

Signed: *Dan Hume*  
Date: 2/10/2015

MINUTES

220th Plenary Session  
North Pacific Fishery Management Council  
Anchorage Hilton Hotel, Alaska

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**Attachments:**

- Sign in Sheet and Time Log
- AP and SSC Minutes
- C4 Emergency Rule Motion
- BSAI and GOA Groundfish Specifications
- Council appointments to AP, SSC, Plan Teams, and PNCIAC
- Newsletter

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

Council Members

Dan Hull, Chair	Craig Cross	Dan Hull
John Henderschedt, Vice Chair	Ed Dersham (absent)	Simon Kinneen
Jim Balsiger	Duncan Fields	David Long
Sam Cotten/Nicole Kimball	Dave Hanson	Bill Tweit
	Roy Hyder	Capt Phillip Thorne

NPFMC Staff

Gail Bendixen	Steve MacLean	Joy Stein
Sam Cunningham	Sarah Marrinan	Maria Shawback
Diana Evans	Jon McCracken	Diana Stram
Peggy Kircher	Chris Oliver	David Witherell

Scientific and Statistical Committee

The SSC met from December 8<sup>th</sup> through 10<sup>th</sup> at the Hilton Hotel, Anchorage, AK.

Pat Livingston, Chair <i>NOAA Fisheries—AFSC</i>	Robert Clark, Vice Chair <i>Alaska Department of Fish and Game</i>	Milo Adkison <i>University of Alaska Fairbanks</i>
Alison Dauble <i>Oregon Dept. of Fish and Wildlife</i>	Sherri Dressel <i>Alaska Department of Fish and Game</i>	Brad Harris <i>Alaska Pacific University</i>
Anne Hollowed <i>NOAA Fisheries—AFSC</i>	George Hunt <i>University of Washington</i>	Seth Macinko <i>University of Rhode Island</i>
Steve Martell <i>Intl. Pacific Halibut Commission</i>	Lew Queirolo <i>NOAA Fisheries—Alaska Region</i>	Terry Quinn <i>University of Alaska Fairbanks</i>
Matt Reimer <i>University of Alaska Anchorage</i>	Farron Wallace <i>NOAA Fisheries—AFSC</i>	

Members absent were:

Chris Anderson <i>University of Washington</i>	Jennifer Burns <i>University of Alaska Anchorage</i>	Kate Reedy <i>Idaho State University Pocatello</i>
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Advisory Panel

The AP met December 9-12, 2014, Anchorage Hilton Hotel, Alaska. The following members were present.

Ruth Christiansen	Jeff Kauffman	Theresa Peterson
Kurt Cochran	Mitch Kilborn	Lori Swanson
John Crowley	Alexus Kwachka	Anne Vanderhoeven
Jerry Downing	Craig Lowenberg	Ernie Weiss
Jeff Favour	Brian Lynch	Sinclair Wilt
Becca Robbins Gisclair	Chuck McCallum	
John Gruver	Paddy O'Donnell	
Heath Hilyard	Joel Peterson	

## B Reports

The following reports were given and briefly discussed. Public Comment was taken on all B items:

B1 Executive Director's Report – Chris Oliver

B2 NMFS Management Report – Glenn Merrill, Jeanne Hansen, Mary Furuness, Chad See: Lead Level 2 Industry Report

B3 ADF&G Report – Karla Bush

B4 NOAA Enforcement Report

B5 USCG Report – Capt. Phillip Thorne, Lt Cdr Corrie Sergent

B7 IPHC Report – Ian Stewart

B8 Protected Species Report - Steve MacLean

B9 NPRB Report – Denby Lloyd

Mike Clark – US Department of State

## B items

### COUNCIL DISCUSSION /ACTION

Mr. Oliver reviewed his ED report and a list of the items the Council may want to discuss during staff tasking for action. Mr. Tweit suggested SSC involvement in Arctic discussions along with the climate change topics and suggested the Chairman and the Executive Director review how to structure the involvement/discussion. Mr. Tweit also requested the Council continue to have a strong advisory role in the developing Antiquities Act and role in NEPA.

Commissioner Cotton noted that the State of Alaska is committed to reducing bycatch in Alaska fisheries, and switching from limited access to catch share could have unintended effects. He noted that the current administration may want to take review the work that has been done. The Alaska Board of Fisheries has an increasing interest in the groundfish issues, and the BOF may want to weigh in on discussions that affect state waters. He noted he is looking forward to discussing specifics during the staff tasking agenda item.

Mr. Tweit noted that the Council should thank NPRB for the presentation in the B reports, and invite them for further collaboration of issues that are relevant to both bodies: specifically Arctic issues, the FEP, and many ecosystem issues.

Mr. Tweit also noted the Council and stakeholders should review the proposed Arctic shipping route, highlighted concerns, and suggested including it in the newsletter.

Mr. Fields noted he would like to discuss halibut bycatch reductions in areas 4CDE, and would like to discuss these issues as part of the TAC-setting process.

Discussion on this topic continued, and it was noted that there are many regulatory issues involved. It was noted that the Council will be having a joint meeting with the IPHC, and many halibut issues can be addressed then. Mr. Fields noted that while a long term solution is important, action is necessary immediately, and an emergency rule will be best suited to address this. Brief discussion continued

regarding the criteria for an emergency rule and that the Council could explore the regulatory construct for this action.

Mr. Hull noted he will be working on development of an agenda for the joint IPHC/Council meeting along with Mr. Oliver and Dr. Leaman of the IPHC. There was brief discussion, and it was agreed that along with reports, the meeting can serve a larger purpose as to how each agency can greater assist the other in fulfilling their mission.

## **C1 Charter Halibut Management Measures for 2015**

### **BACKGROUND**

*The Charter Management Implementation Committee met in October, 2014 to recommend a range of potential management measures for Area 2C and Area 3A in 2015 to frame the analysis. The committee's list of recommended measures for analysis is attached. Final committee recommendations from its December 8, 2014 meeting and the ADF&G analysis, which is the basis for those recommendations, will be posted and distributed during the Council meeting. The analysis will provide the projected harvests for the proposed measures. The Council recommendations would encompass the full range of potential catch limits for Area 2C and Area 3A under consideration by the IPHC.*

Steve MacLean and Scott Meyer gave the staff report on this agenda item and answered questions from the Council. The AP gave its report, there was brief discussion regarding the enforcement aspects, and public comment was taken.

### **COUNCIL DISCUSSION/ACTION**

**Ms. Kimball made the following motion, which was seconded:**

**The Council recommends the following management measures for the 2015 charter halibut fishery in Area 2C and Area 3A, based on initial reference allocations of 1,890,000 lbs in Area 3A and 787,000 lbs in Area 2C, resulting from the IPHC interim meeting.**

#### **Area 3A recommendations:**

- **Two-fish daily bag limit**
- **Maximum size of one of the two fish is 29"**
- **One trip per day (limit each vessel to one trip per calendar day)**
- **5-fish annual limit**
- **Prohibition on halibut charter fishing on Thursdays, during June 15 – August 31**

**If the final charter allocation is sufficiently higher than the "blue line", adjust the maximum size of the second fish upward to meet the allocation.**

#### **Area 2C recommendations:**

- **One-fish daily bag limit**
- **Reverse slot limit of U40" – O80" (must be  $\leq 40$ " or  $\geq 80$ " )**

**If the final charter allocation is sufficiently higher than the "blue line" to accommodate a change in the reverse slot limit, adjust the size of the lower limit upward to meet the allocation.**

**The regulations for GAF remain the same.**



Ms. Kimball spoke to the motion, noting that the task is to select annual management measures for both Area 2C and Area 3A, using the best available data, to achieve the charter harvest allocation under the catch sharing plan. She stated the CSP establishes this annual process in order to use the best and most recent data from the fishery to manage within the allocation and minimize the disruption to these businesses. She continued, stating the rule for the catch sharing plan was clear that because the CSP would not change management measures during a sport fishing season, the management measures implemented prior to the start of a sport fishing season may result in harvests that are greater or less than the catch limit in any given year. The Council anticipated and NMFS agreed, that over time, halibut harvests by the charter halibut fishery under the CSP would stabilize around the charter halibut catch limits, thereby promoting conservation and management objectives over the long term. She noted that overages are taken seriously and projections take into account forecasts and errors in predicting. She noted that the Council is using the best available data and the allocations are expected to average out over time. For 3A and 2C, the combination of measures is recommended by a majority of the Charter Implementation Committee to keep the charter sector below the Catch Sharing Plan allocation in 2015.

Finally she stated she appreciated the committee's detailed work, stating they were the first step in this process. Ms. Kimball answered questions of clarification.

Mr. Hyder commented on enforceability, and stated that the Council has received recommendations from NOAA law enforcement, noting that they are not confident they can provide the enforcement that would support regulations. He cautioned the Council to pay attention to the recommendations.

Mr. Tweit thanked ADF&G's leadership and support on behalf of the Council, and encouraged ADFG and staff to allow more time if at all possible, to review documents and provide comments. Mr. Fields noted that over time the GAF process will be refined, and will support the motion. Mr. Hull thanked those involved, specifically noting the close scrutiny of enforcement issues. **The motion passed without objection.**

## C2 Bering Sea Salmon Bycatch

### BACKGROUND

*In 2013 and 2014, the Council reviewed several discussion papers evaluating the efficacy of management measures and options for modifications under the Amendment 91 Chinook salmon bycatch management program by the Bering Sea pollock fleet, as well as the status of western Alaska Chinook and chum salmon stocks. In June 2014, the Council initiated a combined analysis of refinements to the Chinook bycatch management program with measures to incorporate management of chum salmon bycatch. The motion from that meeting, including the purpose and need statement from the Council, as well as the suite of alternatives for analysis is attached.*

*At this meeting, the Council will take initial review of this analysis. The analysis was made available on November 13<sup>th</sup>. Both the EA/RIR/IRFA and the executive summary of the full analysis are posted and paper copies will be made available as needed at the Council meeting. Additional supplemental tables and figures to correct for omissions and errors are attached as well as supplemental information for evaluating the impact of Alternative 5 on the inshore sector. This supplemental information will be incorporated into the public review draft following this meeting.*

*The Council will review the EA/RIR/IRFA at this meeting and may choose to modify the current suite of alternatives and/or identify a preliminary preferred alternative (PPA). The purpose of identifying a PPA is to signal to the public the likely direction of Council intent, however the Council's preferred alternative at final action may differ from the PPA. The Council is not required to create a PPA at this time and may choose to wait until final action to select a preferred alternative.*

*The Council has previously indicated its intent to pursue further outreach efforts on this analysis with targeted outreach to communities in Western Alaska. A proposed outreach schedule is being developed, and, with the Council's concurrence, outreach efforts will be conducted in the Spring of 2015. The Council has indicated its express intent that outreach timing would be completed prior to Council final action.*

Dr. Diana Stram gave the staff report on this agenda item and answered questions from the Council. Dr. Jim Ianelli and Dr. Alan Haynie both provided additional information on the analysis and answered questions. Dr. Jim Fall and Dr. Katie Howard from the State of Alaska gave reports on subsistence and stock status respectively. The IPA reports were given by the IPA representatives as follows: Stephanie Madsen and Ed Richardson presented the processor report; John Gruver presented the inshore catcher vessel report and James Mize reported on the mothership sector. The SSC and the AP both gave the reports from their meetings on this issue, and public comment was taken.

#### COUNCIL DISCUSSION/ACTION

Mr. Cotton made the following motion:

**The Council releases the analysis of Chinook and chum salmon bycatch measures in the Bering Sea pollock fishery for public review with the following revisions (additions are in bold underline; deletions are stricken). SSC recommendations should be addressed as practicable prior to release of the public review draft.**

***Purpose and need statement: The current chum salmon bycatch reduction program under Am 84 does not meet the Council's objectives to prioritize Chinook salmon bycatch avoidance, while preventing high chum salmon bycatch and focusing on avoidance of Alaska chum salmon stocks; and allow flexibility to harvest pollock in times and places that best support those goals. Incorporating chum salmon avoidance through the Incentive Plan Agreements (IPAs) should more effectively meet those objectives by allowing for the establishment of chum measures through a program that is sufficiently flexible to adapt to changing conditions quickly.***

***Chinook salmon are an extremely important resource to Alaskans who depend on local fisheries for their sustenance and livelihood. Multiple years of historically low Chinook salmon abundance have resulted in significant restrictions for subsistence users in western Alaska and failure to achieve conservation objectives. The current Chinook salmon bycatch reduction program under Am 91 was designed to minimize bycatch to the extent practicable in all years, under all conditions of salmon and pollock abundance. While Chinook salmon bycatch impact rates have been low under the program, there is evidence that improvements could be made to ensure the program is reducing Chinook salmon bycatch at low levels of salmon abundance. This could include measures to avoid salmon late in the year and to strengthen incentives across both seasons, either through revisions to the IPAs or regulations.***

**Alternatives: (Note: action alternatives are not mutually exclusive.)**

**Alternative 1. No action.**

**Alternative 2. Remove BSAI Am 84 regulations and incorporate chum salmon avoidance into the Am 91 Incentive Plan Agreements. An annual exemption from the Chum Salmon Savings Area is contingent upon participation in an incentive plan agreement that includes the provisions below. Revise regulations at 50 CFR 679.21(c)(13) to include associated reporting requirements for chum salmon. Revise regulations at 50 CFR 679.21(c)(12)(iii)(B)(3) to include chum salmon bycatch avoidance as follows:**

***(3) Description of the incentive plan.***

***The IPA must contain a written description of the following:***

***(i) The incentive(s) that will be implemented under the IPA for the operator of each vessel participating in the IPA to avoid Chinook salmon and chum salmon bycatch under any condition of pollock and Chinook salmon abundance in all years;***

***(ii) The incentive(s) to avoid chum salmon should not increase Chinook salmon bycatch;***

***(iii) The rewards for avoiding Chinook salmon, penalties for failure to avoid Chinook salmon at the vessel level, or both;***

***(iv) How the incentive measures in the IPA are expected to promote reductions in a vessel's Chinook salmon and chum salmon bycatch rates relative to what would have occurred in absence of the incentive program;***

***(v) How the incentive measures in the IPA promote Chinook salmon savings and chum salmon savings in any condition of pollock abundance or Chinook salmon abundance in a manner that is expected to influence operational decisions by vessel operators to avoid Chinook salmon and chum salmon;***

***(vi) How the IPA ensures that the operator of each vessel governed by the IPA will manage that vessel's Chinook salmon bycatch to keep total bycatch below the performance standard described in paragraph (f)(6) of this section for the sector in which the vessel participates;***

***(vii) How the IPA ensures that the operator of each vessel governed by the IPA will manage that vessel's chum salmon bycatch to avoid areas and times where the chum salmon are likely to return to Western Alaska; and***

***(viii) The rolling hot spot program for chum salmon bycatch avoidance and an agreement to provide notifications of closure areas and any violations of the rolling hot spot program to at least one third party organization representing western Alaskans who depend on non-Chinook salmon and do not directly fish in a groundfish fishery.***

**Alternative 3. Revise Federal regulations to require that IPAs include the following provisions:**

**Option 1. Restrictions or penalties targeted at vessels that consistently have significantly higher Chinook salmon PSC rates relative to other vessels fishing at the same time. Include a requirement to enter a fishery-wide in-season PSC data sharing agreement.**

- Option 2.** Required use of salmon excluder devices, with recognition of contingencies.  
Suboption: Required use of salmon excluder devices, with recognition of contingencies, from Jan 20 – March 31, and Sept 1 until the end of the B season.
- Option 3.** A rolling hotspot program that operates throughout the entire A and B seasons.
- Option 4.** Salmon savings credits last for a maximum of three years for savings credit based IPAs.
- Option 5.** Restrictions or performance criteria used to ensure that Chinook salmon PSC bycatch rates in the month of October are not significantly higher than those achieved in the preceding months.

**Alternative 4.** Revise the Bering Sea pollock fishery seasons:

- Option 1.** Change the start date of the Bering Sea pollock B season to June 1.
- Option 2.** Shorten the Bering Sea pollock fishery to end on [suboptions: September 15, October 1 or October 15].
- Option 3.** Reallocate pollock A and B season apportionments to:  
Suboption: 45% (A) and 55% (B), with A to B season rollovers  
Suboption: 50% (A) and 50% (B), with A to B season rollovers

**Alternative 5.** Revise Federal regulations to lower the performance standard under Am 91 in years of low Chinook salmon abundance per the options below. Low abundance is defined as ~~≤500,000~~ 250,000 Chinook salmon, based on the ~~total~~ post-season inriver Chinook salmon run size index of the Unalakleet, Upper Yukon, and Kuskokwim coastal WAK aggregate stock grouping in a [option: year or average of two years]. Sectors that exceed the applicable performance standard, in 3 out of 7 years, would be held to their proportion of the annual applicable performance standard in future years (for example, either 47,591 or an option selected below, whichever is in place that year). ~~hard cap of 47,591 in perpetuity.~~ If an option is selected under Alternative 5 that establishes a performance standard lower than the opt-out cap, then in a year in which the lowered performance standard is in place, the opt-out cap would be equal to the lower performance standard. In a year in which the lowered performance standard is in place and there are no approved IPAs, the PSC limit allocated to sectors would equal the lower performance standard.

- Option 1.** 25% reduction (35,693)
- Option 2.** 60% reduction (19,036)
- ~~Suboption: Apply the reduction [25% or 60%] to the B season portion of the performance standard only.~~  
Suboption: Reduce the 60,000 hard cap in years of low Chinook salmon abundance by the same proportion as the performance standard.

The analysis should continue to include the regulatory amendments recommended by NMFS in Section 2.6 of the initial review draft, such that they could be incorporated into a preferred alternative at final action, if desired. Under Alternative 3, the analysis should incorporate and evaluate the industry responses to the options, as practicable, in the public review draft.

Mr. Cotton spoke to the motion. He explained that this motion releases the document for public review, noting that the document is complete and with these revisions represents a reasonable suite of alternatives in which to consider revising the program to provide a meaningful incentive to revise behavior in these years of low salmon abundance when vessels and coops are below their salmon allocations. A key part of the original program was to evaluate whether incentives are in place in years of low salmon abundance thus it remains important to evaluate whether these incentives are working well during these periods of historically low abundance when we continue to struggle to meet salmon escapement goals, given what is known about the proportion of bycatch fish that originate from western Alaska and that the majority of these fish would have returned to rivers in western Alaska. The opportunity to fish for pollock has not yet been constrained, but in-river fishing for Chinook has been constrained to the point of total closures in some systems, this is it important to continue to conservatively manage all salmon removals that could otherwise contribute to escapement in years in which it is absolutely critical to get salmon to the spawning grounds. Mr. Cotton briefly discussed proposed changes in each alternative of the motion. In alternative 2, he noted that a backstop for chum needs to be retained, similar to status quo, if a sector does not participate in an incentive plan that includes chum avoidance measures. Additionally, some form of rolling hotspot program should be continued as well as the notification requirements under the current program.

He continued, stating in Alternative 4, the A and B seasons were revised to allocate a higher percentage of pollock to the A season. This is included as a means to reduce effort in the B-season, noting that this would likely need some form of consultation (formal or informal) as the seasonality originates from steller sea lion protection measures. There is no indication at this time that the inclusion of this option would slow down the analysis. Alternative 5 reflects the proposed change to the Chinook salmon abundance index provided in the analysis. He also discussed why the Nushagak River was not included in the index, for the reasons explained clearly in the analysis itself. He noted that this motion uses post-season preliminary run reconstruction estimates for the 3-System index, and further noted that the analysis clearly indicated a natural break in the data at the proposed threshold level which indicates the years of low Chinook abundance. These years are the same years indicated by the previous CWAK index. The Council notes that this threshold indicated simply years of very low abundance as compared to higher years and thus meets the intent of the Council's goals and objectives for this action. Post-season preliminary run size estimates are used to improve the timeliness of the availability of these estimates in order to shorten the time for the use of this index in September/October following the salmon season, instead of waiting for final numbers which would not be available until March of the following year. He spoke briefly to the variables of the year's run, and triggers which would lower the performance standard. Additionally, he outlined other changes that affect Alternative 5, some of which directly address the need to account for what the analysis points out as potential for unintended perverse incentives and as revised now would close any of these perceived loopholes for the opt-out cap as well as the performance standard in any year. A new suboption to the lower the 60,000 hard cap in years of low Chinook salmon abundance by the same proportion that the performance standard is included as well. The intent is also that consideration be given in the analysis to the extent possible to the impact of lowering the overall hard cap on the appropriate incentives in the IPAs..

Mr. Cotton noted that he included statements at the end of the motion which assist the public and provide direction to comment on the public review draft.

Mr. Cotton answered questions of clarification on the motion and spoke to the intent of the overall motion. With respect to questions of clarification on Alternative 4 option to increase the allowable proportion of pollock to the A season, it was noted that the analysis would treat the allocation as if it

was all caught in the A-season, understanding that the regulations to implement this however would allow for a rollover of any unused quota to the B-season.

**Mr. Henderschedt moved to amend Alternative 5, to apply reduction(s) to those sectors that have not included in their IPAs measures intended to limit Chinook bycatch to the reduced performance standard and which establish an absolute bycatch limit at the amount equivalent to a reduced hardcap.**

Mr. Henderschedt spoke to the motion. He noted he intended to acknowledge the value of the IPAs that are already in place. He stated it is very important that the Council maintain flexibility in the program to design performance standards that reduces to a minimum what needs to be changed in regulations. The more that is captured in the IPAs and the less that is in regulation, the more quickly and easily the Council will be able to respond. Mr. Henderschedt answered questions of clarification. Discussion ensued regarding elements of IPAs and the ability to amend them. Mr. Henderschedt noted that the motion is not changing the caps or performance standards analyzed but the process by which they are revised.

Mr. Cotton stated his opposition to the amendment, and noted that while there may be some benefits, it appears to be a weaker approach than the current motion as exceeding the performance standard would not impose a regulatory penalty. Mr. Kinneen noted that he will also be opposing the motion and he does not want to lose sight of the fact that the Council will need to stake strong action in the years with low Chinook abundance. There was discussion of the distinction between evaluating the presence of measures in an IPA by NMFS versus analyzing the likely performance of those measures. The intent of the amendment would be to be similar to how the requirements are written under the current IPAs regulations. Discussion further noted that the Council remains the body which evaluates to what extent the intent of the IPA measures are being met annually.

Mr. Tweit noted that this is still initial review, not final and that the Council shouldn't discard the ability to provide a tool through IPAs instead of regulations. There is evidence that IPAs work extremely well and does not want to convey the impression that this is not the case. Mr. Cross noted the Council is better served to fine tune the program through IPAs, rather than through the complexity of changing regulations. He supports the amendment as an option. Mr. Fields noted that including this as a regulatory measure assumes that there is an expectation for the IPAs to continue to work within their sectors to meet the lowered cap levels. This is similar to how our current program is structured under the higher cap levels.

**The amendment failed 5/5, with Henderschedt, Cross, Tweit, Hyder and Merrill voting in favor.**

Discussion continued on the main motion. Mr. Kinneen thanked the Commissioner for the motion, and noted his appreciation for comments heard in public testimony, and the potential for improved chum salmon avoidance measures that are included in the motion. He noted his support of changing to a 3 System index, stating that it is better suited to a timely response. He noted his support of the inclusion of the option for a lower hard cap in years of low abundance noting that this is also responsive to comments heard in public testimony and better suited to the current action than to a trailing amendment. Mr. Henderschedt noted there has been good discussion, but cautioned the Council on encouraging additional efforts from industry without positive feedback related to the effort. He noted his support of the motion, and appreciates the scope, and stated that it captures reasonable responses to challenges from AM91. Mr. Tweit will support the motion also, and stated that it addresses issues surrounding the Council's basic intent that Chinook bycatch should be as close to 0 as possible. He

stated there is room for refinements and improvements and does not want to revert to a hard cap management alone for this fishery as this would incite very different behavior than the Council's intent for both Chinook and pollock. An incentive-based approach remains the best strategy.

Mr. Fields supports the motion, and appreciates the progress involved in integrating chum and Chinook bycatch management and represents an important policy change. He also noted that seasonal adjustments may help program overall. He noted that one of his concerns is that not all sectors are similarly situated in their ability to respond to a changing performance by way of how they fish. He will be attentive to the different needs of different fleets as the process proceeds with a subsequent analysis.

