 10/28/2013 12:30 PM  
**To:** npfmc.comments@noaa.gov

Oct 28, 2013

Mr. Eric Olson  
605 West 4th Avenue #306  
Anchorage, AK 99501-2252

Dear Chairman Olsen and Council members Mr. Olson,

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Sincerely,

Yuri Barsukov  
14 Anderson St  
Fort Rucker, AL 36362-2002