Mr. Merrill will be supporting the motion, and stated that it is responsive to comments heard both in public testimony and in the Agency's tribal consultation. He would like to note that the process is working well as far as analyzing a complicated issue and thanked the various staff members from each agency. Mr. Henderschedt further commented in response to Mr. Fields concerns that the original apportionment under Amendment 91 more than accounted for the disproportionate ability to accommodate fishing practices by the different fleets. Mr. Hull noted his agreement with many Council members, and stated that the motion accommodates the structure of Amendment 91 and makes appropriate modifications to this program. He noted that that the reason the Council can do such an outstanding job is because of the outstanding management of salmon in-river by the state and bycatch management in the federal system as well as the amount of effort put into understanding the impacts of this bycatch, bycatch stock of origin and to crafting appropriate management measures. He thanked the federal and state agencies as well as the observer program and the ongoing genetic studies. He also noted the Council has received very good public testimony, and thanked those that participated.

Commissioner Cotton thanked the staff.

**Motion passed without objection.**

Dr. Stram noted that the outreach efforts are scheduled and provided an overview of the meetings that are being considered for outreach.

### **C3 Revising GOA Skate Maximum Retainable Allowance**

**BACKGROUND:**

*Public testimony to the Council, in December 2013, testimony suggested that the incidental catch of skates (primarily big skates, *Raja binoculata*, and longnose skates, *Raja rhina*) has exceeded the intrinsic rate of skate incidental catch in GOA groundfish fisheries in some years. Testimony indicated that this is because the MRA for skates in the GOA (20 percent) allows industry to top off on skates while fishing for groundfish. Since 2010, the estimated catch of big skates has exceeded the ABC in the Central GOA each year, and the estimated catch of longnose skates exceeded the ABC in the Western GOA in 2009, 2010, and 2013. The purpose of this action is to slow the harvest rate of skates by decreasing the incentive for vessels to top off on skates by reducing the MRA to levels that more accurately reflect the intrinsic rate of incidental skate catch in the GOA.*

*The amounts of skates available to the commercial fisheries in the GOA are limited by relatively small ABCs and TACs that are fully needed to support incidental catch needs in other fisheries. As a result, the directed fishery for skates is typically closed at the beginning of the fishing year and skate incidental catch is limited by an aggregate skate MRA of 20 percent. The MRA percentages serve as a management*

*tool to slow the harvest rates of incidental catch species by limiting the amount that can be retained on board a vessel. The MRA also serves to reduce regulatory discards of species taken in other directed fisheries by preventing the species from being placed on "prohibited retention" status. However, once the TAC for a species is reached, retention of that species is prohibited and all catch of that species must be discarded.*

Steve Maclean gave the staff report on this agenda item. The AP gave its report, and the SSC gave its report. Public comment was taken.

#### COUNCIL DISCUSSION/ACTION

**Mr. Henderschedt moved that the Council adopt alternative 4: reduce MRAs by 5%. The motion was seconded.** He spoke to the motion noting out of the 3 action alternatives, 5% is identified that it is the only action alternative that will have impact. The Council wanted to take final action quickly, and the goal will be accomplished while achieving the National Standards. He stated a more conservative approach needs to be taken as the Council is just learning about this fishery and its behaviors.

**Mr. Long moved to amend the motion by using 7% as the MRA. The motion was seconded by Mr. Fields.** Mr. Long spoke to the motion, and stated 7 % will slow the harvest rate, decrease incentives for vessels to top off, and facilitate development as the fishery moves toward cooperative arrangement. There was discussion regarding incentives and cooperative operation along with the unknown variables of the fishery. Mr. Merrill noted that 5% will still accommodate an intrinsic rate, while still providing opportunities for sales of catch. Mr. Fields noted that the higher number is an appropriate benchmark, especially for the longline sector.

**A vote on the amendment failed 5/5 with Tweit, Merrill, Henderschedt, Hull and Hyder voting in opposition.**

**Mr. Tweit moved to amend the motion by adding "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."**

He spoke to the motion stating 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 E.D. and Chairman determine that the section 305(d) draft proposed regulations are not in keeping with Council intent for the action. The Council is authorizing the Executive Director and Chairman to act on their behalf.

**The amendment passed without objection.**

Mr. Fields spoke to the main motion, noting that there has been a lot of public testimony, the national standards are addressed by minimizing bycatch. Mr. Merrill noted that the 5% applies to all species.

**The main motion passed without objection.**



## C4 Bering Sea Aleutian Islands Groundfish SAFE report and 2015/2016 Harvest Specifications

### BACKGROUND

*At this meeting, the Council will adopt the Bering Sea/Aleutian Islands (BSAI) Groundfish Stock Assessment and Fishery Evaluation (SAFE) Report including the Ecosystem Considerations Chapter and final recommendations on groundfish harvest specifications and PSC limits to manage the 2015 and 2016 BSAI groundfish fisheries. Upon publication in the Federal Register, the 2015/2016 final harvest specifications will replace harvest specifications adopted last year for the start of the 2015 fisheries.*

Dr. Diana Stram and Dr. Jim Ianelli gave the staff report on this agenda item, along with the joint groundfish plan team report. Dr. Ianelli also gave a report on Bering Sea pollock, and an overview of sablefish. Seanbob Kelly (NMFS) gave an update on the flatfish flexibility provisions, and Jon McCracken provided an overview of the incidental catch discussion paper. The AP and SSC each gave reports, and public comment was taken.

### COUNCIL DISCUSSION/ACTION

**Mr. Cross moved to adopt 2015 and 2016 OFLs, ABCs, and TACs for groundfish in the Bering Sea and Aleutian Islands, as shown in ATTACHMENT 1.** Mr. Cross spoke to the motion, noting that these numbers have been reviewed by many people and the TACs are at or below recommended ABCs. The ABCs are a result of a rigorous examination, and in the case where the TACs are set at ABC, the catch will not exceed that number. There are no environmental factors that indicate TACs need to be set below ABC. The TAC sheet is a result of industry cooperation and differs slightly from the APs recommendation.

There was brief discussion regarding flatfish flexibility and the ABC buffers, and Mr. Cross noted the Council would set ABC reserve maximum amount equal to the ABC surplus. Mr. Cross noted the flatfish sector is investing heavily to be more efficient in the harvest of flatfish, and it is important to keep that sector stable.

Mr. Tweit encouraged the industry as they use the flatfish flex provisions to have flexibility in decision making in order to minimize halibut bycatch.

Mr. Cross thanked the staff for working with him, and thanked industry to arrive to a general consensus on the numbers. Mr. Henderschedt noted he would like to address a TAC-setting process that introduce a structure and stability. It was generally agreed it would be discussed during staff tasking. **The motion on TACs passed unanimously by roll call vote 10/0.**

**Mr. Cross moved to approve the BSAI SAFE report.** He noted it has been reviewed by the SSC and AP, and they have approved it. **The motion was seconded by Mr. Fields,** who also commented that having a document with this much information and work that goes into it is remarkable. Mr. Tweit also noted that the Ecosystem Chapter is becoming more important, and thanked the plan teams for keeping that chapter current. **The motion passed unanimously.**

Mr. Fields moved **under the provisions of Section 305(c) of the Magnuson-Stevens Act that the Council recommend to the Secretary the promulgation of emergency regulations to reduce the 2015 BSAI halibut bycatch allocation by 33%. This action would be for the maximum duration allowed by the MSA (360 days) so as to allow for the Council's BSAI halibut bycatch reduction amendment package to "catch up" with the regulation.** Mr. Fields spoke to the motion and it is included as ATTACHMENT, and answered questions of clarification.

Discussion ensued regarding emergency rules and the logistics and constraints of such regulations.

Mr. Henderschedt stated his concern about the Council making emergency decisions that hinge on an outcome from another decision making body (IPHC), and noted that there needs to be work between the Council and the IPHC to resolve disconnects in the mutual understanding of the management of halibut bycatch. He noted that in June 2014, these same issues were discussed, and the Council asked industry to reduce BSAI bycatch in the near term. The difference in the dynamic today is a new understanding that the distribution of bycatch in the BSAI, and particularly in relation to Area 4CDE, is important, highlighting the need for the Council to work in step with IPHC. Although he recognizes that the situation is difficult for Area 4CDE fishermen, he will not be supporting the motion because he doesn't believe that emergency action, which bypasses the normal review process, is justified, given severe outcomes that will result to other sectors. Mr. Tweit agreed, and is concerned for Area 4CDE halibut fishermen, but the Council does not have the tools to assist them as an emergency rule.

Mr. Long recognizes the emergency circumstances that force the Council to consider action, as provided for in the MSA and justified in the motion, and stated the lengthy normal review process will do little to address the current crisis. Mr. Kinneen agreed that he cannot imagine something looking more like an emergency than this issue, as testimony reflected people not being able to fish in the coming year.

Ms. Smoker recommended the Council discuss how the proposed action resolves the stated emergency, and what the effect might mean in terms of impacts on the groundfish fishery. Mr. Fields responded that there would be an immediate reduction in bycatch, which will mitigate the harm. He also noted that the impact on the groundfish fisheries is described in the number handout included with his motion. Mr. Henderschedt disagreed that the rationale for the motion captures the impact of the reduction on the groundfish fleet, because it assumes that the impact will be a 10% reduction in usage across the fleets, when in fact, each sector is at a different utilization rate of their PSC limit. He reiterated the lessons learned today about stakeholders and the Council participating in both this process and the IPHC process.

Mr. Hull agreed that there is a strong need to identify what the roles and responsibilities of each agency/body are, and how to coordinate efforts to have the best impact, regardless of the outcome of this vote.

Mr. Fields agreed with Mr Henderschedt about the potential for a disproportionate impact across sectors as a result of this action, but noted emergency rules are not without problems, and the refinement will come with the FMP amendment that is already underway.

The motion failed 5/5 by a roll call vote:

Henderschedt NO	Cotton YES
Hyder NO	Cross NO
Long YES	Fields YES
Kinneen YES	Hull YES
Tweit NO	Merrill NO

**Mr. Cross moved that the Council approve the PSC amounts for 2015/2016 be approved.** He noted the PSC tables are included in the action memo, and noted they have been reviewed by the industry and approved by the SSC. Mr. Fields noted he will vote NO on the motion, stating he cannot support status quo and also can't vigorously support prior action. **The motion passed 7/3, with Kinneen, Fields, and Long voting in opposition.**

## **C5 GOA Groundfish Specifications and SAFE Report**

### **BACKGROUND:**

*At this meeting, the Council makes final recommendations on groundfish and bycatch specifications as listed above to manage the 2015 and 2016 Gulf of Alaska (GOA) groundfish fisheries.*

### **GOA SAFE Document**

*The groundfish Plan Teams met in Seattle November 17-21, 2014 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 2015 and 2016 fishing years. The introduction to the GOA SAFE report previously distributed to the Council and Advisory Panel. The full GOA SAFE report, the economic SAFE report and the ecosystem considerations volume was sent to the SSC.*

### **ABCs, TACs, and Apportionments**

*At this meeting, the Council will establish final catch specifications for the 2015 and 2016 fisheries. The SSC and AP recommendations will be provided to the Council during the meeting.*

*The abundances of Pacific cod, Dover sole, flathead sole, northern and southern rocksole, arrowtooth flounder, Pacific ocean perch, roughey and blackspotted rockfish, northern rockfish, and dusky rockfish are above target stock size. The abundances of pollock and sablefish are below target stock size. The target biomass levels for deep-water flatfish (excluding Dover sole), shallow-water flatfish (excluding northern and southern rocksole), rex sole, shortraker rockfish, other rockfish, demersal shelf rockfish, thornyhead rockfish, Atka mackerel, skates, sculpins, squid, octopus, and sharks are unknown.*

### **TAC Considerations for State Pacific Cod Fishery**

*Using the area apportionments for the 2015 and 2016 Pacific cod ABC recommended by the Plan Team, the Federal TAC for P. cod would be adjusted as listed in **Item 3**. Note that because the same ABC is recommended for both years, the apportionment values are identical for both years.*

### **TAC Considerations for State Pollock Fishery**

*The federal GOA Pollock TACs include reductions due to State waters GHL. State waters, specifically PWS GHL, is presently computed as 2.5% of the total W/C/WYAK ABC. If TAC = ABC for 2015 and 2016, the values corresponding to the PWS GHL are reflected in **Item 3**.*

### **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. From 1995 until 2013, total halibut PSC limits for all fisheries and gear types totaled 2,300 t.*

Jim Armstrong gave the staff report on this agenda item and answered questions from the Council. Dr. Jim Ianelli gave the Plan Team report. The AP and SSC reports were given, and public comment was taken.

## COUNCIL DISCUSSION/ACTION

**Mr. Cross moved the Council adopt 2015 and 2016 OFLs, ABCs, and TACs for groundfish the Gulf of Alaska as show in ATTACHMENT. The TACs for both GOA pacific cod and pollock have been adjusted to account for the state water GHF fisheries as show in in the C5 action memo Item 3, State Water TAC Consideration tables. The motion was seconded.** Mr. Cross noted that the TAC sheet blanches the National Standards and has been reviewed by the SSC and AP and has been available for the public. **The motion passed unanimously by roll call vote.**

**Mr. Cross moved the Council adopt the 2015 and 2016:**

- **GOA halibut limits and apportionments contained in Tables 9 and 10 in C5 action memo item 4, per Amendment 95 (PSC reductions).**
- **Apportionment of halibut PSC trawl limits in the GOA between shallow and deep-water species as contained in Tables 11 and 12 in C5 action memo item 4.**
- **Apportionments of “other hook and line fisheries” annual halibut PSC allowance between hook and line gear catcher vessels and catcher processors in the GOA contained in Tables 13 and 14 in C5 action memo item 4.**

Mr. Cross spoke to the motion, noting that the PSC limits have been reviewed by the various agencies and approved by the industry and AP. **The motion passed unanimously by roll call vote.**

Mr. Cross moved to approve the GOA SAFE document, which was seconded. Mr. Fields noted the SAFE documents are like a textbook, with breath and depth on Alaska fisheries and he relies on the SAFEs as reference. He thanked the staff for the work that goes into it to prepare for the documents. **The motion passed unanimously.**

## C6 GOA Sablefish Longline Pots

### *BACKGROUND:*

*The Council is considering amendments to the Fishery Management Plan for Groundfish of the Gulf of Alaska and regulations to allow the use of pot longline gear in the Gulf of Alaska (GOA) sablefish individual fishing quota (IFQ) fishery. Currently, the IFQ sablefish fishery is conducted with hook-and-line (HAL) gear, and has significant whale depredation. Depredation has negative consequences for the sablefish IFQ fleet through reduced catch rates and increased operating costs. Depredation also has negative consequences for the whales through increased risk of vessel strike, and for both whales and seabirds through gear entanglement and altered foraging strategies. An additional management concern stems from the impact that whale depredation may have on the precision of sablefish stock abundance indices. The action is proposed to minimize fishery interactions and potential entanglements with marine mammals and seabirds, adverse impacts on the sablefish IFQ fleet from depredation by sperm whales and killer whales, and gear conflicts that could result from allowing pot longline and HAL gear to fish in the same regulatory areas.*

*The analysis examines the Council’s proposed action alternative (Alternative 2) which would apply exclusively to a pot longline fishery for sablefish in the GOA IFQ fishery. Alternative 2 includes 4 elements: (1) pot limits; (2) gear retrieval; (3) gear specification; and (4) retention of incidentally caught halibut.*

*Elements 1 through 3 have additional options. The Council could select any of the elements under Alternative 2, in combination. The analysts have streamlined the options for analysis and suggested a potential option under Element 4 for a halibut MRA in a sablefish IFQ pot longline fishery in the GOA. This suggestion is based on the Council's intent that retained halibut bycatch in sablefish IFQ pot longline gear be "incidental" in nature. Unless further action is taken, selecting gear specifications (Element 3) would affect all pot longline fishing in the GOA, since there is no regulatory definition of a "sablefish pot". Selecting Element 4 may require coordination with the IPHC, and changes to IPHC regulations so that pot longlines are identified as legal gear.*

Sam Cunningham gave the staff report on this agenda item and answered questions from the Council. Roy Hyder gave the Enforcement Committee update, and the AP gave its report. Public comment was taken.

#### COUNCIL DISCUSSION/ACTION

**Mr. Fields moved, which was seconded, to release the analysis for public review with the following purpose and need and alternatives. Staff should address SSC recommendations as practicable prior to releasing the analysis.**

#### **Purpose and Need:**

**Interactions with sperm whales in throughout the Central and Eastern Gulf of Alaska, and killer whales in the Western Gulf affect the ability of sablefish quota share holders to harvest their sablefish IFQs by reducing catch per unit of effort and increasing fishing costs. Research into developing technological solutions to deter whales and changes in fishing strategies has not resolved the problem. Additional sablefish mortality associated with whale depredation is difficult to quantify, but increases total mortality and uncertainty in sablefish abundance indices. The use of pot gear for sablefish could reduce sperm whale and killer whale interactions with fishing gear in the Gulf of Alaska. The Council seeks to reduce the problems associated with whale depredation while minimizing gear conflicts that could result from allowing pot and longline gear to fish in the same regulatory areas.**

**Alternative 1. No action.**

**Alternative 2. Allow the use of pot longline gear in the GOA sablefish IFQ fishery (the Council can select any or all GOA areas: WGOA, CGOA, WY, or SEO).**

**Element 1. Limit of 60 to 400 pots (different pot limits can be selected for each area).**

**Option 1: Require identification tags for each pot.**

**Element 2. Gear retrieval**

**Option 1. Require the location of pots set, left or lost on the grounds to be submitted to an electronic database when in the water.**

**Option 2. Gear cannot be left more than seven days without being moved.**

**Element 3. Gear specifications**

**Require both ends of the sablefish pot longline set to be marked with buoys and/or flagpoles and transponders that work with AIS or an equivalent system.**

**Element 4. Retention of incidentally caught halibut.**

**Allow the retention of halibut caught incidentally in sablefish pots, provided the sablefish IFQ holder also holds sufficient halibut IFQ.**

Mr. Fields spoke to the motion, and answered questions of clarification from the Council members. There was discussion regarding electronics and databases and their use, and Mr. Fields noted he would

prefer a database that would exceed enforcement purposes. He also noted that he would prefer affected gear groups to comment on this their desire and ability to develop a database for deployed gear. Discussion continued regarding ID tags and logbooks, and electronic logbooks.

**Mr. Henderschedt made a motion to amend to strike first sentence, and insert “...and bring it back to the Council for another initial review.” The motion was seconded.** Mr. Henderschedt spoke to the amendment, stating that the discussion the Council just had indicated that while regulatory in nature, the changes are also dependent on non-existent or non-identified infrastructure. There are many different views on the permission of GOA sablefish pots, and the problem is not solved entirely by doing an area by area approach. Given the diversity of opinion, complexity and operational aspect, the Council and public would be better served if a PPA could be identified. This would indicate direction to the public. There was discussion regarding scheduling, and if another review was required. It was generally agreed that implementation could still be in place for 2016. There was general discussion, and many of the members noted that adding another review would slow the process. **Mr. Henderschedt, with the concurrence of his second, withdrew the amendment.**

**Mr. Cross moved to amend the purpose and needs statement after sentence 3 to read: The use of pot gear will also reduce the incidental take of seabirds. The motion was seconded.** There was brief discussion regarding the need to add seabirds, and the **amendment passed without objection.**

**Mr. Tweit moved to amends Option 2, element 2 to add: add 4 days, and 7 days.** The motion was seconded. Mr. Henderschedt noted that there should be reviewing of shorter periods if the individual fisherman had used all of his or her IFQs. **The amendment passed unanimously.**

Mr. Tweit commented that the Council had done a good job on the motion, and would like more background provided in the document on developing technologies, testing of whale deterrents and their efficacy. **The main motion passed unanimously.**

## C7 Vessel IFQ Caps

### *BACKGROUND:*

*Beginning with a sablefish IFQ proposal in 2009, the Council has heard from some stakeholders that the caps on the amount of IFQ species one vessel can harvest in a season, vessel IFQ caps, are a constraining factor in successfully harvesting a QS holder’s IFQ. The original proposal, (which was modified from focusing on “QS use caps” to “vessel IFQ caps”) requested the Council raise the vessel IFQ cap specifically for sablefish A shares. This proposal was later joined by a request that the Council consider creating a vessel IFQ cap floor for halibut IFQ; a threshold which the vessel IFQ cap would not fall below in the event of a very low halibut catch limit.*

*In February 2014, the Council requested a “spreadsheet” summary of issues raised by these two proposals as well some specific background information to assist in scoping the nature and extent if the issues. Based on the type of qualitative and quantitative information requested, Council staff determined that a discussion paper would provide a more comprehensive overview of the issues.*

*The discussion paper describes the potential issues around vessel IFQ caps for the sablefish IFQ fishery as well as the halibut IFQ. Concerned stakeholders in the sablefish IFQ fishery have primarily pointed to a historical trend of sablefish IFQ in the BS and AI left unharvested, stating that the vessel IFQ cap is one*

*responsible factor. While halibut IFQ is often harvested to its full potential in most areas, stakeholders concern in this fishery has propagated because of the rapidly declining vessel IFQ cap, as a result of the declining halibut IFQ. Some stakeholders in this fishery are reacting to impacts they have felt in the last one or two years, while other halibut IFQ stakeholders may be expressing concern for vessel IFQ cap they anticipate becoming a burden in the future.*

*This discussion paper examines several Council decision points around scope of action if the Council determines any action is warranted. Based on these two proposals, information provided in the discussion paper, and other public testimony, the Council may consider focusing action to certain areas or quota share categories.*

Sarah Marrinan gave the staff report on this agenda item. The AP gave its report, and public comment was taken.

#### COUNCIL DISCUSSION/ACTION

**Mr. Fields moved to take no action.** He noted that although it was not necessary to make a motion to take no action, given the fair interest in this issue, he felt it would be appropriate to go on the record stating why this motion was moved at this time. **The motion was seconded.** Fields spoke to the motion, and noted that while it appears there are concerns for sablefish IFQ in BSAI, based on Table 4 of the discussion paper only 4 of the 48 vessels are capped out. Therefore there may be other constraining factors other than vessel caps that are inhibiting this fishery. This may be a solution looking for a problem. The entire fishery could be prosecuted by 15 vessels under the current caps. He also noted that addressing A share quota in AI could instigate ripple effects and become a complex issue. Based on that and the suite of issues raised at the end of the discussion paper, and considering what that paper would need to look like, he didn't know that this issue merited the time and resources. He concluded in the end, that the Council's best path, at least at this time, would be to take no action on this package.

**Mr. Tweit made a substitute motion that the Council develop a purpose and needs statement, and initiate a problem statement to examine the impacts to Class A sablefish vessel caps to address unharvested sablefish quota. In specific the analysis would examine: from the AP minutes, Alternative 2, Option 2 which would raise sablefish A share IFQ vessel caps in all areas by (options) 1.5%, 2%, or 5% based on the sablefish IFQ TAC for all areas and all quota share categories. This would be in contrast to Alternative 1 status quo. The motion was seconded.**

Mr. Tweit spoke to the motion, noting that it would initiate formal analysis of the FLL company's original proposal. He stated it had been reviewed by the IFQ committee which had found merit in the proposal. He sees an ongoing and programmatic problem in achieving the full harvest of sablefish in the BS and AI for the Class A shares. It appears that the only remedy is realigning the vessel use caps. There may be unintended ripple effects, but an analysis would elucidate those issues. He noted that this was a proposal they'd had for a long time. The only argument they'd had against it all the way through was just how to prioritize it.

There was some discussion on the proposed scope of the motion. Tweit clarified that the proposed analysis would evaluate modifying vessel IFQ caps by all areas for sablefish Class A shares, with the problem statement focused around the predominate area of concern: the BSAI. Further Council action could restrict regulatory action to the BSAI, if consequences proved to be negative in these regions, and

implementation challenges were overcome. There was also extensive discussion on the distribution and benefits of action. **The motion failed 4/6, with Tweit, Cross, Henderschedt, and Hyder voting in favor.**

Mr. Hull noted that he is interested in fixing the problems, and he does not see how Mr. Field's motion would solve it. **A vote on the original motion passed 6/4 with Tweit, Cross, Henderschedt and Hull voting in opposition.**

## C8 Electronic Monitoring

### *BACKGROUND:*

*The Electronic Monitoring Workgroup met on November 19-20, 2014 in Seattle, with a short follow-on conference call on December 1<sup>st</sup> (minutes attached). The Workgroup made progress with preparing the 2015 Cooperative Research Plan, which is scheduled for review by the SSC in February 2015. 2015 fieldwork will focus both on operational testing of EM camera systems in the under 58 ft longline fleet, as well as further research on EM systems to allow for an evaluation of whether they will successfully achieve the Council's goal to integrate EM used for catch estimation into the Observer Program. The Workgroup outlined a timeframe for how the fieldwork and pre-implementation years will intersect with the Council's analytical process and EM's eventual integration into the Annual Deployment Plan process. The Workgroup also discussed budget and funding for the 2015 fieldwork, and opportunities for funding for the 2016 pre-implementation year.*

*The Workgroup also heard a presentation from the North Pacific Fishing Association about research in EM on pot cod boats, which is being conducted independently of the NMFS cooperative research work, and supports the continuation of that work.*

Diana Evans gave the staff report on this agenda item and Ernie Weiss gave the AP report. Public comment was heard.

### COUNCIL DISCUSSION/ACTION

Mr. Tweit, as chair of the EM Workgroup, noted that they will be scheduling a meeting in January in preparation for SSC review of the Research Plan at the February meeting. The Council agreed with the EM Workgroup direction for developing the cooperative research plan. Mr. Fields noted he remains concerned about the observer contract, and to whom it gets awarded, because he wants to reduce cost in the program. Also, he will be tracking the latest draft Regional Implementation Plan for Electronic Technologies. Dr. Balsiger noted the information on who is awarded the contract can be made available to the public as soon as it is decided.

## C9 Observer coverage on small catcher processors

### *BACKGROUND:*

*In February 2014, the Council evaluated potential regulatory amendments for the Observer Program, and identified revising allowances for small catcher/processors to be placed in partial coverage as a high priority. NMFS has prepared the attached discussion paper which describes the purpose and need for the*



amendment, and proposes a draft set of alternatives for evaluating the issue. The alternatives have been developed to meet three objectives:

- Continue to maintain a relatively limited exception to the general requirement that all catcher/processors are in the full coverage category, so that independent estimates of catch can be made for these operations;
- Establish an appropriate balance between data quality and the cost of observer coverage; and
- Establish a threshold that is not unduly difficult to apply and enforce.

NMFS is seeking Council feedback on the statement of purpose and need, and the draft alternatives.

Diana Evans introduced Mary Alice McKeen who gave the staff report on this agenda item. Ernie Weiss gave the AP report, and public comment was taken.

#### COUCNIL DISCUSSION/ACTION

Mr. Merrill made the following motion, which was seconded:

Initiate analysis for revising the allowances for placing small catcher/processors in the partial coverage category.

#### Purpose and Need Statement

*Under the Restructured Observer Program, all catcher/processors are in the full coverage category unless they meet the requirements for an allowance to be placed in partial coverage. The placement of catcher/processors in full coverage enables NMFS obtain independent estimates of catch, at sea discards, and prohibited species catch (PSC) for catcher/processor vessels. In recognition of the relatively high cost of full coverage for smaller catcher/processors and the limited amount of catch and bycatch by these vessels, the Council recommended two limited allowances for placing a catcher/processor in partial coverage. Both of these allowances were based on vessel activity between 2003 and 2009.*

*Since implementation of the Restructured Observer Program, owners and operators of some catcher/processors have requested that the Council and NMFS revise these allowances to include vessels that began processing after 2009. First, the allowance for placing a catcher/processor in partial coverage should, at a minimum, be based on a measurement of ongoing production that shows that the catcher/processor processes a small amount of groundfish relative to the rest of the catcher/processor fleet. Second, the current regulations do not provide a way to move a catcher/processor placed in partial coverage into full coverage if production increases to a level deemed appropriate for full coverage.*

*This action would maintain a relatively limited exception to the general requirement that all catcher/processors are in the full coverage category, provide an appropriate balance between data quality and the cost of observer coverage; and establish a basis for placing catcher/processors into partial coverage that is not unduly difficult to apply and to enforce.*

#### Alternatives

**Alternative 1**, No Action; maintain existing exemptions

**Alternative 2**, Revise the allowances for NMFS to place small catcher/processors into partial coverage. Under this alternative, the basic criterion for placing a catcher/processor in partial coverage is the vessel's production in the prior year or most recent year of production.

Option	Measure	Threshold based on 10 <sup>th</sup> percentile approach	Threshold based on kernel density distribution approach
		Pounds (metric tons)	
1.	Average daily production	11,000 (5.0)	15,500 (7.0)
2.	Average weekly production	42,000 (19.1)	79,000 (35.8)
3.	Maximum daily production	26,000 (11.8)	44,000 (20.0)
4.	Maximum weekly production	94,000 (42.6)	197,000 (89.4)
5.	Annual production	677,000 (307.1)	2,665,000 (1,208.8)

Sources: Percentile based thresholds summarized from Table 4 in Appendix B of Discussion Paper (Nov. 28, 2014); kernel density based thresholds derived from Table 5 in Appendix B. Tonnage estimates based on rounded pound values reported in table.

Under this alternative, if a catcher/processor is required to have  $\geq 100\%$  observer coverage because of the vessel's participation in a catch share program, the vessel would be ineligible for partial observer coverage under this action.

#### Notes to Analysts

The Analysis should evaluate whether the basic production criterion for placing a catcher/processor in partial coverage should be modified based on any of the following factors:

- Whether a catcher/processor is a hybrid vessel, that is, a catcher/processor operates as a catcher vessel for part of the year and a catcher/processor for part of the year;
- Whether the owner of a catcher/processor chooses partial coverage;
- Whether a catcher/processor uses particular gear;
- Whether a catcher/processor operates in a fishery with a PSC limit;
- Whether a catcher/processor is just starting or is resuming processing and therefore its production in the prior year was zero.

Mr. Merrill spoke to the motion, and answered questions of clarification. **Mr. Fields moved to amend Option 5 to include a 1, 825,000 annual exemption as a middle ground, which was seconded by Mr. Long.** There was brief discussion and Mr. Merrill noted that it is already in the range of alternatives. **Mr. Fields withdrew his amendment with the concurrence of the second.**

Mr. Tweit noted that there are valid arguments for supporting this issue, although it will only benefit a small number of boats. Ms. Kimball noted her appreciation for the motion and appreciates having a methodology. Mr. Merrill noted the kernel density analysis will be particularly helpful in analyses that are restrained by confidentiality issues in the future. **The motion passed without objection.**

## D1 VMS Discussion paper

#### BACKGROUND

*At the December 2012 meeting, the Council reviewed an evaluation of how advanced features of vessel monitoring system (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. Over a series of*

*Enforcement Committee meetings, the Committee has prepared a discussion paper concerning the utility of these advanced features. Specifically, the discussion paper provides an overview of VMS program, advance features of the VMS not currently utilized in the North Pacific, uses of VMS by the different user groups, where VMS fits into the Strategic Plan for Electronic Monitoring/Electronic Reporting (EM/ER) in the North Pacific, and the Enforcement Committee's implementation recommendations to the Council.*

Jon McCracken gave the staff report on this agenda item. Martin Loefflad also provided input for the observer program. The AP gave its report, and there was no public comment.

#### COUNCIL DISCUSSION/ACTION

Mr. Hyder suggested and the Council agreed that the Enforcement Committee should examine the committee's enforcement precepts to incorporate new information from advanced VMS technologies. There was discussion noting that new information would be helpful with boundary lines and the paper would assist with further action appropriate to VMS. Mr. Hyder also noted that the committee would review other enforcement precepts from different regions in the U.S. to determine if there are other enforcement tools that might be of use for the North Pacific. Finally, the Council tasked the Enforcement Committee to prepare a technical document on VMS usage for the universe of non-VMS vessels in the North Pacific for use by the Council in considering more effective enforcement and electronic monitoring for future FMP and regulatory actions.

## D2 LLP FMP Amendments

#### *BACKGROUND:*

*All changes to a Fishery Management Plan (FMP), even minor typographical changes, require an FMP amendment that is approved by the Council. This analysis demonstrates the need for amending the Fisheries Management Plan (FMP) for the Groundfish of the Bering Sea and Aleutian Islands (BSAI), the FMP for the Groundfish of the Gulf of Alaska (GOA), and the FMP for the Bering Sea/Aleutian Islands King and Tanner Crab in order to be consistent with the Council's initial intent of the license limitation program (LLP). This action would not require changes to any Federal regulations. The amendments under consideration would align the FMP text that establishes the vessel size standards for exempting small vessels from the LLP in the BSAI groundfish and king and Tanner crab fisheries, as well as GOA groundfish fisheries with the original intent of the programs, current operations in the fishery, and Federal regulations.*

Sarah Marrinan gave the staff report on this agenda item. There was no public comment and no AP/SSC report.

#### COUNCIL DISCUSSION/ACTION

Mr. Henderschedt noted that the error was in the FMP, and implemented through regulation, he noted there will be no impacts to fishery participants as a result of this action. **Dr. Balsiger moved to amend the BSAI Groundfish FMP, the GOA Groundfish FMP, and the BSAI King and Tanner Crabs FMP as shown in Appendix A.1, A.2, and A.3 of the analysis. The motion was seconded and passed without objection by roll call vote.**

## D3 Bering Sea Canyons

### **BACKGROUND:**

*In June 2013, the Council passed a motion to identify and validate areas of coral concentrations for possible measures for the conservation and management of deep sea corals in Pribilof and Zhemchug Canyons. The Council also directed staff to meet with the Alaska Fisheries Science Center (AFSC) and other stakeholders to discuss possibilities for collaboration in order to survey areas of coral abundance and to identify and develop tools for coral impact reduction. In February 2014, Council staff hosted a workshop on Bering Sea canyons in Seattle. The results of that workshop, and updated models to identify potential coral habitat in the Bering Sea were presented to the Council in April 2014.*

*In April 2014, the Council adopted a purpose and need statement. Specifically, the purpose of this action is to determine whether and how the Council should recommend amendment of the BSAI Groundfish and Crab FMPs to protect known, significant concentrations of deep sea coral in the Pribilof Canyon and adjacent slope from fishing impacts. In passing this motion, the Council noted that they have consistently acted to identify significant concentrations of deep sea corals and to protect those areas from fishery impacts. This action continues a process to re-examine the potential value and need for management measures to protect habitat in the Bering Sea canyons. The Council also requested that time be scheduled for public scoping to focus on two topics: (1) the general range of alternatives that should be considered under this action; and (2) the best process by which to identify, develop, and refine alternatives. At this meeting, the Council will take testimony on these two topics.*

*The Council noted that alternatives will not be finalized until there has been adequate review of the data. In October, NMFS provided a presentation on the preliminary results from the 2014 drop-camera survey. A final review of the survey data, and a report to the Council, is tentatively scheduled for June 2015. The Council may wish to discuss next steps.*

Steve MacLean gave the staff presentation on this agenda item and answered questions from the Council. Ernie Weiss gave the AP report, and public comment was heard.

Public comment focused on two main points: whether the Council should, at this point in the process, consider a narrow geographic scope for the action (focus on Pribilof Canyon) or maintain a broad geographic scope (consider the whole Bering Sea slope, including Zhemchug and other canyons); and what authority or methods the Council should consider, at this point in the action, to proceed.

Some commenters and Council members stated that the narrow focus of the action, to concentrate on known, significant concentrations of corals in Pribilof Canyon, was appropriate, while other commenters and Council members stated that it was more appropriate at this early stage to keep the geographic scope of the action broad and review data from the 2014 Bering Sea Slope camera surveys before narrowing the scope of any potential action.

Some commenters also recommended that the Council identify which authority (MSA Deep-Sea Corals, EFH, HAPC, etc.) is appropriate to consider for an action, and further recommended that the deep-sea coral authority under the MSA was appropriate. Other commenters recommended that the Council should consider all authorities at this stage, and not eliminate certain authorities until all available data have been analyzed. One commenter noted that keeping a broad, inclusive focus at this point is

consistent with the Council's Ecosystem Approach Vision Statement, adopted by the Council in February, 2014.

#### COUNCIL DISCUSSION/ACTION

Mr. Henderschedt noted he may want to develop some sort of direction understaff tasking, and he will be prepared to do that. Mr. Tweit noted that he thinks the Council may not be ready to develop something during staff tasking, but the Council members should be thinking about this issue in between Council meetings. Ms. Kimball noted that there are helpful metrics and data and she is comfortable with the purpose and needs statement on this action. Mr. Hull thanked the public for their comments submitted electronically.

Alaska Senator Dan Sullivan addressed the Council.

### **E Staff Tasking**

**Mr. Fields moved to approve the October 2014 minutes. The motion passed unanimously.**

Mr. Oliver updated the Council on the list of items the Council had marked for discussion during the Staff Tasking agenda item, and public comment was heard.

#### Committees

*Charter Workgroup Committee:* It was generally agreed that the Council would solicit a call for nominations again in the newsletter and make appointments in February.

*Rural Outreach Committee:* Mr. Oliver noted that it would be helpful if Council members could identify blocks of time that they would be available for travel. Dr. Stram noted she would send out an email coordinating logistics.

*Protected Species Committee:* Mr. Tweit expects ongoing issues with Steller sea lions, Short-tailed albatross, and seals, and noted there is enough work to keep a standing committee on a list with basic membership and knowledge of protected species issues. He urged the Council to think about the composition of such a committee. The Council instructed staff to provide a more detailed vision and charter for a Protected Species Committee.

*IFQ Committee:* Mr. Fields noted he has gotten requests to address IFQ issues, and that at some time there should be a call for proposals. It was generally agreed the Chairman would review the list of IFQ issues, as well as discuss with NMFS the timeline for program review.

*SSC Working Group:* Mr. Henderschedt requested a joint/SSC PT to convene working group modeled after an earlier stock structure workgroup. He noted that industry could be engaged in these discussions. He also discussed the idea of a stock complex committee to outline processes that might be followed for identifying candidate species that might be broken out of complexes and management implications and to address all National Standard 1 issues. There was general discussion, and it was clarified that it would be the committee that focuses on implementation guidelines that have to do with setting ACLs for managed species.

*Ecosystem Committee:* Mr. Tweit indicated that the Ecosystem Committee would be interested in a discussion regarding climate change during the June Council meeting. He also stated the Committee will be discussing Arctic issues at the next meeting.

### Shipping Routes through the Arctic

Shipping routes: It was generally agreed information would be published in the newsletter to ensure the public and stakeholders are well informed. It was noted the relationship between USCG/State/NPFMC is important as is understanding the authority of each agency. The Council can act as a clearinghouse for information for the public. Mr. Henderschedt urged the Council to hold off on action until identified as a need by industry.

### VMS

Mr. Hyder noted the Enforcement Committee would review the existing Enforcement Precepts. They would also reach out to other regions with the primary purpose of reviewing how other agencies incorporate VMS information to determine if there are other enforcement tools that might be of use for the North Pacific. Additionally, Mr. Hyder requested staff prepare a technical document on VMS usage for the universe of non- VMS vessels in the North Pacific. This would be needed by the Council in considering enforcement and electronic monitoring issues associated with future FMP and regulatory actions. He noted that it would be a technical report that contains information that would be helpful for in-season management, enforcement, or the observer program. There was brief discussion, and it was generally agreed that it would be a useful planning tool.

### Standardized TAC-Setting

Mr. Henderschedt noted that he would prefer a more standardized process for setting TACs every year, but the best approach may be to not take action at this time. He noted that he likes the idea of challenging the fleets as we move forward, and anticipated the need for a more formal process.

### Pribilof Canyon Corals

Mr. Henderschedt noted that there was testimony during the canyons agenda item regarding classification of coral density, distribution, size and habitats. He suggested to informally discuss with AFSC the types of criteria the Council is considering to ensure the data the center collects are accessible in a way the Council can use.

### GOA Trawl issues

Mr. Cotton noted that with new administration changes, extra time may be necessary to review actions that have been taken, and requests a 6 month (no action) period so the new State of Alaska administration can evaluate the approach. Mr. Tweit is also interested in taking a break, and notes there hasn't been a loss of interest, but rather to allow stakeholders and those involved to continue to look for tools that may work in a restructured fishery. Mr. Henderschedt noted that while there are benefits in taking time for a re-assessment, there are risks which accompany that and wishes to signal continued commitment to addressing GOA trawl bycatch issues. There was discussion regarding control dates, and it was generally agreed that while the MSA requires the Council to consider current participation vs. past participation, the control date that has been set gives them another reference point to use in evaluating the fishery. Mr. Hyder stated he would like to see the direction and timeline stay on track.

Discussion continued regarding pausing work on this issue for the purposes of re-evaluation. It was generally agreed that the staff would continue working on existing elements of the workplan that was outlined in the B reports, and the item will not be on the Council's agenda until October.

### Experimental Fishing Permit

Mr. Henderschedt recommended delegating the process of review of the EFP to the Chair and Executive director in order to expedite the process. He noted he is encouraged by the idea of industry

representatives engaging with IPHC in this issue which would ensure clarity of impact and effect of measures taken by AM 80 fleet. He stated the Council should send a letter to IPHC describing work and potential objectives of EFP and the parameters that would optimize impacts in areas 4CDE. He noted this topic may be a good topic for discussion at the February joint meeting. Mr. Merrill noted that there is not a review process that is required by regulation. Mr. Kinneen appreciated the expedited process, and looks forward to an email update.

Appointments

Mr. Oliver announced the appointments, and they are included as an attachment.

The Chairman thanked those in attendance for their work, and wished everyone a Merry Christmas. The meeting adjourned at 2:53, on December 15, 2015.

**Time Log**  
**North Pacific Fishery Management Council**  
**Meeting held in Anchorage, Alaska**  
**December 10-15, 2014**

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**Meeting 12-10-14**

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Call to Order	08:00	[0:00:01]
<b>B1 ED Report</b> - Chris Oliver	08:17	[0:09:00]
Sam Cunningham	08:29	[0:20:46]
Mateo Paz Soldon, Joe Sullivan, Frank Kelty, John Iani	08:49	[0:40:03]
Chris Oliver	09:07	[0:58:58]
Presentation to Pat Livingston	09:13	[1:04:03]
<b>B2 NMFS Management Report</b>	09:24	[1:15:24]
Glenn Merrill	09:24	[1:15:30]
Mary Furuness	09:45	[1:36:08]
Chad See LL2 Industry Report	10:17	[2:08:42]
<b>B3 ADFG Report</b> - Karla Bush	10:27	[2:18:58]
<b>B4 NOAA Enforcement Report</b>	10:34	[2:25:52]
<b>B5 USCG</b> - Courtney Sergent	10:44	[2:36:01]
<b>B7 IPHC Report</b> - Ian Stewart	11:05	[2:56:44]
<b>B8 Protected Species Report</b> - Steve MacLean	12:02	[3:53:11]
<b>B9 NPRB Report</b> - Denby Lloyd	12:54	[4:45:51]
Mike Clark, State Department	01:30	[5:21:09]
Public comment out of order: Richard Yamada	01:37	[5:28:13]
Public comment on B items	01:44	[5:35:57]
George Hutchings	01:45	[5:36:04]
Jeff Kauffman	01:49	[5:40:19]
Buck Laukitis	02:01	[5:52:58]
Angel Drobnica	02:07	[5:58:33]
Linda Behnken	02:12	[6:03:40]
Simeon Swetzoff	02:20	[6:11:41]
Paul Clampitt	02:30	[6:21:19]
Leonard Herzog	02:30	[6:21:29]
Don Lane	02:33	[6:24:26]
Adjourn for the day	05:25	[6:34:08]



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**Meeting 12-11-14**

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Call to Order	08:05	[0:00:01]
Public comment out of order C2	08:07	[0:02:02]
Yukon First Nation Delegation: Duane Aucoin, Richard Dewhurst, Madeleine Jackson, Gillian Rourke (w/TTC); Cora Lee Johns, Betsy Jackson (w/Ta'an)	08:07	[0:02:10]
<b>D1 VMS Discussion paper</b>	08:48	[0:42:28]
Jon McCracken	08:48	[0:42:33]
<b>C1 Halibut Charter Management Measures</b>	09:40	
Steve MacLean, Scott Meyer	10:22	[2:17:04]
Andy Mezirow, Richard Yamada	10:28	[2:22:58]
Governor Walker addresses Council	10:28	[2:23:12]
AP Report, Lori Swanson	10:31	[2:26:20]
Steve Zernia	10:33	[2:28:12]
Bruce Gabrys	10:40	[2:34:40]
Nate Smith	10:49	[2:44:09]
Mel Grove	10:51	[2:46:20]
Heath Hilyard	11:04	[2:59:00]
Daniel Donich	11:04	[2:59:04]
Tom Gemmel	11:11	[3:05:51]
Jody Mason	11:13	[3:07:40]
Council Action on C1	11:28	[3:22:39]
Nicole Kimball	11:28	[3:22:45]
<b>C2 BS Salmon Bycatch</b>	11:37	[3:32:16]
Diana Stram	11:37	[3:32:16]
Carrie Howard	12:28	[4:23:07]
Jim Fall	01:15	[5:10:07]
Public Testimony out of order	01:57	[5:51:21]
Bill Alstrom	01:57	[5:51:27]
Roy Ashenfelter	02:06	[6:00:41]
Virgil Upenhauer	02:10	[6:04:24]
John Lamott	02:18	[6:13:13]
Andrew Bassich	02:21	[6:16:06]
Coralee Johns Betsy Jackson	02:27	[6:22:20]
George Unmonekston	02:35	[6:29:48]
Stanislavs Sheppard	02:41	[6:35:58]
Francis Thompson	02:52	[6:46:41]
Diana Stram	02:57	[6:51:26]
Alan Hayne	03:18	[7:12:43]
Adjourn for the day	05:23	[7:44:27]

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**Meeting 12-12-14**

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Call to Order	08:00	[0:00:01]
Start Audio Recording [08:05]	08:05	[0:00:00]
<b>C2 Salmon Bycatch - Diana Stram</b>	08:05	[0:00:02]
Jim Ianelli	08:30	[0:24:14]
IPA Representatives	10:01	[1:55:52]
Stephanie Madsen, Ed Richardson	10:02	[1:56:32]
John Gruver	10:24	[2:19:07]
James Mize	10:47	[2:41:25]
SSC report, AP report	11:23	[3:18:13]
Public Comment	11:30	[3:24:48]
Elizabeth Hensley	11:30	[3:24:54]
Matt Watsky	11:36	[3:30:44]
Gayle Vick	11:39	[3:34:11]
Ben Stevens	11:46	[3:41:04]
Frank Kelty	11:56	[3:50:34]
art nelson	12:07	[4:01:30]
donna parker	12:07	[4:01:34]
Karl Haflinger	12:19	[4:14:00]
Stephanie Madsen	12:30	[4:24:50]
George Hutchings	12:43	[4:37:25]
Brent Paine, John Gruver	12:47	[4:42:02]
Becca Robbins Gisclair	12:58	[4:52:20]
James Mize	01:06	[5:00:46]
<b>C5 GOA Specs Mike Sigler's report (out of order)</b>	01:22	[5:16:20]
Adjourn	04:52	[5:41:46]

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**Meeting 12-13-14**

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Call to Order	08:03	[0:00:00]
<b>C2 Salmon bycatch action</b>		
<b>C3 Skate MRAs in GOA - Steve Maclean</b>	09:58	[1:54:28]
Public Testimony	10:19	[2:15:18]
George Hutchings	10:19	[2:15:26]
Bob Krueger	10:24	[2:21:09]
Julie Bonney	10:33	[2:29:59]
<b>C4 Bering Sea Groundfish Specs Diana Stram and Jim Ianelli</b>	11:15	[3:30:35]
Public Comment out of order	11:47	[3:43:45]
Jason Anderson and Mark Fina	11:47	[3:43:53]
Mary Beth Tooley Public Comment out of order	12:07	[4:03:27]
Jim Ianelli and Diana Stram	12:10	[4:06:59]
Sean Bob Kelly	12:16	[4:12:26]
Flatfish specs	12:16	[4:12:46]
Jon McCracken	12:30	[4:27:09]
Summary of Catch Discards, and Retention	12:31	[4:27:16]
Lori Swanson, AP Report	01:00	[4:56:42]
Public Comment	01:06	[5:02:40]
Paul Clampitt	01:06	[5:02:56]
Shawn McManus	01:11	[5:07:40]
James Mize, PPLP	01:13	[5:09:47]
Chad See	01:15	[5:12:10]
Bob Alverson	01:21	[5:18:06]
Gerry Merrigan	01:38	[5:34:25]
Stephanie Madsen	01:41	[5:37:32]
Buck Laukitis	01:48	[5:44:18]
Peggy Parker	02:21	[6:17:43]
Vince O'Shea	02:27	[6:23:17]
Todd Hoppe	02:29	[6:25:38]
Todd Loomis, Ed Richardson, Chris Woodyly	02:33	[6:29:25]
Susan Robinson	02:50	[6:46:45]
John Bundy, Mike Hyde	02:56	[6:53:14]
Mateo Paz Soldon, Simeon Swetsoff	03:00	[6:56:27]
Jeff Kauffman, Heather McCarty	03:08	[7:04:29]
Lenny Herzog	03:26	[7:22:36]
Bill Orr	03:32	[7:29:02]
Angel Drobnika	03:36	[7:33:10]
Linda Behnken	03:46	[7:43:10]
Donna Parker	03:47	[7:43:15]
Brent Paine	03:48	[7:45:14]
Action on C4	04:09	[8:06:03]
Duncan motion (reads 6 pp)	04:33	[8:29:18]

Adjourn

06:29

[9:18:20]

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**Meeting 12-14-14**

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Call to Order	08:36	[0:00:00]
Brian Lynch - Public Testimony out of order	08:38	[0:01:38]
<b>C5 GOA Groundfish Specs</b> - Jim Armstrong, Jim Ianelli	08:47	[0:10:36]
Lori Swanson, AP report	09:33	[0:56:45]
Public Comment, Gerry Merrigan	09:34	[0:58:13]
Julie Bonney	09:36	[0:59:57]
<b>C6 GOA Sablefish LL Pots</b> - Sam Cunningham	10:08	[1:31:36]
Enforcement Committee	11:20	[2:43:40]
Roy Hyder	11:20	[2:43:58]
AP Report	11:40	[3:04:08]
Public Comment	11:44	[3:08:16]
Bonnie Millard	11:45	[3:08:29]
Shawn McManus	11:57	[3:21:04]
Bernie Burkholder	12:01	[3:25:21]
Linda Kozak, Rob Wurm	12:13	[3:36:53]
Bob Alverson	12:25	[3:48:38]
Todd Hoppe	12:31	[3:54:46]
Rhonda Hubbard	12:39	[4:03:24]
Linda Behnken	12:42	[4:06:02]
Stephan Rhoads	12:57	[4:21:07]
Buck Laukitis	01:03	[4:26:32]
Jeff Stephan	01:18	[4:42:04]
Jeff Farvor	01:24	[4:47:35]
Duncan motion	01:30	[4:53:32]
<b>C7 Vessel IFQ Cap</b> – Sarah Marrinan		
AP report, Lori Swanson	02:59	[6:22:55]
Bob Alverson	03:04	[6:28:11]
Linda Kozak	03:05	[6:29:18]
Rob Wurm	03:05	[6:29:24]
Clem Tillion	03:12	[6:35:51]
Bruce Gabrys	03:18	[6:42:09]
Shawn McManus, DSFU	03:21	[6:45:22]
Todd Hoppe	03:25	[6:49:23]
Jeff Farvour	03:27	[6:51:18]
Rhonda Hubbard	03:30	[6:53:48]
Buck Laukitis	03:35	[6:58:49]
Linda Behnken	03:41	[7:04:29]
Adjourn	05:28	[7:45:42]

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**Meeting 12-15-14**

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Call to Order	08:08	[0:00:01]
<b>C-8 Electronic Monitoring Workgroup</b> - Diana Evans	08:08	[0:00:12]
AP report, Ernie Weiss	08:45	[0:37:34]
Public Testimony, Beth Stewart	08:46	[0:38:16]
<b>C-9 Observer Coverage on Small CPs</b>	08:50	[0:42:56]
Mary Alice McKeen, Diana Evans	08:51	[0:43:04]
AP report, Ernie Weiss	09:27	[1:19:49]
Oisten Lone	09:28	[1:20:56]
Adam Lalich	09:41	[1:33:28]
Andrew Richards	09:41	[1:33:35]
Rhonda Hubbard	09:42	[1:34:06]
Lenny Herzog	09:48	[1:40:09]
Council Motion – Glenn Merrill	09:54	[1:46:22]
<b>D2 FMP Amendments LLP Exemptions</b> - Sarah Marrinan	10:31	[2:23:09]
<b>D3 Bering Sea Canyons/Corals</b> - Steve MacLean	10:51	[2:43:29]
AP report, Ernie Weiss	10:55	[2:47:07]
Shawn McManus	10:56	[2:48:10]
Merrick Burden	11:01	[2:53:33]
Jackie Dragon	11:06	[2:58:53]
Jon Warrenchuk	11:19	[3:11:45]
John Gauvin	11:26	[3:18:27]
Dan Sullivan addresses the Council	11:42	[3:34:31]
<b>E Staff Tasking</b> – Chris Oliver	12:13	[4:05:40]
Chris Woodley, Chad See	12:31	[4:23:02]
George Hutchings	12:34	[4:26:38]
John Gauvin	12:37	[4:29:19]
Clem Tillion	01:00	[4:52:37]
Action on Staff Tasking	01:32	[5:24:07]
December 2014 Meeting Adjourned	02:53	[6:45:49]

MEETING ATTENDEE SIGN-IN SHEET  
December, 2014 N.P.F.M.C. MEETING

PLEASE REGISTER ATTENDANCE FOR MEETING RECORDS

PLEASE PRINT - THANK YOU!

NAME	AFFILIATION
Michael Lake	Alaskan Observer, Inc.
Bruce S. GABAYS	SELF IFR+CHA owner
Don Lane	self, f/v Predator
ORALE CROSS	ASF
Stanislaus Shippard	Lower Yukon River
GLENN REED	PSPA
JIM PAULIN	Dutch Harbor Fisherman
Simeon Swetsov Jr.	City of ST. PAUL
MARK FINA	US SURVEYS
Frank Kelly	City of UNALASKA
Kris Norosz	Ice Seafoods
Vince O'Shea	PSPA
Stanislaus Shippard	MAN. VILLAGE Lower Yukon
Matt Waskeg	
BRENT PAINE	UCB
STEPHEN GRABACKI	GRAY STAR
Heather McCarty	McCarty's Assoc. Juneau

MEETING ATTENDEE SIGN-IN SHEET

December, 2014 N.P.F.M.C. MEETING

PLEASE REGISTER ATTENDANCE FOR MEETING RECORDS

PLEASE PRINT - THANK YOU!

NAME	AFFILIATION
MARCUS ALDEN	WESTWARD FISHING CO
Mark Snigaroff	Atka Fishermen's Assoc.
Mark Upton	US Seafoods
JAMES MUZE	PPLP
JOE PLESHA	TRIDENT
SINCLAIR WILT	WESTWARD SEAFOODS
Bernie Burkholder	Buck and Ann Fisheries
Jeff Stephan	UFMA
Beth Stewart	Peninsula Fishmen's Coalition
ENZABETH REED	WESTWARD FISHING CO



# North Pacific Fishery Management Council

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Chris Oliver, Executive Director



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## FINAL ADVISORY PANEL MINUTES December 9-12, 2014 Anchorage, Alaska

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

Ruth Christiansen	Heath Hilyard	Paddy O'Donnell
Kurt Cochran	Jeff Kauffman	Joel Peterson
John Crowley	Mitch Kilborn	Theresa Peterson
Jerry Downing	Alexus Kwachka	Lori Swanson
Jeff Farvour	Craig Lowenberg	Anne Vanderhoeven
Becca Robbins Gisclair	Brian Lynch	Ernie Weiss
John Gruver	Chuck McCallum	Sinclair Wilt

Minutes from the October 2014 meeting were approved.

### **C1 Charter Halibut Management Measures for 2015**

The AP recommends the Council adopt the following 2015 management measures as proposed by the Charter Halibut Implementation Committee:

Area 2C: Reverse slot limit of 40 inches or under and 80 inches or over (U40/O80).

Area 3A: In addition to the limitations under the existing management measure (one fish per day of any size in addition to one fish of 29" or under in combination with a limit of one daily trip by a charter operator), the following restrictions are added for the 2015 season:

- 1) An annual limit of 5 fish retained by the angler; and
- 2) Day of the week closure – Thursdays from June 15 through August 31st

*Motion passed 21-0.*

#### **Rationale:**

##### **Area 2C**

- Provides regulatory stability by remaining substantially similar to the previous 3 years regulation.
- Allows guided anglers the ongoing opportunity to retain "trophy class fish".
- Responsive to the needs and concerns of different sub-areas and business models.

##### **Area 3A**

- Continues to allow harvest of two fish daily.
- Minimizes excessive harm to the industry and angler access that would result from the adoption of only one management element (i.e. only day of the week or only annual limit).

## C2 Bering Sea Salmon Bycatch

The AP recommends the Council release the document for public review with the changes noted below (additions underlined, deletions in ~~strikethrough~~):

**Alternative 1.** No action.

**Alternative 2.** Remove BSAI Am 84 regulations and incorporate chum salmon avoidance into the Am 91 Incentive Plan Agreements. Revise regulations at 50 CFR 679.21(c)(13) to include associated reporting requirements for chum salmon. Revise regulations at 50 CFR 679.21(c)(12)(iii)(B)(3) to include chum salmon bycatch avoidance as follows:

*(3) Description of the incentive plan.*

*The IPA must contain a written description of the following:*

*(i) The incentive(s) that will be implemented under the IPA for the operator of each vessel participating in the IPA to avoid Chinook salmon and chum salmon bycatch under any condition of pollock and Chinook salmon abundance in all years;*

*(ii) The incentive(s) to avoid chum salmon should not increase Chinook salmon bycatch;*

*(iii) The rewards for avoiding Chinook salmon, penalties for failure to avoid Chinook salmon at the vessel level, or both;*

*(iv) How the incentive measures in the IPA are expected to promote reductions in a vessel's Chinook salmon and chum salmon bycatch rates relative to what would have occurred in absence of the incentive program;*

*(v) How the incentive measures in the IPA promote Chinook salmon savings and chum salmon savings in any condition of pollock abundance or Chinook salmon abundance in a manner that is expected to influence operational decisions by vessel operators to avoid Chinook salmon and chum salmon; and*

*(vi) How the IPA ensures that the operator of each vessel governed by the IPA will manage that vessel's Chinook salmon bycatch to keep total bycatch below the performance standard described in paragraph (f)(6) of this section for the sector in which the vessel participates.; and*

*(vii) How the IPA ensures that the operator of each vessel governed by the IPA will manage that vessel's chum salmon bycatch to avoid areas and times where the chum salmon are likely to return to Western Alaska.*

**Alternative 3.** Revise Federal regulations to require that IPAs include the following provisions:

Option 1. Restrictions or penalties targeted at vessels that consistently have significantly higher Chinook salmon PSC rates relative to other vessels fishing at the same time. Include a requirement to enter a fishery-wide in-season PSC data sharing agreement.

Option 2. Required use of salmon excluder devices, with recognition of contingencies.

Suboption: Required use of salmon excluder devices, with recognition of contingencies, from Jan 20 – March 31, and Sept 1 until the end of the B season.

Option 3. A rolling hotspot program that operates throughout the entire A and B seasons.

- Option 4. Salmon savings credits last for a maximum of three years for savings credit based IPAs.
- Option 5. Restrictions or performance criteria used to ensure that Chinook salmon PSC bycatch rates in the month of October are not significantly higher than those achieved in the preceding months.

Include new measures presented by IPA groups in the analysis.

**Alternative 4.** Revise the Bering Sea pollock fishery seasons:

- Option 1. Change the start date of the Bering Sea pollock B season to June 1.
- Option 2. Shorten the Bering Sea pollock fishery to end on:  
Suboptions: ~~September 15~~, October 1 or October 15].

New – Option 3. Reallocate pollock A and B season splits to:

- Suboption 1. 45% A Season / 55% B Season with A to B rollover  
Suboption 2. 50% A Season / 50% B Season with A to B rollover

New - Include an economic analysis that looks at catch rates, recovery rates, roe and other product form production that occurs at the beginning and end of B Season.

**Alternative 5.** Revise Federal regulations to lower the performance standard under Am 91 in years of low Chinook salmon abundance per the options below. ~~Low abundance is defined as  $\leq 500,000$  Chinook salmon, based on the total Chinook salmon run size index of the coastal WAK aggregate stock grouping in a [option: year or average of two years].~~ Sectors that exceed the applicable performance standard, in 3 out of 7 years, would be held to their proportion of the hard cap of 47,591 in perpetuity.

- Option 1. 25% reduction (36,693)  
Option 2. 60% reduction (19,036)

~~Suboption: Apply the reduction [25% or 60%] to the B season portion of the performance standard only.~~

In addition to the 3 river index (Kuskokwim, Upper Yukon, and Unalakleet) with low abundance defined as  $\leq 250,000$  Chinook salmon currently found in the current analysis, analyze a four river index (Kuskokwim, Upper Yukon, Unalakleet, and Nushagak) including a recommendation for a comparable low abundance trigger.

Include in the analysis more information that makes clear the assumptions, estimates, and calculations used in determining low abundance triggers.

Include economic impacts to the pollock fishery using the current IPA rules (status quo) as the basis for determining the impacts.

Analysts should also provide data and considerations to inform an approach to differentially apply the seasonal adjustments under Alt 4 and the reduction in the performance standard among the CV, CP, and MS sectors under Alternative 5. Analysts should also describe potential methods for addressing the time

lag between the population's vulnerability to marine fishery bycatch and the population statistics in the trigger.

Analysts should also develop and include recommended changes to Federal reporting requirements that would be necessary to evaluate the effectiveness of any of the alternatives.

New - General Additions:

1. Include AEQ impacts of Alternatives 4 and 5
2. Provide in the analysis an update of other impacts to Western Alaska Chinook runs such as identified in the AYK Sustainable Salmon Initiative.
3. An analysis of impacts to pollock dependent communities.
4. Add an option to eliminate data transmission requirements for CVs over 125' using ATLAS reporting software.

*Motion passed 13-7.*

**Rationale:**

- Inclusion of a September 15<sup>th</sup> end date doesn't provide a significant increase in Chinook savings when contrasted to the very likely impact on pollock harvest.
- Well informed decisions of the alternatives require an accurate understanding for the level of benefit to Chinook salmon abundance that will occur when choosing an alternative.
- Moving B season fish into A season will shift pollock harvest from the end of B Season when there is a likely potential of higher Chinook bycatch to the end of the A season where there is a likely lower bycatch of Chinook.
- Earlier closure dates will increase pollock harvest levels towards the early B Season. An economic analysis of early and late B season will illustrate the differences in product value coming from pollock harvested in early B Season compared to those products produced from later B Season pollock harvest.
- Removing the CWAK index provision is consistent with current analysis. The Nushagak, one of the most significant Chinook producing river systems in Western Alaska, should be included in an index intended to represent Western Alaska Chinook abundance.
- An accurate understanding for economic impacts on the pollock fishery require the analysis to use the distribution of pollock allocations found in each existing IPA, not sector level pollock allocations.
- Since the Performance Standard is an annual threshold, there is no B season apportionment.
- There is no significant benefit for requiring vessels over 125' to transmit ATLAS data while at sea. The cost of providing and maintaining such data transmitting systems is an unnecessary burden on the over 125' catcher vessels.

*C2 Minority Report on substitute motion: A minority of the AP did not support the substitute motion and supported the original motion, attached below. In response to the drastic situation in Western Alaska in which even subsistence fisheries were closed on the Yukon and Kuskokwim Rivers in 2014, it is essential that we keep moving forward with this action on an expedited timeline. The current set of alternatives contains a number of good options to address the bycatch situation, and the original motion provided a few minor changes to ensure that the incentives created under Amendment 91 to participate in industry incentive programs stay intact, and that the incentives apply to chum salmon bycatch as well. The original motion also retains important specifications from Amendment 84 that ensure minimum*

standards—inclusion of a rolling hotspot program and 3<sup>rd</sup> party notifications—for a chum salmon bycatch program which increase accountability and transparency.

The substitute motion, on the other hand, does not address these issues and includes substantial requests for additional analysis and information. This additional analysis and information will not provide information which is needed to inform the Council's decision, but does threaten to significantly slow down the timeline for final action. The three river index provides for an appropriate index on which to base the trigger for lowering the performance standard in times of low abundance. The Yukon and Kuskokwim Rivers combined account for 80% of the Chinook salmon subsistence harvest in the state of Alaska, thus an index which emphasizes these river systems is a good fit.

Signed by: Theresa Peterson, Ernie Weiss, Chuck McCallum, Becca Robbins Gisclair, Jeff Kauffman, Jeff Farvour, Alexis Kwachka

ORIGINAL MOTION: The AP recommends the Council release the document for public review with the changes noted below (additions underlined, deletions in ~~strikethrough~~):

#### Alternative 2

Revise ~~Remove~~ BSAI Am 84 regulations to exempt vessels from the Chum Salmon Savings Area if they are participating in an approved Amendment 91 Incentive Plan Agreement and incorporate chum salmon avoidance into the Am91 Incentive Plan Agreements. Revise regulations at 50 CFR 679.21(c)(13) to include associated reporting requirements for chum salmon. Revise regulations at 50 CFR 679.21(c)(12)(iii)(B)(3) to include chum salmon bycatch avoidance as follows:

(3) Description of the incentive plan only changes are shown.

- ....
- (viii) A description of a rolling hot spot program for chum salmon bycatch which includes notifications to at least one third party group. Third party groups include any organizations representing western Alaskans who depend on non-Chinook salmon and have an interest in non-Chinook salmon bycatch reduction but do not directly fish in a groundfish fishery. Third party groups will be notified of violations of the chum salmon rolling hot spot program and will receive closure notices for the rolling hot spot program. (As under A. 84 currently)

#### Alternative 5

Revise Federal regulations to lower the performance standard under Am 91 in years of low Chinook salmon abundance per the options below. Low abundance is defined as ≤250,000 ~~500,000~~ Chinook salmon, based on the total post-season in-river Chinook salmon run size index of the ~~east~~ ~~WAK~~ Unalakleet, Upper Yukon, and Kuskokwim aggregate stock grouping in a [option: year or average of two years]. Sectors that exceed the applicable performance standard, in 3 out of 7 years, would be held to their proportion of the hard cap of 47,591 in perpetuity.

...

Add the following:

In years of low Chinook salmon abundance (when the lower performance cap is triggered), the Amendment 91 opt-out cap will be equal to the lower performance standard.

FAILED MOTION: A motion to initiate a trailing amendment to analyze reducing the 60,000 hard cap by 25% (40,000) or 60% (24,000), failed 7-13.

*C2 Minority Report on trailing amendment: A minority of the AP felt that in a time when subsistence and commercial fisheries for Chinook salmon were completely shut down in 2014 on the Yukon and Kuskokwim Rivers, allowing the pollock fishery to catch up to 60,000 Chinook salmon is problematic. Literally every Chinook salmon counts in this situation, and a bycatch of 60,000 Chinook salmon would be devastating to Western Alaska Chinook salmon runs at this point. The 60,000 cap was set above the average bycatch at the time it was adapted, and bycatch has declined since. Given the declines we have seen since the high bycatch in 2007 and surrounding years, it is hard to conclude that Western Alaska Chinook salmon runs can sustain these levels of bycatch. While bycatch alone is not the cause of the decline, it is one of the few sources of mortality (aside from in-river management) over which we have control, thus it is appropriate to look at adjusting the 60,000 hard cap.*

*Signed by: Theresa Peterson, Ernie Weiss, Chuck McCallum, Becca Robbins Gisclair, Jeff Kauffman, Jeff Favour, Alexis Kwachka*

### **C3 GOA Skate MRA**

The AP recommends the Council adopt Alternative 4 for final action. *Motion passed 21-0.*

### **C4 Final BSAI Groundfish Specifications**

The AP recommends the Council adopt 2015 and 2016 OFLs, ABCs, and TACs for groundfish in the Bering Sea and Aleutian Islands, as shown in Attachment 1. An amendment to reduce the Pollock TAC by 25,000 mt and move it to Atka mackerel (proportionally allocated by area) *passed 19-2. The amended motion passed 18-3.*

*C4 Minority Report: BSAI Groundfish Specifications: A minority of the AP believe that the TAC numbers approved by the AP move an excessive amount of quota to the pollock sector and significantly underfund the Amendment 80 fleet, removing all benefit to that sector resulting from the new flatfish flexibility provision. In addition to accommodating the return of the Atka mackerel fishery in 2015, TAC numbers for flatfish must be set high enough to allow the sector to maximize flatfish harvest and adjust to changes in fishing conditions throughout the year.*

*Signed by: Lori Swanson, Ruth Christiansen, Alexis Kwachka*

The AP recommends to the Council that they request NMFS institute immediate emergency action as provided for in Section 305(c) of the MSA to lower the halibut PSC limits for all sectors in the BSAI to the actual bycatch usage levels from 2013. This action would be for a **maximum** duration ~~of three years~~, or until the implementation of reductions in halibut PSC limits ultimately agreed upon in the halibut bycatch reduction action currently before the Council (with the next Council action in February), whichever comes first.

*The amendment to the motion passed 20-1. Final motion as amended passed 11-9 with 1 abstention.*

#### **Rationale:**

- The International Pacific Halibut Commission has no direct authority over the amount of halibut taken as bycatch or in the monitoring and estimation of bycatch. The IPHC therefore relies on U.S. and Canadian agencies for the necessary bycatch information and management.
- Bycatch is part of a national focus for the U.S. based on specific requirements in federal legislation or policy. The MSA is the primary law for federal fisheries management. The MSA

contains national standard for fishery conservation and management. National Standard 9 specifically addresses bycatch reduction, stating:

- “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.
- Changes in O26 bycatch directly translate into changes to directed fishery yields.
- O26 bycatch increased by 840,000 lbs over 2013. Had this remained constant, the 4CDE FCEY would be 1.21 instead of 0.37
- Had a 10% reduction occurred (as requested by the Council), the 4CDE FCEY would be 1.434 Mlbs
- Communities, IFQ and CDQ halibut fishermen are at risk of a fishery failure and are looking for immediate relief through bycatch reductions.
- This action provides a mechanism for the directed halibut users and halibut processors to maintain the much reduced 2014 halibut allocation until the halibut bycatch reduction action currently before the Council works its way through the process.

The AP recommends the Council rollover PSC limit amounts for 2015 and 2016 in Tables 12-15 in C4 action memo item 7. *Motion passed 19-2*

The AP recommends the Council adopt Table 11 in C5 action memo item 5 to set the ABC buffers for flathead sole, rock sole, and yellowfin sole equal to the difference between TAC and ABC for each species. *Motion passed 21-0.*

The AP recommends the Council approve the BSAI SAFE report. *Motion passed 21-0.*

## **C5 Final GOA Groundfish Specifications**

The AP recommends the Council adopt 2015 and 2016 OFLs, ABCs, and TACs for groundfish the Gulf of Alaska as show in [Attachment 2](#). The TACs for both GOA pacific cod and pollock have been adjusted to account for the state water GHL fisheries as show in in the C5 action memo Item 3, State Water TAC Consideration tables. *Motion passed 20-0.*

The AP recommends the Council adopt the 2015 and 2016:

- GOA halibut limits and apportionments contained in Tables 9 and 10 in C5 action memo item 4, per Amendment 95 (PSC reductions).
- Apportionment of halibut PSC trawl limits in the GOA between shallow and deep-water species as contained in Tables 11 and 12 in C5 action memo item 4.
- Apportionments of “other hook and line fisheries” annual halibut PSC allowance between hook and line gear catcher vessels and catcher processors in the GOA contained in Tables 13 and 14 in C5 action memo item 4.

*Motion passed 20/0.*

The AP recommends the Council approve the GOA SAFE document. *Motion passed 20-0.*

## C6 GOA Sablefish Longline Pots

The AP recommends the Council send the document out for another initial review with the following revisions (additions **bold/underlined**, deletions in **~~bold/strikeout~~**):

Alternative 1. No action.

Revised Alternative 2. Allow the use of pot longline gear in the GOA sablefish IFQ fishery

Element 1. Limit of ~~0 to 400 pots~~ **...150, 250, 350, 400 (pots** per vessel)

Element 2. Gear retrieval

Option 1. Require vessels to remove their pot gear when making a landing.

Suboption. Provide an exemption for vessels less than 60', 50', or 40'.

Option 2. Require the location of pots left on the grounds or lost on the grounds to be submitted when landings are made.

**Option 3. Remove gear when finished with IFQ or switching to a different fishery within 7 days.**

**Option 4. Gear not left more than 2 weeks unattended.**

**Option 5. No in water pot storage.**

**Option 6. Use biodegradable panels on pots.**

Element 3. Gear specifications.

~~**Option 1. Require the use of neutrally buoyant groundline.**~~

Option 2. Require both ends of the pot longline set to be marked.

**Option 3. Require pot tags and flagpoles with transponders that work with AIS or an equivalent system.**

Element 4. Retention of incidentally caught halibut.

Allow the retention of halibut caught incidentally in sablefish pots, provided the sablefish IFQ holder also holds sufficient halibut IFQ.

Option 1. Allow the retention of halibut caught incidentally in sablefish pots up to an MRA percentage, provided the sablefish IFQ holder also holds sufficient halibut IFQ.

*An amendment to strike Option 1 under Element 3, passed 15-6. Final motion as amended passed 19-2.*

*C6 Minority Report on "no pot limit" amendment: A minority of the AP supported an amendment to include a "no pot limit" option in the range of alternatives for Element 1 (failed 12-9). The minority felt it represented a reasonable range of alternatives as intended in the Council motion based on public comment and the pot limit being deemed unnecessary in the BSAI crab fisheries post-rationalization. Signed by: Anne Vanderhoeven, Ruth Christiansen, Jerry Downing, Craig Lowenberg, Sinclair Wilt, Kurt Cochran, John Gruver*

*C6 Minority Report on amendment to separate pots from longlines by area/time: A minority supported an amendment to include consideration of using time and/or area to separate longline and pot gear to*



*minimize gear conflicts (failed 11-10). The third part of the Council's purpose and need statement for this action speaks to "minimizing gear conflicts that could result from allowing pot and longline gear to fish in the same regulatory area." Some members of the industry believe gear conflicts and gear loss will be significant if this major new gear type is introduced to the GOA sablefish fishery. The existing motion lacks options to mitigate these impacts. The undersigned AP members support a more cautious area or sub-area specific evaluation of allowing pots in the GOA and believe options should be added to inform that approach.*

*Signed by: Jeff Favour, Brian Lynch, Chuck McCallum, Ernie Weiss, Alexis Kwachka, Becca Robbins Gisclair, Theresa Peterson, Jeff Kauffman*

## **C7 VESSEL IFQ CAPS**

AP recommends the Council develop a Purpose and Need statement and initiate an analysis to provide relief from halibut vessel IFQ caps in years with low caps, sablefish vessel caps to address unharvested sablefish quota and to provide additional second generation opportunity in both fisheries. The analysis should consider the following alternatives which are not mutually exclusive:

Alt 1: Status quo

Alt 2: Option 1: Raise the vessel IFQ caps for sablefish IFQ caps (all areas, all QS types)

Sub-option 1: 2.5% cap

Sub-option 2: 5% cap

Raise the vessel IFQ caps for halibut (all areas, all QS types)

Sub-option 1: 1%,

Sub-option 2: 1.5%

Option 2: Exclusively raise Sablefish A-share IFQ vessel caps in all areas to (options) 1.5%, 2%, or 5% based on the Sablefish IFQ TAC for all areas and all quota categories.

Alt 3: Create a minimum vessel cap which would apply to the statewide cap for vessels harvesting IFQ in Areas 3 and 4 and for sablefish in the GOA and BSAI.

Option 1: 2013 cap

Option 2: 2011 cap

Option 3: 2011 cap plus 15%

Alt 4: Second generation quota of halibut and sablefish for all types/classes in all areas would be exempt from having their IFQ harvest accrue to the vessel IFQ cap.

Option: the provision to exclude SE/2C for alternatives 2 through 4.

*Motion passed 11-9.*

### **Rationale for Alt 2, Option 2:**

- The logic behind this motion is to improve efficiency.
- One of the goals of the IFQ program was to maintain the historical make-up of the harvesting sector. This only applies to IFQ participants with exclusive A-shares i.e. not mixed quota- No B, C, or D shares.
- Since the inception of the IFQ program, the cap has been overly restrictive for a FLL vessel.
- The cap only allows FLL vessels to make a partial trip before reaching the cap.

*C7 Minority Report on Vessel IFQ Cap discussion: The undersigned AP members recognize that raising the vessel caps, allowing vessels to fish over the vessel caps, and establishing a vessel cap “floor” will facilitate additional consolidation of QS onto fewer boats. The sablefish/halibut fleet has been reduced to by 70% since the IFQ program was implemented. Additional consolidation undermines the goals of the IFQ program, hurts coastal communities, and increases entry level barriers. In terms of halibut, table 5 of the document illustrates the relatively few vessels that would benefit from this significant change to the program. There is no “stranded” quota in the Gulf; only BSAI sablefish is not fully utilized. We also believe that the stranding of fish may be, at least partially, a result of factors other than low vessel caps. Changing the caps allows a few vessels with a lot of QS to acquire more to the detriment of all other IFQ holders, their crew, and the coastal economies that depend on them.*

*Signed by: Theresa Peterson, Jeff Favour, Alexis Kwachka, Chuck McCallum, Ernie Weiss, Lori Swanson, Jeff Kaufman, Becca Robbins Gisclair, Brian Lynch*

## **C8 EM Workgroup Report**

The AP supports the EMWG in prioritizing operational testing of standard EM systems and building community capacity for pre implementation in 2016. *Motion passed 19-0.*

## **C9 Observers on Small CPs**

The AP recommends that the Council adopt the draft Purpose and Need Statement and the alternatives for further analysis recommended by NMFS in its discussion paper on placing small catcher processors in partial observer coverage. *Motion passed 18-0.*

## **D1 VMS Discussion Paper**

The AP appreciates the VMS discussion paper and concurs with the Enforcement Committee’s recommendation that these features be further considered for use in future actions. *Motion passed 21-0.*

### **Rationale:**

- The document shows how VMS might be better used in North Pacific fisheries.
- These options should be considered as possible applications arise.
- Possible increased costs would be considered as part of any action.

## **D3 Pribilof Canyons**

The AP received public comment and looks forward to the report from AFSC in June.

AP recommended TACs and SSC recommended OFL and ABC (metric tons) for BSAI Groundfish, 2015-2016

Species	Area	2014			Catch as of 11/8/14	2015			2016		
		OFL	ABC	TAC		OFL	ABC	TAC	OFL	ABC	TAC
Pollock	EBS	2,795,000	1,369,000	1,267,000	1,294,703	3,330,000	1,637,000	1,325,000	3,319,000	1,554,000	1,350,000
	AI	42,811	35,048	19,000	2,375	36,005	29,659	19,000	38,699	31,900	19,000
	Bogoslof	13,413	10,059	75	427	21,200	15,900	100	21,200	15,900	100
Pacific cod	BS	299,000	255,000	246,897	208,053	346,000	255,000	246,822	389,000	255,000	246,822
	AI	20,100	15,100	6,997	6,145	23,400	17,600	9,422	23,400	17,600	9,422
Sablefish	BS	1,584	1,339	1,339	315	1,575	1,333	1,333	1,431	1,211	1,211
	AI	2,141	1,811	1,811	817	2,128	1,802	1,802	1,934	1,637	1,637
Yellowfin sole	BSAI	259,700	239,800	184,000	143,805	266,400	248,800	152,750	262,900	245,500	152,777
Greenland turbot	BSAI	2,647	2,124	2,124	1,653	3,903	3,172	2,648	6,453	5,248	3,250
	BS	n/a	1,659	1,659	1,476	n/a	2,448	2,448	n/a	4,050	3,050
	AI	n/a	465	465	177	n/a	724	200	n/a	1,198	200
Arrowtooth flounder	BSAI	125,642	106,599	25,000	18,697	93,856	80,547	19,000	91,663	78,661	19,000
Kamchatka flounder	BSAI	8,270	7,100	7,100	6,395	10,500	9,000	6,450	11,000	9,500	6,450
Northern rock sole	BSAI	228,700	203,800	85,000	51,549	187,600	181,700	52,000	170,100	164,800	52,000
Flathead sole	BSAI	79,633	66,293	24,500	16,102	79,419	66,130	16,300	76,504	63,711	16,300
Alaska plaice	BSAI	66,800	55,100	24,500	18,808	54,000	44,900	19,400	51,600	42,900	19,400
Other flatfish	BSAI	16,700	12,400	2,650	4,388	17,700	13,250	4,425	17,700	13,250	4,425
Pacific Ocean perch	BSAI	39,585	33,122	33,122	32,373	42,558	34,988	31,812	40,809	33,550	31,470
	BS	n/a	7,684	7,684	7,429	n/a	8,771	7,500	n/a	8,411	7,500
	EAI	n/a	9,246	9,246	9,021	n/a	8,312	8,312	n/a	7,970	7,970
	CAI	n/a	6,594	6,594	6,439	n/a	7,723	6,500	n/a	7,406	6,500
	WAI	n/a	9,598	9,598	9,485	n/a	10,182	9,500	n/a	9,763	9,500
Northern rockfish	BSAI	12,077	9,761	2,594	2,339	15,337	12,488	2,350	15,100	12,295	2,350
Blackspotted/Rougheye rockfish	BSAI	505	416	416	196	560	453	276	686	555	276
	EBS/EAI	n/a	177	177	98	n/a	149	126	n/a	178	126
	CAI/WAI	n/a	239	239	98	n/a	304	150	n/a	377	150
Shortraker rockfish	BSAI	493	370	370	194	690	518	250	690	518	250
Other rockfish	BSAI	1,550	1,163	773	931	1,667	1,250	880	1,667	1,250	880
	BS	n/a	690	300	316	n/a	695	325	n/a	695	325
	AI	n/a	473	473	615	n/a	555	555	n/a	555	555
Atka mackerel	BSAI	74,492	64,131	32,322	30,947	125,297	106,000	56,050	115,908	98,137	31,050
	EAI/BS	n/a	21,652	21,652	21,185	n/a	38,493	38,269	n/a	35,637	21,200
	CAI	n/a	20,574	9,670	9,520	n/a	33,108	17,330	n/a	30,652	9,600
	WAI	n/a	21,905	1,000	242	n/a	34,400	451	n/a	31,848	250
Skates	BSAI	41,849	35,383	26,000	24,695	49,575	41,658	26,250	47,035	39,468	26,250
Sculpins	BSAI	56,424	42,318	5,750	4,570	52,365	39,725	4,750	52,365	39,725	4,750
Sharks	BSAI	1,363	1,022	125	122	1,363	1,022	130	1,363	1,022	130
Squids	BSAI	2,624	1,970	310	1,678	2,624	1,970	400	2,624	1,970	400
Octopuses	BSAI	3,450	2,590	225	351	3,452	2,589	400	3,452	2,589	400
<b>Total</b>	BSAI	4,196,553	2,572,819	2,000,000	1,872,627	4,769,174	2,848,455	2,000,000	4,764,283	2,731,897	2,000,000

Sources: 2014 OFLs and ABCs are from harvest specifications adopted by the Council in December 2013, 2014 catches through November 8, 2014 from AKR Catch Accounting.

- Pollock - Bering Sea Increased TAC 13,650 mt to 1,280,650
- Pollock - Aleutian Islands Decreased TAC 13,650 to 5,350 mt
- Other rockfish - Bering Sea Increased TAC 100 mt to 400 mt
- Skates Increased TAC 600 mt to 26,600 mt
- Sharks Increased TAC 100 mt to 225 mt
- Squids Increased TAC 1,190 mt to 1,764 mt
- Octopuses Increased TAC 200 mt to 425 mt

AP recommended TACs and SSC recommended OFL and ABC (metric tons) for GOA Groundfish, 2015-2016

Species	Area	2014			Catch as of 11/8/14	2015			2016		
		OFL	ABC	TAC		OFL	ABC	TAC	OFL	ABC	TAC
Pollock <sup>a/</sup>	W (61)	n/a	36,070	36,070	13,318	n/a	31,634	31,634	n/a	41,472	41,472
	C (62)	n/a	81,784	81,784	83,049	n/a	97,579	97,579	n/a	127,936	127,936
	C (63)	n/a	39,756	39,756	42,068	n/a	52,594	52,594	n/a	68,958	68,958
	WYAK	n/a	4,741	4,741	1,317	n/a	4,719	4,719	n/a	6,187	6,187
	Subtotal		211,998	162,351	162,351	139,752	256,545	191,309	186,526	321,067	250,824
	EYAK/SEO	16,833	12,625	12,625	1	16,833	12,625	12,625	16,833	12,625	12,625
	Total	228,831	174,976	174,976	139,753	273,378	203,934	199,151	337,900	263,449	257,178
Pacific Cod	W	n/a	32,745	22,922	20,910	n/a	38,702	27,091	n/a	38,702	27,091
	C	n/a	53,100	39,825	38,429	n/a	61,320	45,990	n/a	61,320	45,990
	E	n/a	2,655	1,991	294	n/a	2,828	2,121	n/a	2,828	2,121
	Total	107,300	88,500	64,738	59,633	140,300	102,850	75,202	133,100	102,850	75,202
Sablefish	W	n/a	1,480	1,480	1,195	n/a	1,474	1,474	n/a	1,338	1,338
	C	n/a	4,681	4,681	4,706	n/a	4,658	4,658	n/a	4,232	4,232
	WYAK	n/a	1,716	1,716	1,655	n/a	1,708	1,708	n/a	1,552	1,552
	SEO	n/a	2,695	2,695	2,819	n/a	2,682	2,682	n/a	2,436	2,436
	Total	12,500	10,572	10,572	10,375	12,425	10,522	10,522	11,293	9,558	9,558
Shallow-Water Flatfish	W	n/a	20,376	13,250	243	n/a	22,074	13,250	n/a	19,577	13,250
	C	n/a	17,813	17,813	4,144	n/a	19,297	19,297	n/a	17,114	17,114
	WYAK	n/a	2,039	2,039	1	n/a	2,209	2,209	n/a	1,959	1,959
	EYAK/SEO	n/a	577	577	1	n/a	625	625	n/a	554	554
	Total	50,007	40,805	33,679	4,389	54,207	44,205	35,381	48,407	39,204	32,877
Deep-Water Flatfish	W	n/a	302	302	68	n/a	301	301	n/a	299	299
	C	n/a	3,727	3,727	271	n/a	3,689	3,689	n/a	3,645	3,645
	WYAK	n/a	5,532	5,532	5	n/a	5,474	5,474	n/a	5,409	5,409
	EYAK/SEO	n/a	3,911	3,911	4	n/a	3,870	3,870	n/a	3,824	3,824
	Total	16,159	13,472	13,472	348	15,993	13,334	13,334	15,803	13,177	13,177
Rex Sole	W	n/a	1,270	1,270	124	n/a	1,258	1,258	n/a	1,234	1,234
	C	n/a	6,231	6,231	3,382	n/a	5,816	5,816	n/a	5,707	5,707
	WYAK	n/a	813	813	1	n/a	772	772	n/a	758	758
	EYAK/SEO	n/a	1,027	1,027	-	n/a	1,304	1,304	n/a	1,280	1,280
	Total	12,207	9,341	9,341	3,507	11,957	9,150	9,150	11,733	8,979	8,979
Arrowtooth Flounder	W	n/a	31,142	14,500	1,875	n/a	30,752	14,500	n/a	29,545	14,500
	C	n/a	115,612	75,000	33,085	n/a	114,170	75,000	n/a	109,692	75,000
	WYAK	n/a	37,232	6,900	50	n/a	36,771	6,900	n/a	35,328	6,900
	EYAK/SEO	n/a	11,372	6,900	16	n/a	11,228	6,900	n/a	10,787	6,900
	Total	229,248	195,358	103,300	35,026	226,390	192,921	103,300	217,522	185,352	103,300
Flathead Sole	W	n/a	12,730	8,650	212	n/a	12,767	8,650	n/a	12,776	8,650
	C	n/a	24,805	15,400	2,284	n/a	24,876	15,400	n/a	24,893	15,400
	WYAK	n/a	3,525	3,525	1	n/a	3,535	3,535	n/a	3,538	3,538
	EYAK/SEO	n/a	171	171	-	n/a	171	171	n/a	171	171
	Total	50,664	41,231	27,746	2,497	50,792	41,349	27,756	50,818	41,378	27,759

a/ 2015-2016 W/C/WYAK Subarea amounts for pollock are apportionments of subarea ACL that allow for regulatory reapportionment.

b/ Note 1 mt moved from the northern rockfish stock EGOA allocation to EGOA "other rockfish" category.

AP recommended TACs and SSC recommended OFL and ABC (metric tons) for GOA Groundfish, 2015-2016

Species	Area	2014			Catch as of 11/8/14	2015			2016		
		OFL	ABC	TAC		OFL	ABC	TAC	OFL	ABC	TAC
Pacific Ocean Perch	W		2,399	2,399	2,063		2,302	2,302		2,358	2,358
	C		12,855	12,855	13,434		15,873	15,873		16,184	16,184
	WYAK		1,931	1,931	1,871		2,014	2,014		2,055	2,055
	W/C/WYAK	19,864		17,185	17,368	23,406	20,189	20,189	23,876	20,597	20,597
	SEO	2,455	2,124	2,124	-	954	823	823	973	839	839
	E(subtotal)				1,880		2,837	2,837		2,894	2,894
Total		22,319	19,309	19,309	17,368	24,360	21,012	21,012	24,849	21,436	21,436
Northern Rockfish <sup>a/</sup>	W	n/a	1,305	1,305	802	n/a	1,226	1,226	n/a	1,158	1,158
	C	n/a	4,017	4,017	3,410	n/a	3,772	3,772	n/a	3,563	3,563
	E	n/a	-	-	-	n/a	-	-	n/a	-	-
	Total	6,349	5,322	5,322	4,212	5,961	4,998	4,998	5,631	4,721	4,721
Shortraker Rockfish	W	n/a	92	92	73	n/a	92	92	n/a	92	92
	C	n/a	397	397	323	n/a	397	397	n/a	397	397
	E	n/a	834	834	253	n/a	834	834	n/a	834	834
	Total	1,764	1,323	1,323	649	1,764	1,323	1,323	1,764	1,323	1,323
Dusky Rockfish	W	n/a	317	317	134	n/a	296	296	n/a	273	273
	C	n/a	3,584	3,584	2,825	n/a	3,336	3,336	n/a	3,077	3,077
	WYAK	n/a	1,384	1,384	87	n/a	1,288	1,288	n/a	1,187	1,187
	EYAK/SEO	n/a	201	201	4	n/a	189	189	n/a	174	174
	Total	6,708	5,486	5,486	3,050	6,246	5,109	5,109	5,759	4,711	4,711
Rougheye and Blackspotted Rockfish	W	n/a	82	82	25	n/a	115	115	n/a	117	117
	C	n/a	864	864	536	n/a	632	632	n/a	643	643
	E	n/a	298	298	172	n/a	375	375	n/a	382	382
	Total	1,497	1,244	1,244	733	1,345	1,122	1,122	1,370	1,142	1,142
Demersal shelf rockfish	Total	438	274	274	104	361	225	225	361	225	225
Thornyhead Rockfish	W	n/a	235	235	237	n/a	235	235	n/a	235	235
	C	n/a	875	875	666	n/a	875	875	n/a	875	875
	E	n/a	731	731	218	n/a	731	731	n/a	731	731
	Total	2,454	1,841	1,841	1,121	2,454	1,841	1,841	2,454	1,841	1,841
Other Rockfish <sup>b/</sup> (Other slope)	WGOA & CGOA	n/a	-	-	-	n/a	-	-	n/a	-	-
	WYAK	n/a	1,031	1,031	940	n/a	1,031	1,031	n/a	1,031	1,031
	EYAK/SEO	n/a	580	580	53	n/a	580	580	n/a	580	580
	EYAK/SEO	n/a	2,470	200	37	n/a	2,469	200	n/a	2,469	200
	Total	5,347	4,081	1,811	1,030	5,347	4,080	1,811	5,347	4,080	1,811
Atka mackerel	Total	6,200	4,700	2,000	981	6,200	4,700	2,000	6,200	4,700	2,000
Big Skate	W	n/a	589	589	135	n/a	731	731	n/a	731	731
	C	n/a	1,532	1,532	1,150	n/a	1,257	1,257	n/a	1,257	1,257
	E	n/a	1,641	1,641	94	n/a	1,267	1,267	n/a	1,267	1,267
	Total	5,016	3,762	3,762	1,379	4,340	3,255	3,255	4,340	3,255	3,255
Longnose Skate	W	n/a	107	107	51	n/a	152	152	n/a	152	152
	C	n/a	1,935	1,935	1,031	n/a	2,090	2,090	n/a	2,090	2,090
	E	n/a	834	834	336	n/a	976	976	n/a	976	976
	Total	3,835	2,876	2,876	1,418	4,291	3,218	3,218	4,291	3,218	3,218
Other Skates	Total	2,652	1,989	1,989	1,559	2,980	2,235	2,235	2,980	2,235	2,235
Sculpins	GOA-wide	7,448	5,569	5,569	1,075	7,448	5,569	5,569	7,448	5,569	5,569
Sharks	GOA-wide	7,986	5,989	5,989	1,188	7,986	5,989	5,989	7,986	5,989	5,989
Squids	GOA-wide	1,530	1,148	1,148	92	1,530	1,148	1,148	1,530	1,148	1,148
Octopuses	GOA-wide	2,009	1,507	1,507	1,057	2,009	1,507	1,507	2,009	1,507	1,507
Total		790,468	640,675	499,274	292,544	870,064	685,597	536,158	910,895	731,049	590,161

a/ 2015-2016 W/C/WYAK Subarea amounts for pollock are apportionments of subarea ACL that allow for regulatory reapportionment.

b/ Note 1 mt moved from the northern rockfish stock EGOA allocation to EGOA "other rockfish" category.

# North Pacific Fishery Management Council

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Certified: *San Bledy*  
Date: *12/30/14*

## SCIENTIFIC AND STATISTICAL COMMITTEE to the NORTH PACIFIC FISHERY MANAGEMENT COUNCIL December 8<sup>th</sup> – 10<sup>th</sup>, 2014

The SSC met from December 8<sup>th</sup> through 10<sup>th</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*

Milo Adkison  
*University of Alaska Fairbanks*

Alison Dauble  
*Oregon Dept. of Fish and Wildlife*

Sherri Dressel  
*Alaska Department of Fish and Game*

Brad Harris  
*Alaska Pacific University*

Anne Hollowed  
*NOAA Fisheries—AFSC*

George Hunt  
*University of Washington*

Seth Macinko  
*University of Rhode Island*

Steve Martell  
*Intl. Pacific Halibut Commission*

Lew Queirolo  
*NOAA Fisheries—Alaska Region*

Terry Quinn  
*University of Alaska Fairbanks*

Matt Reimer  
*University of Alaska Anchorage*

Farron Wallace  
*NOAA Fisheries—AFSC*

Members absent were:

Chris Anderson  
*University of Washington*

Jennifer Burns  
*University of Alaska Anchorage*

Kate Reedy  
*Idaho State University Pocatello*

### B-1 Plan Team Nomination

The SSC reviewed the Plan Team nomination of Laura Stichert to the BSAI Crab Plan Team. The SSC finds Laura to be well qualified, with appropriate expertise that will assist the Crab Plan Team. The SSC recommends that the Council approve this nomination.

### C-2 BS Salmon Bycatch

The SSC received a presentation of the Initial Review EA/RIR/IRFA document from Diana Stram (NPFMC), Jim Ianelli (NMFS-AFSC), Alan Haynie (NMFS-AFSC), Jim Fall (ADF&G), and Katie Howard (ADF&G). The SSC received public testimony from Roy Ashenfelter (Kawerak), Ed Richardson (Pollock Conservation Cooperative), Paul Peyton and Gene Sandone (Bristol Bay Economic Development Corporation).

The purpose of the proposed action is to address prohibited species catch (PSC) of Chinook and chum salmon in the Bering Sea directed pollock fishery. The analysis examines multiple measures under consideration by the Council, including: modifying management of chum salmon prohibited species catch (PSC) by requiring incorporation into existing industry-run Chinook salmon incentive program agreements (IPA), modifying IPA requirements to add provisions and more stringent restrictions for



Chinook salmon PSC management, modifying the existing pollock seasons in the summer to begin earlier and/or end sooner, and setting a lower threshold performance standard for use as a target in management of Chinook PSC limits within the IPAs which would be employed in years of low Chinook abundance. The SSC previously commented on a discussion paper on this topic in June 2014.

The alternatives under consideration by the Council focus on changing the PSC avoidance behavior of vessel operators in the pollock fleet. The two fundamental questions for evaluating the efficacy of the alternative measures, relative to the status quo, are therefore: 1) to what extent will vessel behavior change and 2) how does altered vessel behavior translate into reduced salmon PSC? An ideal analysis would answer these two questions and frame the predicted effects of different management measures in terms of tradeoffs, such as foregone pollock revenue per adult equivalent (AEQ) spawning salmon saved. In this way, the Council would have a meaningful way to compare and contrast the alternatives. Unfortunately, insufficient information and modeling techniques preclude quantitative comparisons of estimated impacts. Instead, alternative measures are evaluated qualitatively by whether or not salmon PSC is expected to increase or decrease from the status quo. Estimated impacts are largely based on historical fishing patterns, with a caveat that these estimates are sensitive to changes in vessel behavior. The degree of change depends on how the fleet responds to the alternative measures. Without quantitative comparisons, it is difficult—if not impossible—to compare the alternative measures in terms of their estimated impacts on PSC reduction. In this sense, the analysis is not ideal, but is similar to analyses of previous actions (e.g., Amendment 91) on this issue.

Despite the limitations of the qualitative analysis, the analysts have done an excellent job identifying (and presenting) the major potential benefits, key concerns, trade-offs, and measurement issues among all of the alternative measures, from the perspective of the commercial fishery (e.g., Table 2). The document therefore provides the Council with vital information and issues for consideration as they focus their efforts to reduce Chinook and chum salmon PSC mortality. **The SSC therefore recommends that the draft be released for public review and that the following changes be incorporated before release, if possible:**

- Estimated impacts largely depend on how the industry will change its behavior in response to the measures under consideration, yet the magnitude of the industry’s response is unknown. Accordingly:
  - 1) The analysis of Alternatives 4 and 5 would benefit from an expanded discussion on possible behavioral responses of the industry and the implications for salmon PSC reduction, rather than relying exclusively on historical fishing patterns.
  - 2) Since the magnitude of the estimated impacts is unknown, the estimated impacts should only indicate whether or not the alternative has the potential to reduce salmon PSC relative to the status quo, and refer the reader to Table 2 for the key factors that will determine the magnitude of the impacts or net benefits. For instance, on page 179 in the summation of alternatives with respect to net benefits, the analysts state that Alternative 3 is “not expected to result in reduced net national benefits,” while Alternatives 4 and 5 are “expected to have positive effects on net national benefits as compared to the status quo.” This text seems to suggest that Alternatives 4 and 5 may be “better” than Alternative 3. However, there is no justification for this in the analysis due to the uncertain nature of the industry’s potential response to each alternative. Unjustified comments such as these should be removed from the document. The level of uncertainty about the final terms and details of the preferred alternative makes drawing summary conclusions about Net National Benefit outcomes premature. These required elements of the RIR must await further Council action.
- The analysis would benefit from a discussion of some of the ways in which incentive-based alternatives may be better suited for achieving reduced salmon PSC. Experience has shown that

PSC avoidance requires flexibility and the ability of vessels to adjust to real-time information and fishery conditions. In this sense, incentive-based measures are more adaptable compared to measures such as shortening the directed pollock season or requiring salmon excluders at all times, which redirect vessel behavior irrespective of current fishing conditions. The benefits of incentive-based alternatives are particularly true when there are uncertain future fishery conditions and limited information on future Council actions, as is the case for the action considered here.

- The 3-system index of Chinook salmon abundance presented in Alternative 5 is a reasonable and transparent approach to identifying years of low Chinook salmon abundance in coastal Western Alaska. The SSC and public testimony note that other indices of Chinook salmon abundance in coastal Western Alaska are possible. One method that should be considered is to first standardize the abundances from each river system and then add them together so that the influence of large stocks (e.g., Kuskokwim and Upper Yukon) is tempered against the abundance of the smallest stock (Unalakleet) in the index.
- Figure 10 in the document depicts trends in abundance of Chinook salmon stocks across Alaska. To provide better relevance to this action, the figure should be constructed solely from stocks in coastal Western Alaska.

**The SSC offers the following recommendations to the authors for future iterations of the analysis:**

- As the Council narrows down the alternatives under consideration for this action, the authors need to be clear about the data and information that are required for future analyses, including retrospective evaluations of the measures that are eventually chosen by the Council.
- There are significant deficiencies in the analysis pertaining to impacts beyond the commercial industry-level. This is a severe limitation to constructing a comprehensive understanding of all dimensions of this action. The AEQ with run reconstruction analysis is an excellent step in this direction, but the extension of these projections/estimates to subsequent users and uses remains deficient. While an elaborate appendix containing subsistence information is attached, very little on the topic has made it into the body of the analysis. Public testimony was persuasive, asserting that too little attention is paid within the draft to “post-pollock fishery” effects, e.g., the role of Chinook, but especially chum salmon PSC losses on AYK communities and subsistence users.
- In connection with GOA and BSAI Groundfish Fishery Management regulations, there is no obvious advantage to be found in substituting the broader, less precise term “bycatch”, when the legally sanctioned and precise term “prohibited species catch” is the matter under consideration. The Council created and placed in regulation a clear distinction between “bycatch” and “prohibited species catch” within the two groundfish FMPs. The continued interchanging of the two terms is inadvisable within the formal public record, as confusion has occurred.

**The SSC offers the following recommendations for the Council:**

- An analysis of the social and non-monetary effects of potential alternatives on subsistence users in western Alaska will require additional fieldwork and data collection, including metrics to determine the viability (i.e., predictability and stability of the fishery over time) of subsistence fisheries in the face of declining abundance of Chinook salmon (cf. research priority 228).
- Specific information and methods are required for evaluating alternative measures for salmon PSC reduction in a meaningful way. The Council should continue to support industry transparency and the development of methods for evaluating industry behavior to meet these demands in the future.
- If the Council no longer believes a formal regulatory distinction between bycatch and PSC serves a useful purpose, the Council should consider amending the Groundfish FMPs appropriately.

**C-4 BSAI and C-5 GOA specifications and SAFE report**

The SSC received a presentation by Grant Thompson (NMFS-AFSC) on Plan Team recommendations for BSAI groundfish OFLs and ABCs. Jim Ianelli (NMFS-AFSC) presented the BSAI pollock stock



assessment. GOA Plan Team recommendations were summarized by Jim Ianelli (NMFS-AFSC) and Jim Armstrong (NPFMC).

### **General SAFE Comments**

The SSC reviewed the SAFE chapters and 2013 OFLs with respect to status determinations for BSAI and GOA groundfish. **The SSC accepts the status determination therein, which indicated that no stocks were subject to overfishing in 2013. Also, in reviewing the status of stocks with reliable biomass reference points (all Tier 3 and above stocks and rex sole), the SSC concurs that these stocks are not overfished or approaching an overfished condition.**

The SSC concurred with the Joint Plan Team recommendation regarding Council's stock structure and management policy, which is to adopt the four-level scale of concern that is better linked to the steps outlined in the Council's stock structure policy. The scale of concern would be adopted in the context of the Council's stock structure and spatial management policy (with the understanding that all actions described here would be contingent on SSC concurrence):

- 1) Little or no concern, in which case no action needs to be taken,
- 2) 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,
- 3) Strong concern, in which case Steps 2 and 3 of the Council's process must be activated, and
- 4) 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 Plan Team noted several outstanding issues and questions regarding the policy that require further clarification, including whether the policy applies to the process of splitting stocks out of complexes. The SSC recommends that a workgroup comprised of Council, SSC, and Plan Team members be convened to address the questions. The SSC also concurred with the proposed public process and terminology regarding the application of a "maximum subarea species catch," which the stock assessment author would recommend to the Plan Team with subsequent review and comment by the SSC. This will ensure a more scientifically-based and transparent process for determining the subarea harvest recommendations and allow better tracking progress in meeting the management goals.

The SSC requests that stock assessment authors use the following model naming conventions in SAFE chapters:

- Model 0: last years' model with no new data,
- Model 1: last years' model with updated data, and
- Model numbers higher than 1 are for proposed new models.

The SSC also requests that stock assessment authors use the random effects model for area apportionment of ABCs.

The SSC supports the GOA Plan Team's comment that for thornyheads and a number of other species, it is critically important to the assessments that the GOA trawl surveys continue, that a full suite of stations are included in future trawl surveys (the 2013 survey was reduced by one-third), and that surveys extend to 1000 m to cover their habitat more completely.

The SSC notes from the BSAI Plan Team report that the Bering Sea slope survey was not conducted in 2014. Continuation of this survey is critical for assessment of Greenland turbot and several other species.

Table 1. SSC recommendations for GOA groundfish OFLs and ABCs for 2015 and 2016, shown with 2014 OFL, ABC, TAC, and catch amounts in metric tons (2014 catches through November 8<sup>th</sup>, 2014 from AKR catch accounting system). None of the SSC recommendations differed from those of the GOA Plan Team.

Species	Area	2014				2015		2016		
		OFL	ABC	TAC	Catch	OFL	ABC	OFL	ABC	
Pollock	W(61)	-	36,070	36,070	13,318		31,634 <sup>a</sup>		41,472 <sup>a</sup>	
	C(62)	-	81,784	81,784	83,049		97,579 <sup>a</sup>		127,936 <sup>a</sup>	
	C(63)	-	39,756	39,756	42,068		52,594 <sup>a</sup>		68,958 <sup>a</sup>	
	WYAK	-	4,741	4,741	1,317		4,719 <sup>a</sup>		6,187 <sup>a</sup>	
	Subtotal		211,998	162,351	162,351	139,752	256,545	191,309	321,067	250,824
	EYAK/SEO		16,833	12,625	12,625	1	16,833	12,625	16,833	12,625
	Total	228,831	174,976	174,976	139,753	273,378	203,934	337,900	263,449	
Pacific cod	W		32,745	22,922	20,910		38,702		38,702	
	C		53,100	39,825	38,429		61,320		61,320	
	E		2,655	1,991	294		2,828		2,828	
	Total	107,300	88,500	64,738	59,633	140,300	102,850	133,100	102,850	
Sablefish	W		1,480	1,480	1,195		1,474		1,338	
	C		4,681	4,681	4,706		4,658		4,232	
	WYAK		1,716	1,716	1,655		1,708		1,552	
	SEO		2,695	2,695	2,819		2,682		2,436	
	Total	12,500	10,572	10,572	10,375	12,425	10,522	11,293	9,558	
Shallow-water flatfish	W		20,376	13,250	243		22,074		19,577	
	C		17,813	17,813	4,144		19,297		17,115	
	WYAK		2,039	2,039	1		2,209		1,959	
	EYAK/SEO		577	577	1		625		554	
	Total	50,007	40,805	33,679	4,389	54,207	44,205	48,407	39,205	
Deep-water flatfish	W		302	302	68		301		299	
	C		3,727	3,727	271		3,689		3,645	
	WYAK		5,532	5,532	5		5,474		5,409	
	EYAK/SEO		3,911	3,911	4		3,870		3,824	
	Total	16,159	13,472	13,472	348	15,993	13,334	15,803	13,177	
Rex sole	W		1,270	1,270	124		1,258		1,234	
	C		6,231	6,231	3,382		5,816		5,707	
	WYAK		813	813	1		772		758	
	EYAK/SEO		1,027	1,027	-		1,304		1,280	
	Total	12,207	9,341	9,341	3,507	11,957	9,150	11,733	8,979	
Arrowtooth flounder	W		31,142	14,500	1,875		30,752		29,545	
	C		115,612	75,000	33,085		114,170		109,692	
	WYAK		37,232	6,900	50		36,771		35,328	
	EYAK/SEO		11,372	6,900	16		11,228		10,787	
	Total	229,248	195,358	103,300	35,026	226,390	192,921	217,522	185,352	
Flathead sole	W		12,730	8,650	212		12,767		12,776	
	C		24,805	15,400	2,284		24,876		24,893	
	WYAK		3,525	3,525	1		3,535		3,538	
	EYAK/SEO		171	171	-		171		171	
	Total	50,664	41,231	27,746	2,497	50,792	41,349	50,818	41,378	

<sup>a</sup> W/C/WYAK subarea amounts for pollock are apportionments of subarea ACL that allow for regulatory reapportionment

Table 1. continued.

Species	Area	2014				2015		2016	
		OFL	ABC	TAC	Catch	OFL	ABC	OFL	ABC
Pacific Ocean perch	W		2,399	2,399	2,063		2,302		2,358
	C		12,855	12,855	13,434		15,873		16,184
	WYAK		1,931	1,931	1,871		2,014		2,055
	W/C/WYAK	19,864		17,185	17,368	23,406		23,876	
	SEO	2,455	2,124	2,124	-	954	823	973	839
	E(subtotal)					-	-	-	-
	Total	22,319	19,309	19,309	17,368	24,360	21,012	24,849	21,436
Northern rockfish <sup>b</sup>	W		1,305	1,305	802		1,226		1,158
	C		4,017	4,017	3,410		3,772		3,563
	E		-	-	-		0*		0*-
	Total	6,349	5,322	5,322	4,212	5,961	4,998	5,631	4,721
Shortraker rockfish	W		92	92	73		92		92
	C		397	397	323		397		397
	E		834	834	253		834		834
	Total	1,764	1,323	1,323	649	1,764	1,323	1,764	1,323
Dusky rockfish	W		317	317	134		296		273
	C		3,584	3,584	2,825		3,336		3,077
	WYAK		1,384	1,384	87		1,288		1,187
	EYAK/SEO		201	201	4		189		174
	Total	6,708	5,486	5,486	3,050	6,246	5,109	5,759	4,711
Rougheye and blackspotted rockfish	W		82	82	25		115		117
	C		864	864	536		632		643
	E		298	298	172		375		382
	Total	1,497	1,244	1,244	733	1,345	1,122	1,370	1,142
Demersal shelf rockfish	Total	438	274	274	104	361	225	361	225
Thornyhead rockfish	W		235	235	237		235		235
	C		875	875	666		875		875
	E		731	731	218		731		731
	Total	2,454	1,841	1,841	1,121	2,454	1,841	2,454	1,841
Other rockfish (Other slope) <sup>b</sup>	I		-	-	-		-		-
	W/C		1,031	1,031	940		1,031		1,031
	WYAK		580	580	53		580		580
	EYAK/SEO		2,470	200	37		2,469		2,469
	Total	5,347	4,081	1,811	1,030	5,347	4,080	5,347	4,080
Atka mackerel	Total	6,200	4,700	2,000	981	6,200	4,700	6,200	4,700
Big skate	W		589	589	135		731		731
	C		1,532	1,532	1,150		1,257		1,257
	E		1,641	1,641	94		1,267		1,267
	Total	5,016	3,762	3,762	1,379	4,340	3,255	4,340	3,255
Longnose skate	W		107	107	51		152		152
	C		1,935	1,935	1,031		2,090		2,090
	E		834	834	336		976		976
	Total	3,835	2,876	2,876	1,418	4,291	3,218	4,291	3,218
Other skates	Total	2,652	1,989	1,989	1,559	2,980	2,235	2,980	2,235
Sculpins	GOA-wide	7,448	5,569	5,569	1,075	7,448	5,569	7,448	5,569
Sharks	GOA-wide	7,986	5,989	5,989	1,188	7,986	5,989	7,986	5,989
Squids	GOA-wide	1,530	1,148	1,148	92	1,530	1,148	1,530	1,148
Octopuses	GOA-wide	2,009	1,507	1,507	1,057	2,009	1,507	2,009	1,507
Total		790,468	640,675	499,274	292,544	870,064	685,597	910,895	731,049

<sup>b</sup>Note 1 mt was moved from the northern rockfish stock EGOA allocation to EGOA "other rockfish" category

Table 2. SSC recommendations for BSAI groundfish OFLs and ABCs for 2015 and 2016 are shown with the 2014 OFL, ABC, TAC, and Catch amounts in metric tons (2014 catches through November 8<sup>th</sup> from AKR Catch Accounting include CDQ). Recommendations are marked in **bold** where SSC recommendations differ from those of the BSAI Plan Team.

Species	Area	2014			2014 Catch as of 11/8/14	2015		2016	
		OFL	ABC	TAC		OFL	ABC	OFL	ABC
Pollock	EBS	2,795,000	1,369,000	1,267,000	1,294,703	3,330,000	1,637,000	3,319,000	1,554,000
	AI	42,811	35,048	19,000	2,375	36,005	29,659	38,699	31,900
	Bogoslof	13,413	10,059	75	427	21,200	15,900	21,200	15,900
Pacific cod	BS	299,000	255,000	246,897	208,053	346,000	255,000	389,000	255,000
	AI	20,100	15,100	6,997	6,145	23,400	17,600	23,400	17,600
Sablefish	BS	1,584	1,339	1,339	315	1,575	1,333	1,431	1,211
	AI	2,141	1,811	1,811	817	2,128	1,802	1,934	1,637
Yellowfin sole	BSAI	259,700	239,800	184,000	143,805	266,400	248,800	262,900	245,500
Greenland turbot	BSAI	2,647	2,124	2,124	1,653	3,903	3,172	6,453	5,248
	BS	n/a	1,659	1,659	1,476	n/a	2,448	n/a	4,050
	AI	n/a	465	465	177	n/a	724	n/a	1,198
Arrowtooth flounder	BSAI	125,642	106,599	25,000	18,697	93,856	80,547	91,663	78,661
Kamchatka flounder	BSAI	8,270	7,100	7,100	6,395	10,500	9,000	11,000	9,500
Northern rock sole	BSAI	228,700	203,800	85,000	51,549	187,600	181,700	170,100	164,800
Flathead sole	BSAI	79,633	66,293	24,500	16,102	79,419	66,130	76,504	63,711
Alaska plaice	BSAI	66,800	55,100	24,500	18,808	54,000	44,900	51,600	42,900
Other flatfish	BSAI	16,700	12,400	2,650	4,388	17,700	13,250	17,700	13,250
Pacific Ocean perch	BSAI	39,585	33,122	33,122	32,373	42,558	34,988	40,809	33,550
	BS	n/a	7,684	7,684	7,429	n/a	8,771	n/a	8,411
	EAI	n/a	9,246	9,246	9,021	n/a	8,312	n/a	7,970
	CAI	n/a	6,594	6,594	6,439	n/a	7,723	n/a	7,406
	WAI	n/a	9,598	9,598	9,485	n/a	10,182	n/a	9,763
	BSAI	12,077	9,761	2,594	2,339	15,337	12,488	15,100	12,295
Blackspotted/Rougheye rockfish	BSAI	505	416	416	196	<b>560</b>	<b>453</b>	<b>686</b>	<b>555</b>
	EBS/EAI	n/a	177	177	98	n/a	<b>149</b>	n/a	<b>178</b>
	CAI/WAI	n/a	239	239	98	n/a	<b>304<sup>a</sup></b>	n/a	<b>377<sup>a</sup></b>
Shortraker rockfish	BSAI	493	370	370	194	690	518	690	518
Other rockfish	BSAI	1,550	1,163	773	931	1,667	1,250	1,667	1,250
	BS	n/a	690	300	316	n/a	695	n/a	695
	AI	n/a	473	473	615	n/a	555	n/a	555
Atka mackerel	BSAI	74,492	64,131	32,322	30,947	125,297	106,000	115,908	98,137
	EAI/BS	n/a	21,652	21,652	21,185	n/a	38,493	n/a	35,637
	CAI	n/a	20,574	9,670	9,520	n/a	33,108	n/a	30,652
	WAI	n/a	21,905	1,000	242	n/a	34,400	n/a	31,848
Skates	BSAI	41,849	35,383	26,000	24,695	49,575	<b>41,658</b>	47,035	<b>39,468</b>
Sculpins	BSAI	56,424	42,318	5,750	4,570	52,365	39,725	52,365	39,725
Sharks	BSAI	1,363	1,022	125	122	1,363	1,022	1,363	1,022
Squids	BSAI	2,624	1,970	310	1,678	2,624	1,970	2,624	1,970
Octopuses	BSAI	3,450	2,590	225	351	3,452	2,589	3,452	2,589
<b>Total</b>	<b>BSAI</b>	<b>4,196,553</b>	<b>2,572,819</b>	<b>2,000,000</b>	<b>1,872,627</b>	<b>4,769,174</b>	<b>2,848,455</b>	<b>4,764,283</b>	<b>2,731,897</b>

<sup>a</sup> The SSC recommendation for “maximum subarea species catch” of Blackspotted/Rougheye rockfish in the WAI portion of the CAI/WAI is 46 mt in 2015 and 57 mt in 2016.

## GOA – BSAI Sablefish

Public testimony was provided by Gerry Merrigan (Freezer Longline Coalition). He commented that fixing the spatial allocation of allowed harvest at the 2012 level has fishery impacts, and noted that the fisheries efficiency of the current apportionment scheme should be taken into consideration. He also noted that whale depredation continues to be problematic.

The 2014 sablefish stock assessment model was updated to include several new sources of data including relative abundance and length data from the 2014 longline survey, relative abundance and length data from the 2013 longline and trawl fisheries, age data from the 2013 longline survey and 2013 fixed gear fishery, updated historical catches 2006 - present due to changes in the Regional Office Catch Accounting Database, updated 2013 catch, and projected 2014 catch. There are no model changes.

Review of the sablefish longline survey shows that after a period of declining sablefish abundance, the 2014 relative population number (RPN) increased slightly. Stock projections indicate a continued decline in abundance through 2018. The 2008 year class continues to be slightly above average.

The SSC appreciated the sensitivity analysis presented in Appendix 3C. This sensitivity analysis explored the implications of correcting for whale depredation, treatment of new survey area sizes, and other issues. The authors noted that they are exploring a suite of potential model changes before implementing them in the assessment. The SSC agrees that this seems like a prudent approach to incorporating changes to the model. The authors plan to develop a full benchmark assessment in preparation for a Center of Independent Experts review of the sablefish assessment in 2016.

The authors presented an update to a model previously approved by the SSC. The retrospective analysis showed that the updated model addressed the retrospective pattern and the model now has very little retrospective bias (Mohn rho = 0.019) of the groundfish stocks.

**The SSC recommends that sablefish be managed under Tier 3 harvest rules.** Projected female spawning biomass (combined areas) for 2015 is 91,183 (88% of  $B_{40\%}$ ), placing sablefish in Tier 3b. **The SSC supports the authors' recommendation for a maximum permissible value of  $F_{ABC}$  of 0.082, which translates into a 2015 ABC (combined areas) of 13,657 t. The OFL fishing mortality rate is 0.098, which translates into a 2015 OFL (combined areas) of 16,128 t.**

The authors and the Plan Team recommended keeping the area apportionment for harvest fixed at the proportions used in 2014. The SSC appreciated the authors' inclusion of the preliminary results of the spatial movement analysis. Dr. Quinn provided a progress report on development of a sablefish movement model that will be used to evaluate the performance of different spatial allocation strategies relative to several population attributes. The assessment authors and Kari Fenske (graduate student, UAF) are nearing completion of this movement model, which allows for them to conduct an evaluation of different spatial allocation strategies. For this reason, **the SSC accepts the Plan Team and authors' recommendation for fixing the spatial allocation for this assessment cycle.** The SSC looks forward to a more thorough analysis of the strengths and weaknesses of spatial allocation strategies which could improve on the weighted moving average approach used since 1995 or the random effects approach recently recommended by the Plan Team's Survey Averaging Working Group. The SSC notes that a flexible spatial allocation strategy is important for sablefish due to the importance of strong year classes in the population and the evidence for shifts in the spatial distribution of the population by age. The suite of proposed objectives included in the apportionment evaluation modeling will include:

- 1) Reduce annual variation in TAC changes,
- 2) Maximize economic yield by region and for the total fishery,
- 3) Maximize sustainable yield by region and for the total fishery, and
- 4) Maintain a minimum level of harvest in every region.

The proposed strategies to attain these objectives include:

- 1) Status quo (5-year exponential average of fishery and survey abundance),
- 2) Apportionment of terminal year abundance from a spatially explicit model,
- 3) Apportionment based on a longer-term (e.g., 10 year) average of abundance,
- 4) Apportionment based on equal allocation (i.e., divide TAC by the number of regions), and
- 5) Apportionment based on relative population weight or relative population numbers (to protect spawning biomass).

The SSC suggests that the authors might benefit from engagement of the fishing community and the Council in the selection of suites of objectives for this analysis.

#### Sablefish GOA

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Sablefish	W		1,474		1,338
	C		4,658		4,232
	WYAK		1,708		1,552
	SEO		2,682		2,436
	Total	12,425	10,522	11,293	9,558

#### Sablefish BSAI

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Sablefish	BS	1,575	1,333	1,431	1,211
	AI	2,128	1,802	1,934	1,637

#### C-4 BSAI SAFE and Harvest Specifications for 2015/16

##### EBS Walleye Pollock

Public testimony was provided by Ed Richardson (PCC) who believed that the stock assessment model was consistent with data, wanted ABC near 1.6 million t so that spawning biomass would not go above 3 million t, at which point he stated that recruitment would be below average 80% of the time, preferred that the treatment of average weight should be formalized, and that full Tier 1 projections should be undertaken with risk assessment and probability distributions; and Donna Parker (Arctic Storm) who thought the assessment showed that the pollock stock was in excellent shape, praised the science-based Council process, expressed one concern with warm temperatures affecting pollock and its assessment, and agreed with the Plan Team's ABC recommendation.

Hydroacoustic and trawl surveys in 2014 indicate higher estimated pollock biomasses, broadening of the spatial distribution, and expansion of range into the SE Bering Sea and Russia. Ages 6 and 7 (2008 and 2007 year classes) appear strong in the bottom trawl survey and age 2 (2012 year class) appears strong in the hydroacoustic survey, suggesting that some recent recruitments have been above average. There have been fairly large changes in growth interannually, suggesting a cohort effect (large year classes having low weight-at-age).

The authors considered the following three classes of models:

- Model 0: last year's model with updated data,
- Model 1: natural mortality as a function of age, and
- Model 2: density-dependent survey catchability.

Each updated dataset was added in sequence from most precise to least precise. There were three models for natural mortality at age, the status quo model, and two other well-known models from the literature. Model 2 used the Kotwicki index (a new efficiency correction for bottom trawl survey data).

The authors found no major problems in adding the updated datasets; there were no issues with model fitting. There was a small retrospective pattern upward. Thus, the authors proceeded to Models 1 and 2. They found that the status quo natural mortality model was as good as the other two models, so no change was made. They found the use of the Kotwicki index was promising but needed further study. Thus, the best model was last year’s model with updated data and no structural changes.

The Plan Team agreed that this was the best model, and the SSC concurs. EBS pollock are in Tier 1a for biological reference points. The results from the best model indicate that the EBS pollock stock is in good health with biomass well above the MSY level and strong year classes in the composition. Table 1.3 shows that average catch was about 1.2 million t (range 0.8-1.5 million t) since 1977 (when NPFMC management began). Thus for almost 40 years, the management system has produced sustainable harvests around this magnitude. From this assessment, the 2015 maxABC has returned to a very high level of 2.900 million t, jumping from the 2014 ABC of 1.369 million t. Because this large a change requires moderation for robust determination, the authors proposed a Replacement Yield strategy (choosing yield equal to the surplus production to keep the population at the same level) of 1.35 million t. The Plan Team did not approve this type of strategy, and the SSC agrees, because the rationale to keep the stock well above  $B_{MSY}$  is lacking. The strategy of using average F for the last five years, which produces an ABC of 1.409 million t (Table 1.29), is more reasonable for rebuilding a stock, not one that is already rebuilt. The Plan Team instead recommended a Tier 3 strategy used in the past, which uses  $F_{40\%}$  and  $B_{40\%}$ , considered conservative approximations to  $F_{MSY}$  and  $B_{MSY}$ . **The SSC agreed with this choice, which results in a 2015 ABC of 1.637 million t.** Unlike the Plan Team, the SSC is not concerned at this point about the concentrated age distribution with 50% of fish at age 6, because the population level is high. That would be a concern if there were weak year classes in the recent past and consequently there was concern about spawning biomass going too low. The SSC welcomes the return to this harvest control rule and believes it provides a more stable strategy than Replacement Yield or 5-year average fishing mortality.

The SSC requests that the following issues be addressed in future assessments:

1. Projection graphs should be included to better understand future responses.
2. Elaboration and justification are needed for the method used to calculate weight-at-age used to calculate biomass from numerical abundance.
3. The extent to which environmental variables affect year class strength and its uncertainty should be examined.
4. The extent to which temperature affects survey catchability and/or selectivity should be examined with attention to whether large increases in survey biomass are due to temperature effects rather than actual changes in biomass.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Pollock	EBS	3,330,000	1,637,000	3,319,000	1,554,000

### Aleutian Islands Walleye Pollock

This assessment is a fairly routine update of last year’s model, with updated catch data and the 2014 survey biomass estimate. Estimated biomass from the model gradually increased from a minimum level in 1999. As there have been no large year classes since 1989, the increased biomass is expected to be from

major decreases in harvest. **The SSC concurs with the PT that the model should be used to determine biological reference points from Tier 3b.**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
AI Pollock	AI	36,005	29,659	38,699	31,900

#### **Bogoslof Walleye Pollock**

The 2014 acoustic-trawl survey estimated biomass at 112,070 t, an increase of 67% from the 2012 value, but still on the low end of the range of survey biomasses since 2000. Under Tier 5, ABC and OFL were calculated with  $M = 0.2$  and a random effects model. **The SSC concurs with this approach and the biological reference points.**

An age-structured model suggested that  $M$  is actually near 0.3. **The SSC agrees with the Plan Team that the author should bring forward this analysis next year to consider whether  $M$  should be changed.** Also, because there has been only minimal harvest since 1992, **it would be helpful to do a catch curve analysis** to provide additional information about the appropriate value for  $M$ .

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Bogoslof pollock	Bogoslof	21,200	15,900	21,200	15,900

#### **BSAI Pacific Cod**

Public testimony was presented by Chad See and Gerry Merrigan (Freezer Longline Coalition) and Jason Anderson (Alaska Seafood Cooperative). Mr. See and Mr. Merrigan support the scientific approach and support the ABC recommendation of 255,000 mt. They expressed concerns about survey catchability and positive retrospective bias in the assessment model. Mr. Anderson expressed that Pacific cod is now the new “prohibited species cap” (“choke species”). In the Amendment 80 fisheries, they are actively avoiding Pacific cod and Pacific halibut species in pursuit of yellowfin sole and rock sole. He commented that the Pacific cod tend to separate from yellowfin sole in mid-September.

#### **Bering Sea:**

Two alternative assessment models were put forward this year for Bering Sea Pacific cod. Model 1 is the same Stock Synthesis model that has been in use since 2011. Model 2 differed significantly from Model 1 in that a single season was used instead of five seasons, a single fishery was defined where the composition data were catch weighted, Richards growth model, natural mortality, and survey catchability were all estimated internally. Survey catchability and selectivity were allowed to vary annually (based on a random walk), and an iterative method was used to tune the standard deviations for penalized deviation vectors.

The author and Plan Team recommended the use of Model 1 for specifying stock status and determining ABC and OFL levels. The 2015 maxABC for Model 1 is 295,000 mt; however, the author and Plan Team recommend rolling over the 2014 ABC due to the strong retrospective pattern in the estimated spawning biomass – the retrospective analysis suggest the biomass is over-estimated by as much as 50%. In contrast, Model 2, which has good statistical fits to the observed data, results in a 2015 max ABC of 112,000 mt. The author was not comfortable using this model due to difficulty in resolving questions about selectivity type 17 (random walk in selectivity with respect to age) in Stock Synthesis. Specifically, the use of the max function (not differentiable), difficulty including dev vectors at age of peak selectivity, and the tendency of the model to estimate extremely low selectivity values for ages with exception of age classes close to the plus group. The author attempted to identify the source of the retrospective bias, but no obvious solution was found. The SSC notes that Model 2 does not have the same retrospective bias problem and the solution to this bias must lie in the differences between Models 1 and 2.



Both the Plan Team and the SSC note that Model 2 has desirable properties with respect to improved fits to the data and improved retrospective performance. The SSC recommends that the author conduct a simulation study to better understand the estimability of the selectivity type 17 in Stock Synthesis and the estimation of annual deviations.

The vector of effective sample sizes for the composition data set was assumed to have a mean of 300 in Model 1. The author noted that in combining the fisheries data the effective sample size in Model 2 has a mean of 2700 (9 fleets times 300). The SSC recommends that a statistical approach be used to weight the composition data (i.e., iterative re-weighting, or other methods outlined in Francis 2011).

The SSC had a long discussion regarding major differences in the estimated reference points and ABC recommendations between the two models. Model 2 is preferable due to its better performance overall with respect to fitting data and minimal retrospective bias. However, trends in the trawl survey indicate a relatively stable (even slightly increasing) population since 2009, with commercial catches exceeding 200,000 mt since 2011. Since 2006, Model 1 does estimate above average recruitment, but these estimates are likely biased high due to the retrospective behavior in the model. The SSC agrees with the author and Plan Team recommendation of rolling over the 2014 ABC based on trends in the trawl biomass survey and using Model 1 for stock status determination. **The SSC recommends the rollover of the 2014 ABC/OFL for 2015, and the following ABC/OFL for 2016 (in mt).**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Pacific cod	BS	346,000	255,000	389,000	255,000

#### **Aleutian Islands:**

The assessment author presented three models for the AI Pacific cod, one Tier 5 assessment based on the random effects model (Model 1), and two Tier 3 age-structured models. The author and Plan Team both recommend the Tier 5 assessment. The survey index for 2014 has increased by 8% from 2012 and biomass increased by 25%.

Model 2 and Model 3 are both age-structured models similar to the models used for the Bering Sea Pacific cod assessments, except the model starts in 1991. Model 3 differs from Model 2 by using a more logistic-like selectivity. The author and Plan Team were concerned about using these models at this stage due to the random walk in selectivity (same issue in the Bering Sea Model 2 assessment), and estimated biomass was on average 3.3 times larger than the survey biomass estimates.

**The SSC recommends adopting Model 1 (Tier 5) for the purposes of setting ABC and OFL.** The 2015 and 2016 ABC/OFL recommendations (in mt) below.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Pacific cod	AI	23,400	17,900	23,400	17,900

#### **BSAI Atka Mackerel**

The SSC appreciates the authors' responsiveness to previous SSC and Plan Team recommendations, particularly completing a retrospective analysis, investigating down-weighting the survey, and estimating M and q. The SSC noted that the survey provides highly variable estimates of stock biomass or trends, and that this weakness contributed to the sensitivity of the assessment results to assumptions about M, q, and the effective sample size of composition data. Alternative assumptions result in significant changes to ABC and OFL levels. The SSC suggests that the high variability in survey abundance and trend estimates is the major source of uncertainty in the assessment, and should be featured prominently in "Data Gaps and Research Priorities".

There were no changes to the assessment methodology. **The SSC agrees that this stock is in Tier 3a and endorses the choice of assessment model and the resultant ABC and OFL levels recommended by the Plan Team (in mt) in the table below. The status quo 4-survey average was used to obtain the allocation of ABC to subareas until further guidance is provided. The SSC recommends the use of the random effects procedure for setting subarea ABC allocations in the future.**

The SSC looks forward to seeing the 2014 CIE reviews and the author/Plan Team’s short- and long-term responses this fall.

The Plan Team expressed some concern about the potential relaxation of fishing area restrictions and the re-opening of parts of Area 543 in light of the recent poor performance of the Steller sea lion population in this area; the SSC shares these concerns. The SSC urges that the argument that localized depletions may affect prey availability be tempered, as the report that investigated this subject was not published in the peer-reviewed literature.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Atka mackerel	EAI/BS		38,493		35,637
	CAI		33,108		30,652
	WAI		34,400		31,848
	Total	125,247	106,000	115,908	98,137

### **BSAI Flatfish**

#### Yellowfin Sole

There were no changes in the assessment methods this year. One minor change to the maturity schedule was made to the stock assessment for this year, and 2013 fishery age composition, 2013 survey age composition, 2013 fishery discards and retention estimates, 2014 trawl survey biomass estimate and standard error, and estimated catch through the end of 2014 were added to the model, and maturity estimates were updated with samples collected in 2012.

The SSC appreciates the authors’ responsiveness to the request to update the assessment with new maturity data. The SSC supports the Plan Team’s recommendations to test for differences of 1992/1993 and 2012 maturity curves, and to pool all maturity data for the next assessment if there are no significant differences. The SSC also supports the Plan Team’s recommendations with respect to the weight-at-age analysis for the next assessment. The SSC looks forward to the analysis of the retrospective plots and associated bias in 2015.

The projected female spawning biomass estimate for 2015 is an increase from the 2014 estimate from last year’s assessment. This stock had been declining over the past decade, but this is now reversed due to the influence of a strong 2003 year class. Female spawning biomass is projected to increase through 2019 if the fishing mortality rate continues at the same level as the average of the past 5 yrs. Annual average exploitation rates have averaged 5% since 1977. Yellowfin sole continue to be well-above  $B_{MSY}$  and the annual harvest remains below the ABC level.

Yellowfin sole is managed under Tier 1a. **The SSC recommends adopting the authors’ and Plan Team’s recommended ABCs and OFLs for 2015 and 2016 (in mt).**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Yellowfin sole	BSAI	266,400	248,800	262,900	245,500

### Greenland Turbot

As in the past two full assessments, an alternative model (Model 2) was presented with an autocorrelation parameter on recruitment deviations and fixed shelf survey  $q$  and slope survey  $q$ . Model 1 is the current model used to assess this stock. Similar to previous assessments, the best fitting model was Model 2. Use of and rationale for the autocorrelation parameter in the model was aided by a recent meta-analysis (Thorson et al. 2014) that provided priors for this parameter. The SSC agrees with the authors' and Plan Team's selection of Model 2 and the resulting biological reference points. **The SSC supports the authors' and Team's ABC and OFL recommendations for 2015 and 2016 under Tier 3b below (in mt).**

The SSC notes that there was no slope survey in 2014 and that the assessment of this stock relies heavily on this survey. The SSC reiterates support for continued slope surveys to aid in the assessment of slope species such as Greenland turbot. We also agree with the Plan Team's recommendation to fit Model 1 with recruitments since at least 2007 to investigate whether the large increase in survey  $q$  is due to recruitment dispersion and/or autocorrelation parameters.

The SSC briefly discussed the retrospective bias that was present in the assessment model when the full data set was used to estimate survey  $q$ . The author identified that the addition of the new data was a source of retrospective bias. The authors' solution was to estimate survey  $q$  by excluding the 2007-2014 data, then fix survey  $q$  based on these results and reintroduce the 2007-2014 data. The SSC was concerned that the estimate of survey  $q$  may be biased because it is only informed by part of the time series.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Greenland turbot	BS		2,448		4,050
	AI		724		1,198
	Total	3,903	3,172	6,453	5,248

### Arrowtooth Flounder

Along with the usual update of survey, catch, and composition data, new assessment model components included non-parametric fishery selectivity rather than a 2-parameter logistic and adding a new likelihood component to incorporate the new AI age data. New female maturity information was evaluated against current information in an appendix to the assessment. The preferred and best fitting model (Model 1) used non-parametrically estimated fishery selectivity and the newer female maturity information. The SSC agrees with the authors' and Plan Team's choice of Model 1 and resulting biological reference points. **The SSC supports the authors' and Team's ABC and OFL recommendations for 2015 and 2016 under Tier 3a (in mt).**

The SSC agrees with the Plan Team recommendation to conduct a retrospective analysis during the next assessment.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Arrowtooth flounder	BSAI	93,856	80,547	91,663	78,661

### Kamchatka Flounder

Data added to the assessment were 2012-2014 catches, 2012-2013 fishery length compositions, 2013-2014 shelf survey biomass and length compositions, 2012 slope survey age composition, and 2014 AI survey biomass and length composition. No changes were made to the assessment model from the last assessment. As requested by the SSC, a Tier 5 assessment was also presented as a comparison to the Tier

3 assessment that was first approved last year. **The SSC supports the authors' and Team's ABC and OFL recommendations for 2015 and 2016 under Tier 3a (in mt).**

Despite the short time series for this stock, the SSC agrees with the Plan Team that a retrospective analysis be conducted and presented in the next assessment.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Kamchatka flounder	BSAI	10,500	9,000	11,000	9,500

#### Northern Rock Sole

This year a full assessment was completed for northern rock sole. The SSC appreciates the author's work investigating the effects of including temperature in the northern rock sole assessment. Results from seven models were presented, including a model that estimated survey catchability in relation to annual bottom temperature. The model with temperature gave similar results to the base model and resulted in improved fits to the survey estimates, but it did not fit the observed age compositions as well as the base model and was not selected as the model of choice based on AIC analysis. The SSC agrees with the author and Plan Team and recommends setting catch specifications with the base model.

Given the last four years of low recruitment and the corresponding offshore advection shown in the OSCURS model, the SSC suggests that the author explore a model that estimates an environmental effect on recruitment. **The SSC recommends conducting a retrospective analysis in the next assessment as suggested by the Plan Team.** The Plan Team recommended including the sex ratio as a likelihood component of the objective function. This could be accommodated using a multinomial density function that jointly estimates the sex ratio and size composition (similar to what is done in Stock Synthesis).

Northern rock sole are managed in Tier 1a. **The SSC recommends adopting the authors' and Plan Team's recommended ABCs and OFLs for 2015 and 2016 (in mt).**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Northern rock sole	BSAI	187,600	181,700	170,100	164,800

#### Flathead Sole

Data added to the assessment were updated 2013 catch and 2014 catch to date, fishery ages from 2011-2012, 2013-2014 lengths, 2013-2014 shelf survey biomass, 2014 AI survey biomass, 2013-2014 survey bottom temperature, 2013 survey ages, and 2014 survey lengths. No changes were made to the assessment model from the last assessment. **The SSC recommends adopting the authors' and Team's ABC and OFL recommendations for 2015 and 2016 under Tier 3a (in mt) below. For the next full assessment, the SSC reiterates its request from 2013 that the authors prepare an alternative assessment of flathead sole under Tier 1. The fitted stock-recruit model suggests that Tier 1 status may be appropriate as with yellowfin sole.**

The SSC notes that the residual pattern on survey length compositions (Figure 9-16) needs further investigation during the next assessment.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Flathead sole	BSAI	79,419	66,130	76,504	63,711

Alaska Plaice

A full assessment was completed for Alaska plaice this year. There were no changes in the assessment methodology from last year’s assessment. Fishery and survey data were updated and the authors examined removing pre-1982 survey biomass data from the assessment, given the reported differences in survey catchability for other groundfish species associated with the switch from the 400 eastern to the 83-112 trawl in 1982. When the pre-1982 survey data were removed, population trends were very similar with only a small change in biomass in the early part of the time series and a slight difference in 2014. Given the unknown catchability between the survey trawls used before and after 1982, the SSC supports the authors’ and Plan Team’s recommendation to start the survey time series in 1982.

The SSC appreciated the authors’ responsiveness to the SSC’s request for updating maturity with more recent data and including a new maturity schedule based on 2012 data. As recommended for BSAI yellowfin sole, **the SSC recommends testing for differences in maturity curves and pooling all maturity data for the next assessment if no significant differences are found.**

A survey in 2010 found that 38% of the biomass of Alaska plaice resides in the northern Bering Sea. A challenge is how to incorporate this information into the assessment. Biomass estimates from the northern Bering Sea survey are not included in the current assessment, because that area has only been surveyed once; there are no plans to resurvey this northern area. The SSC agrees with the Plan Team that additional surveys in the northern Bering Sea would be needed before northern Bering Sea biomass could be incorporated into the model and advocates for further surveys.

The SSC noted a retrospective plot of spawning stock biomass was presented in the document. **The SSC recommends that a complete retrospective analysis, including a paragraph describing the results and reporting Mohn’s rho, be included in all future assessments for this stock.**

The shelf survey biomass of Alaska plaice decreased 22% from 2012 to 2014 and age-3 recruitment has decreased, but there is little harvest on this stock and female spawning biomass is well above **B<sub>40%</sub>**. **The SSC recommends adopting the authors’ and Plan Team’s recommendations for continued management of the Alaska plaice stock under Tier 3a. The SSC agrees with the authors’ and Team’s recommended ABCs and OFLs for 2015 and 2016 (in mt).**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Alaska plaice	BSAI	54,000	44,900	51,600	42,900

Other Flatfish

This year a full assessment was presented for Other Flatfish. Survey and fishery data were updated with recent estimates and authors responded to SSC requests to estimate confidence intervals on survey biomass estimates (included for five primary species) and to apply a random effects model. Other Flatfish include 15 species of flatfish, with catches comprised largely of starry flounder and rex sole. Other Flatfish are assessed using Tier 5 methods with  $F_{OFL} = M$ ,  $F_{ABC} = 0.75 M$  and survey biomass.

The assessment authors and Plan Team recommended continued management of Other Flatfish in Tier 5 based on species-specific estimates of M and biomass estimates. **The SSC recommends supporting the authors’ and Plan Team’s recommendations for OFL and ABC (in mt).**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Other flatfish	BSAI	17,700	13,250	17,700	13,250

For the next assessment, the SSC continues to recommend that the assessment authors consider the potential effects of temperature on the variance of survey catches of Other Flatfish. The SSC also requests the authors clarify how the  $F_{ABC}$  and  $F_{OFL}$  were averaged for the complex.

**BSAI Rockfish**

Pacific Ocean Perch (POP)

The 2014 AI survey biomass is large, near 1 million mt, and has been since 2010. This is supported by size composition data that continue to show relatively strong cohorts from 1994 to 2000.

The 2014 BSAI POP assessment was a full assessment and represents significant improvement in model structure and information content. Following Plan Team and SSC advice, the survey biomass estimates and age composition data from the U.S.-Japan cooperative survey (1980, 1983, and 1986) were removed. New data were also incorporated into the assessment including the 2014 AI survey biomass estimate and length composition, the 2012 AI survey and 2013 fishery age compositions and the 2012 fishery length composition. The length-at-age, weight-at-age, and age-to-length conversion matrices were also updated based on data from the NMFS AI trawl survey beginning in 1991.

The multinomial input sample sizes for the age and length composition were reweighted to balance the influence of these data on the model. The reweighting deemphasized the length data. Five models were explored, and Model 3, which used bi-cubic splines to estimate fishery selectivity as a function of year and age, was selected because it provided the best fit to the biomass survey and the age composition data. **The SSC endorses the Plan Team’s and author’s recommendations to incorporate bi-cubic spline selectivity and reweight the length composition data in the model. The SSC also endorses the use of the random effects model to the area biomass estimates, which were very similar to the survey average approach previously applied.**

**The SSC agrees with the Plan Team’s recommended changes to the model and the resulting ABCs and OFLs shown in the table below (in mt). The SSC has determined that reliable estimates of  $B_{40\%}$ ,  $F_{40\%}$ , and  $F_{35\%}$  exist for this stock, thereby qualifying Pacific ocean perch for management under Tier 3a.**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Pacific Ocean perch	EBS		8,771		8,441
	EAI		8,312		7,970
	CAI		7,723		7,406
	WAI		10,182		9,763
BSAI	Total	42,558	34,988	40,809	33,550

The SSC provides the following recommendations to the assessment author:

- Evaluate whether fishery CPUE data (1968-1979) are necessary and consider removing them in future models.
- Examine the evidence supporting the selectivity changes in the most recent years in the model. The shift from dome-shaped to asymptotic selectivity around 2010 appears to correspond with a divergence in modeled and survey estimated biomass.
- Explore a better prior for catchability through empirical studies and determine how to use the EBS slope survey biomass estimates.
- Explore estimates of biological parameters like maturity to see if there are trends in these estimates.
- Continue to evaluate potential sources for the retrospective trend including the impacts of estimating survey catchability in the model.
- Explore potential causes for survey biomass residual pattern.

### Northern Rockfish

The trawl survey biomass estimate was up substantially in the EAI and WAI, but not the CAI. The trawl survey biomass estimates are highly variable for this species, however the top ten year classes track well in both the fishery and survey ages. Spawning biomass increased slowly and almost continuously from 1977 to recent years, where it appears to be leveling. Recent recruitment has generally been below average.

The 2014 AI survey biomass estimate and length composition were included in the assessment as was the 2012 AI survey age composition. New data since the last assessment also included the 2012 and 2013 fishery length compositions, length-at-age and weight-at-age. As in the Pacific Ocean perch assessment, the 1980s cooperative survey data were removed, and the compositional data were reweighted. The age-to-length conversion matrix was also revised based on data from the NMFS AI trawl survey beginning in 1991. Of the 6 models explored, the Plan Team concluded that Model 1 was the best choice.

**The SSC accepts the Plan Team and author’s model recommendation and has determined that this stock qualifies for management under Tier 3 due to the availability of reliable estimates for  $B_{40\%}$ ,  $F_{40\%}$ , and  $F_{35\%}$ . Because the projected female spawning biomass is greater than  $B_{40\%}$ , sub-tier “a” is applicable, with maximum permissible  $F_{ABC} = F_{40\%}$  and  $F_{OFL} = F_{35\%}$ .**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Northern rockfish	BSAI	15,337	12,488	15,100	12,295

The SSC shares Plan Team concern about the substantial increase in the natural mortality estimate from 2012 and requests the author provide further evaluation.

### Shortraker Rockfish

The 2015 estimated shortraker rockfish biomass is 23,009 t, increasing from the previous estimate of 16,447 t primarily due to the inclusion of the 2002-2012 EBS slope survey biomass estimates. According to the random effects model, total biomass (AI and EBS slope combined) from 2002-2014 has been very stable, ranging from a low of 20,896 t in 2006 to a high of 23,938 t in 2002. The time series from the random effects model is much smoother than the time series for the raw data, due to large standard errors associated with the data.

The SSC has previously determined that reliable estimates of only biomass and natural mortality exist for shortraker rockfish, qualifying the species for management under Tier 5. **The SSC agrees with the Plan Team’s recommendation for basing the biomass estimate on the random effects model and setting  $F_{ABC}$  at the maximum permissible level under Tier 5, which is 75 percent of  $M$ . The SSC accepts the ABC and OFL estimates for 2015 and 2016 (in mt) below:**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Shortraker rockfish	BSAI	690	518	690	518

The SSC notes that the continuation of the EBS slope survey is fundamental to providing information to this and other assessments.

### Blackspotted and Rougheye Rockfish Complex

This year a full assessment was presented with updated data including: catch, fishery length composition data from 2012 and 2013, the 2014 AI survey biomass estimate and length composition and the 2012 AI survey age composition.

Similar to the BSAI POP and Northern rockfish assessments, the 1980s cooperative survey data were removed and the compositional data were reweighted. The age-to-length conversion matrix was also revised based on data from the NMFS AI trawl survey beginning in 1991. After evaluating several alternative methods of parameterizing selectivity, the Plan Team recommended a model that uses a double logistic curve; the SSC concurs with this choice. The SSC also endorses the use of a random effects model to estimate current biomass for the EBS component of this stock complex.

As was the case with the two most recent full assessments in 2010 and 2012, the authors and the Plan Team both expressed concerns about the appropriate range of year classes from which to estimate average recruitment. This year, the authors recommended using year classes that are at least 10% selected, which includes year classes through 1998. The Team recommends using year classes up through 1996 only, following the recommendations of the Stock Recruitment Working Group. **The SSC accepts the authors' recommendation and are looking forward to completion of the Working Group's recommendations.**

For the AI, this stock qualifies for management under Tier 3 due to the availability of reliable estimates for  $B_{40\%}$ ,  $F_{40\%}$ , and  $F_{35\%}$ . Because the projected female spawning biomass for 2015 is greater than  $B_{40\%}$ , the stock qualifies as Tier 3a. **The SSC's recommended ABCs and OFLs are tabulated below (in mt):**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Blackspotted/ rougheye	EBS/EAI		149		178
	CAI/WAI		304		377
BSAI	Total	560	453	686	555

Given ongoing concerns about fishing pressure relative to biomass in the Western Aleutians, the SSC requested that the apportionment by sub-area be calculated and shared with the fishing industry as a maximum sub-area species catch. The maximum sub-area species catch levels were estimated for the WAI/CAI using the random effects model. For 2015, the amounts are 46 mt and 258 mt for the Western and Central AI areas respectively. In 2016, these are 57 mt and 320 mt in the Western and Central AI areas, respectively.

#### Other Rockfish Complex

The 2014 assessment reported that biomass of Other Rockfish was at an all-time high in both the most recent EBS slope survey (2012) and this year's AI survey.

New data in the 2014 assessment included updated catch and fishery lengths for 2014. Biomass estimates, CPUE, and length frequency compositions were also included from the 2014 Aleutian Island trawl survey, and the 2013 and 2014 eastern Bering Sea shelf survey. There was no Bering Sea slope survey in 2014. Of the new data, only the survey biomass estimate is used in computing recommended ABCs and OFLs.

To remain consistent with other Tier 5 assessments, the Plan Team recommends using a random effects model for each region to calculate the biomass estimate for the entire BSAI area and the SSC agrees.

The SSC agrees with Team recommended approach of setting  $F_{ABC}$  at the maximum allowable under Tier 5 ( $F_{ABC} = 0.75M$ ). The accepted values of  $M$  for species in this complex are 0.03 for shortspine thornyheads and 0.09 for all other species. Multiplying these rates by the best biomass estimates of shortspine, thornyhead, and other rockfish species in the "other rockfish" yields the 2015 and 2016 ABCs, which are accepted by the SSC and tabulated below (in mt). The SSC supports Team recommendation that OFL be set for the entire BSAI area, which under Tier 5 is calculated by multiplying the best estimates of total biomass for the area by the separate natural mortality values and adding the results.



Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Other rockfish	EBS		695		695
	AI		555		555
	Total	1,667	1,251	1,667	1,251

### BSAI Sharks

The SSC reviewed a full assessment of the BSAI sharks. There was public testimony by Gerry Merrigan (Freezer Longline Coalition) about the history of shark management in the BSAI. He testified that the shark catch in the BSAI is incidental and expressed disagreement with the idea of changing the Tier 6 calculations from maximum catch to average catch.

BSAI sharks have been managed in Tier 6 based on estimates of maximum catch in 1997-2007. The SSC discussed the possibility of moving to average catch due to SSC, Plan Team, and CIE concerns over declining survey and fishery catches for Pacific sleeper shark. Despite concerns, the SSC recommended keeping the Tier 6 calculation based on maximum catch and to re-evaluate options at the next full assessment (2016), after similar options are explored by the authors for GOA sharks in 2015.

### The SSC accepts the Plan Team’s recommended 2015 tier designations, and the 2015 and 2016 ABCs and OFLs for the shark complex (in mt).

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Shark	BSAI	1,363	1,022	1,363	1,022

The SSC agrees that adjustments to the time series of estimated shark catch should be delayed until more data are available from the restructured observer program. When sufficient data are available, the SSC looks forward to an evaluation of a comparison of CAS and HFICE estimates, as well as an exploration of adjustments to the historical catch time series.

### BSAI Skates

A full assessment was presented for BSAI skates in 2014. This stock complex is divided into two units to generate separate recommendations that are aggregated for the entire complex. Alaska skate is managed under Tier 3 criteria and the remaining skate species (“other skates”) are managed under Tier 5. New data in this year’s assessment include updated catch, 2014 EBS shelf and AI survey data, 1982-1991 EBS shelf survey biomass estimates, reconstructed catch data beginning in 1954, and additional length- and weight-at-age data. As part of an ongoing effort to improve skate assessments, and in response to a 2013 CIE review, the BSAI Alaska skate model has undergone substantial modifications.

Four model alternatives were presented in 2014 for Alaska skate, including, as requested by the SSC, last year’s model. Model 1 is last year’s assessment model with updated data. Model 2 is the author’s preferred model, with a start in 1950 instead of 1977, growth estimated within the model, removal of the embryonic stage, a return to the original Beverton-Holt spawner-recruit model, a maximum age of 25 instead of 30, and removal of age selectivity (but retention of length selectivity). Models 3 and 4 were specifically requested by the SSC at the October meeting. Model 3 is the same as Model 2 but with asymptotic selectivity curves for both the survey and the fishery, and finally, Model 4 is the same as Model 2 but with a starting year of 1977, as opposed to 1954.

The Plan Team accepted the author’s preferred Model 2, though they noted some model concerns and modified the accompanying harvest recommendations. The primary Plan Team concern with Model 2 appeared to be the decrease in spawning biomass due to model change with a contrasting increase in the OFL and ABC. As a result of this concern, the Plan Team recommended rolling over the 2014 harvest

specifications from Model 1, last year’s model, with updated data. **In contrast to the Plan Team, the SSC recommends the acceptance of Model 2 for stock biomass and dynamics and use of Model 2 for 2015 harvest specifications.**

Acceptance of Model 2 is contingent upon having accurate historical catches between 1950 and 1977. It is unclear if the author addressed a primary concern of the SSC regarding the evaluation of historical catch data in regard to the assumptions on the proportion of gear-specific effort and species compositions. Further evaluation of selectivity as a function of age and/or length is also warranted.

Additionally, a new random effects model is also presented for other skates, which was recommended by the author to replace the 3-survey average biomass, as is consistent with other Tier 5 stocks. **The SSC concurs with this recommendation. The summary table below gives the total skate ABCs and OFLs, obtained as the sum of Alaska skate and other skates (in mt).**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Skate	BSAI	49,575	41,658	47,035	39,468

### BSAI Sculpins

The BSAI sculpin complex is managed as a Tier 5 stock and a weighted-average of species-specific natural mortality rates is applied to the aggregate complex biomass to estimate harvest specifications. In previous years, the average of three most recent survey biomass estimates for each region (AI, BS shelf and BS slope) is used to calculate the aggregate complex biomass. However, this year, the author also brought forward an alternative that uses a random effects model to calculate BSAI biomass, as consistent with other Tier 5 assessments. The use of the random effects model results in a decrease in biomass estimate. The Plan Team recommends using the random effects model for 2015 harvest specifications, and **the SSC concurs with this recommendation.** Additionally, the SSC also agrees with the continued use of the weighted-average of species-specific natural mortality rate from the six most abundant sculpin species, resulting in an applied natural mortality rate of 0.29 in 2015.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Sculpin	BSAI	52,365	39,725	52,365	39,725

### BSAI Squid

Tier 6 criteria are used to set harvest specifications for BSAI squid, using an average catch from 1978-1995. The SSC notes the large catch increase in 2014 that approaches the ABC more closely than in recent years (2009-2013). However, the 2014 catch level more closely approximates those of 2001-2008.

The assessment author brought forward multiple alternatives for setting harvest specifications, primarily resulting from the 2013 CIE review, and the SSC appreciates the continued efforts to evaluate alternatives to the status quo. New information on fishery-dependent length distributions was also presented that suggests multiple cohorts can be present throughout the year. The Plan Team concurred with the author’s recommended OFL and ABC, which are unchanged from last year and based on the 1978-1995 time period.

The SSC had extensive discussion about whether the period before 1990 should be excluded, the period of the foreign and joint-venture fisheries. Arguments in favor of exclusion include: (1) this was a much different fishery than the current pollock fishery, so catches would not be reflective of current practice and (2) it may spur additional research to move the stock to Tier 5. Arguments against include: (1) the foreign and joint venture fisheries may have covered a broader area which could explain why the catches were higher, (2) the current pollock fishery covers only the edge of the distribution of squids, and (3) the

ecosystem model estimate and study by Horne suggest that the squid population is much larger than the current catches, so there may not be a conservation concern. If the foreign and joint-venture periods before 1990 are removed, then one alternative time period would start in 1990. For consistency with the ending year of the GOA squid specifications, the end would be in 2007 yielding the range 1990-2007. Another alternative would be to use the same date range as the GOA of 1997-2007. Furthermore, if the foreign / joint-venture period is removed, then the alternative Tier 6 approach would use maximum catch instead of average catch.

If the average catch from the 1978-1995 time period is used, then the resultant OFL and ABC is 2,624 mt and 1,970 mt, respectively. If the 1990-2007 or 1997-2007 time periods are used, then the OFL and ABC values are 1,766 mt and 1,325 mt, respectively. Note that if this had been incorporated, the catch in 2014 would have exceeded this alternative ABC and approached the OFL.

In Table 6 of the SAFE squid chapter, several other time periods are examined, resulting in a range of ABCs from 728 mt to 6,728 mt (with most being in the range 700-1,400 mt) and a range of OFLs from 970 mt to 8,971 mt (with most being in the range 1,000-2,000 mt). Also shown in Table 6 are approaches similar to Tier 5 (based on fishing mortality related to *M* times biomass), resulting in ABCs and OFLs ranging from 1,000 to 400,000 mt. Clearly, the uncertainties in ABC and OFL for this complex are enormous.

If it is decided to exclude the foreign / joint-venture time period and followed the default Tier 6 procedure exactly, the SSC would recommend the ABC and OFL resulting from the excluded data. However, the SSC believes that the biomass of squid is probably larger, indeed much larger, than the catch, so that a reasonable ABC would be larger. **For this year the SSC agrees to the rollover of last year’s ABC and OFL shown in the table below (mt).**

For next year, the SSC challenges the author to further investigate existing and additional approaches. A new approach may be to determine a multiplier for nominal ABC; for example, this multiplier could be an expansion from the current fishing area or depth range to that of the foreign / joint-venture fleet. In this regard, reexamination of the historical foreign / joint-venture information and comparison with the current fishery information may shed light on squid spatial distribution. In particular, looking at the historical area, gear, depth and target species of the foreign / joint-venture fleet would be informative.

The SSC also highlights the suggested research priority of investigating the impacts of squid removals on foraging by protected species, particularly for northern fur seals, and agree with the author’s suggestion that this be a higher priority.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Squids	BSAI	2,624	1,970	2,624	1,970

### **BSAI Octopus**

Beginning in 2012, harvest specifications have been set for the BSAI octopus complex using an estimate of consumption of octopus by Pacific cod. The estimate has not been revised since 2012, but will be revisited once every five years. Octopuses are taken incidentally in the trawl, pot and longline fisheries throughout the BSAI and there is no directed fishery for BSAI octopus. Biomass estimates from BSAI trawl surveys are highly uncertain and generally considered unreliable. In response to SSC comments and a CIE review in 2013, the assessment author is examining a size-based assessment model to identify management metrics and potentially to fit to pot survey data, and the SSC looks forward to the further development of this model in 2015. Finally, the SSC also appreciates the appendix describing the substantial ongoing research efforts to resolve issues surrounding this stock assessment.

In agreement with the author and Plan Team, **the SSC recommends continuing with the alternative Tier 6 methodology, using a predation-based estimate of natural mortality, for setting catch limits for 2015.**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Octopus	BSAI	3,452	2,589	3,452	2,589

### C-5 GOA SAFE and Harvest Specifications for 2015/16

#### GOA Walleye Pollock

The authors examined 10 assessment models, which differed by sequentially incorporating changes previously suggested by the SSC and the Plan Team. The model selected by the authors and endorsed by the Plan Team incorporated all changes with the exception of a net selectivity correction for the acoustic survey based on work by Williams et al. (2011). The authors felt this change hadn't been adequately explored, but it is anticipated to be included in future assessments.

The changes that were made to the assessment included incorporating recent data, extensive revision of historical data, exclusion of suspect data from early in the fishery, revisions to the treatment of bottom trawl catchability and selectivity, revisions to the treatment of temporal changes in fisheries selectivity, estimating and incorporating age-specific natural mortality, treating age-1 and age-2 acoustic survey indices separately from other ages, and tuning the weighting of age composition data. Although some of these revisions resulted in changes in the estimates of historical abundance, they were quite consistent in their estimation of current stock levels and recent trends. The SSC appreciates the responsiveness of the authors to our previous comments, and wishes to acknowledge the significant efforts evidenced by the revisions of the data and the changes in the assessment model.

The female spawning biomass is estimated to be slightly below **B<sub>40%</sub>**, resulting in a Tier 3b designation for this stock; the female spawning biomass is projected to exceed **B<sub>40%</sub>** by next year. Several data sources indicate a strong 2012 class, supporting this projection. The OFL and ABC are calculated based on this Tier 3b designation, and are an increase from 2014. The Plan Team concurred with the authors' recommendations. **The SSC agrees that this stock is in Tier 3b and endorses the choice of assessment model and the resultant ABC and OFL levels recommended by the authors and the Plan Team.**

The method for regional apportionments of subarea ACL for the W/C/WYAK ABC is based both on biomass distribution and ecosystem considerations (Appendix C of the assessment). The Plan Team chose to incorporate Prince William Sound GHL in the ABC and subtract it in calculating the TAC to account for the inclusion of the ADF&G survey and to avoid an incorrect impression that the ABC was exceeded; this is the method used to treat State GHL for Pacific cod. **The SSC endorses this decision.**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Pollock	W (61)		31,634 <sup>a</sup>		41,472 <sup>a</sup>
	C (62)		97,579 <sup>a</sup>		127,936 <sup>a</sup>
	C (63)		52,594 <sup>a</sup>		68,958 <sup>a</sup>
	WYAK		4,719 <sup>a</sup>		6,187 <sup>a</sup>
	Subtotal	256,545	191,309	321,067	250,824
	EYAK/SEO	16,833	12,625	16,833	12,625
	Total	273,378	203,934	337,900	263,449

<sup>a</sup> W/C/WYAK subarea amounts for pollock are apportionments of subarea ACL that allow for regulatory reapportionment

### GOA Pacific cod

There were four alternative assessment models. Model 1 is an update of the 2013 assessment, Model 2 is the same as Model 1 with an additional recruitment variability multiplier added. The other two models represent a change in methodology, where 3 blocks of non-parametric or cubic spline-based selectivity parameters are used instead of the double normal. Survey at age data were substituted for conditional age-at-length data, and the GOA NMFS trawl survey data are treated as a single index rather than split into sub-27 and 27-plus for the abundance indices.

The author and Plan Team recommend Model S1a, which uses non-parametric selectivity with 3 time blocks. The SSC noted that the spawning biomass for this stock has been increasing since 2009, and the length composition data indicate a new cohort starting to recruit. Model S1a does have retrospective bias on the order of 20%-40%, and therefore the Plan Team recommends adjusting the ABC downward from 117,200 mt to 102,850 mt (split the difference).

**The SSC recommends adopting the author and Plan Team recommendations of OFL and ABC for 2015 and 2016 (in mt).**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Pacific cod	W		38,702		38,702
	C		61,320		61,320
	E		2,828		2,828
	Total	140,300	102,850	133,100	102,850

### GOA Atka Mackerel

The OFL and ABC recommended for this Tier 6 stock were unchanged as the reference period was unchanged. **The SSC endorses the OFL and ABC levels (in mt) recommended by the author and the Plan Team.**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Atka mackerel	GOA-wide	6,200	4,700	6,200	4,700

### GOA Flatfish

Apportionment of ABC among areas for these stocks was based on relative abundances estimated in the 2013 survey. **The SSC endorses the Plan Team's recommendation to examine area apportionment using the random effects model for 2015 assessments.**

#### Shallow-water Flatfish Complex

*Northern and southern rock sole.* The SSC appreciates the further development of an age- and sex-structured approach suited to a Tier 3 assessment. The SSC also appreciates the author's responsiveness to recommendations of both the Plan Team and the SSC; in particular, the use of the age-at-length approach, investigation of estimating selectivity as a function of length, weighting of composition data using the number of hauls, estimating male mortality, and using a 50:50 allocation of the undifferentiated catch.

Nonetheless, the description of the model lacked detail, making it difficult to understand. For instance, the growth equation was not specified and weight-at-age parameter values were not presented. The selectivity functional form used was not specified or justified, but appeared to be a double normal. It was unclear why survey catchability for the time period 1984-1993 was not estimated for the N and S models when it was for the U models. It was unclear what fishery or survey data were sex-specific, and how such information was used in the assessment. It was unclear how undifferentiated catch samples were allocated to species after 1996, as species identification was not complete. It was unclear whether there were any constraints forcing similarity or identity among time-varying selectivity parameters. Parameter definitions

were not provided in Table 4.1.5, 4.1.6, or 4.1.12. Many of the figures had terse captions and text that ran off of the page. **The SSC recommends that the assessment document be edited to improve specificity and clarity.**

*Entire complex.* The assessments for the remainder of the shallow water flatfish assemblage, yellowfin sole, butter sole, starry flounder, English sole, sand sole and Alaska plaice (all Tier 5 stocks), were executive summaries only, as it was an off-cycle year. With no new survey, none changed their ABC or OFL reference points. Area apportionment was based on the 2013 survey biomass. **The SSC supports the author and Plan Team recommendations for ABC and OFL in 2015 and 2016 and area apportionments using combined Tier 3 and Tier 5 calculations for this stock complex (see table at end of flatfish section).**

#### Deepwater Flatfish Complex

The deepwater complex is comprised of Dover sole, Greenland turbot, and deepsea sole. Only the executive summaries were presented, as this is an off-cycle year. New catch information was added for Dover sole, the only Tier 3 species; this resulted in negligible changes in ABC and OFL levels. The other species are Tier 6 species and ABC and OFL levels are thus unchanged. **The SSC supports the author's and Plan Team's recommendations for ABC and OFL for 2015 and 2016 and area apportionments for the GOA deepwater flatfish assemblage.**

#### Rex Sole

As this is an off-cycle year, only an executive summary was provided. Although a Tier 3 assessment model is used for determining stock status,  $F_{OFL}$  and  $F_{ABC}$  levels are based on Tier 5 calculations. The updated catch information resulted in negligible changes to ABC and OFL levels. Area apportionment was based on the 2013 survey. **The SSC supports the author and Plan Team recommendations for ABC and OFL and area apportionments for 2015 and 2016.**

#### Arrowtooth Flounder

As this is an off-cycle year, only an executive summary was provided. The assessment was updated with recent catch estimates, resulting in negligible changes to ABC and OFL levels. **The SSC supports the authors' and Plan Team's recommendations for ABC and OFL and area apportionments for 2015 and 2016.** The SSC looks forward to the changes the authors anticipate making for the 2015 assessment.

#### Flathead Sole

As this is an off-cycle year, only an executive summary was provided. The assessment was updated with recent catch estimates, resulting in negligible changes to ABC and OFL levels. **The SSC supports the authors' and Plan Team's recommendations for ABC and OFL and area apportionments for 2015 and 2016.** The SSC looks forward to the changes the authors anticipate making for the 2015 assessment.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Shallow- water flatfish	W		22,074		19,577
	C		19,297		17,115
	WYAK		2,209		1,959
	EYAK/SEO		625		554
	Total	54,207	44,205	48,407	39,205
Deep- water flatfish	W		301		299
	C		3,689		3,645
	WYAK		5,474		5,409
	EYAK/SEO		3,870		3,824
	Total	15,993	13,334	15,803	13,177
Rex sole	W		1,258		1,234
	C		5,816		5,707
	WYAK		772		758
	EYAK/SEO		1,304		1,280
	Total	11,957	9,150	11,733	8,979
Arrowtooth flounder	W		30,752		29,545
	C		114,170		109,692
	WYAK		36,771		35,328
	EYAK/SEO		11,228		10,787
	Total	226,390	192,921	217,522	185,352
Flathead sole	W		12,767		12,776
	C		24,876		24,893
	WYAK		3,535		3,538
	EYAK/SEO		171		171
	Total	50,792	41,349	50,818	41,378

## GOA Rockfish

### Pacific Ocean Perch

A full assessment model was presented, but is identical to the model the SSC accepted in December 2013 except for inclusion of updated weight-at-age, an updated size-at-age transition matrix, updated catch for 2013, new catch estimates for 2014-2016, and new maturity data. Including the updated growth data resulted in a 5% increase in spawning biomass on average compared to the base model. Including updated growth data with new maturity data resulted in a larger increase in spawning biomass, on average about 22%, which is expected given the decrease in the age at 50% maturity when including the new maturity information.

For this assessment a random effects model was fit to the survey biomass estimates (with associated variance) for the Western, Central, and Eastern GOA. This model results in estimates of apportioned survey biomass of 11.0% for the Western area, 75.5% for the Central area, and 13.5% for the Eastern area.

The random effects model was not applied for the WYAK and EYAK/SEO split because (1) uncertainty estimates for WYAK and EYAK/SEO survey biomass were not available so the random effects model could not be used to fit the time-series of survey biomass in these two regions, and (2) the use of the upper 95% confidence interval from WYAK to calculate the ratio between WYAK and EYAK/SEO was a policy decision that allowed for additional harvest of Pacific Ocean perch in the WYAK area. Therefore the weighting method (95% confidence of the ratio in biomass) used in previous assessments was used.

**The SSC accepts the OFL and ABC recommendations of the Plan Team and the assessment authors (in mt). The SSC accepts the recommendation of the authors and Plan Team to use the random-**

effects model for area apportionment of ABCs among GOA areas. The SCC agrees with the authors' and Plan Team's recommendation to continue using the upper 95% confidence interval of the ratio in biomass to apportion catch between WYAK and EYAK/SEO following the previous assessments.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Pacific ocean perch	W		2,302		2,358
	C		15,873		16,184
	WYAK		2,014		2,055
	W/C/WYAK	23,406		23,878	
	SEO	954	823	973	839
	Total	24,360	21,012	24,849	21,436

The SSC requests the authors estimate these area apportionments using both the current method and the random effects model so the Plan Team and SSC can assess the impacts to harvest of Pacific Ocean perch in the WYAK and EYAK/SEO.

#### Northern Rockfish

This year an executive summary was provided for northern rockfish to recommend harvest levels for the next two years. There were no changes in the assessment model or the area apportionment methods. New data added to the projection model included updated 2013 catch and new estimated total year catches for 2014-2016.

Northern rockfish is a Tier 3a stock. The 2015 spawning biomass estimate (39,838 t) is above  $B_{40\%}$  (30,073 t) and projected to decrease to 37,084 t in 2016. The Plan Team agreed with the authors' recommendation to use the maximum permissible ABC and OFL values and area apportionment.

**The SSC supports the ABCs and OFLs (in mt) recommended by the authors and Plan Team.**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Northern rockfish	W		1,226		1,158
	C		3,772		3,563
	E		0*		0*
	Total	5,961	4,998	5,631	4,721

\* The small northern rockfish ABC apportionments from the Eastern Gulf are combined with "Other Rockfish" for management purposes.

#### Shortraker Rockfish

The SSC reviewed the executive summary of the GOA shortraker rockfish assessment. **The SSC accepts the Plan Team and author's recommendations for ABC and OFL and the area apportionments (in mt).** The SSC recommends that this stock continue to be managed as a Tier 5 stock.

The SSC appreciates the author's past review of area apportionment methods and expects that the author will include the random effects approach in next year's assessment. A full stock assessment will be presented next year.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Shortraker rockfish	W		92		92
	C		397		397
	E		834		834
	Total	1,764	1,323	1,764	1,323



Other Rockfish (Combination of Slope Rockfish and Pelagic Shelf Complex Species)

The SSC reviewed the executive summary of the GOA other rockfish assessment. **The SSC accepts the Plan Team’s and authors’ recommendations for ABC and OFL and the area apportionments (in mt).** The SSC supports the Plan Team’s recommendation for authors to complete a stock structure template for other rockfish. The SSC also supports the Plan Team recommendation for authors to evaluate the IPHC survey data for the distribution of yelloweye/DSR in the Gulf of Alaska. In addition, the SSC recommends evaluation of the IPHC CPUE time series for DSR in the Gulf of Alaska.

Assemblage /Stock	Area	2015		2016	
		OFL	ABC	OFL	ABC
Other rockfish	W				
	C				
	W/C		1,031		1,031
	WYAK		580		580
	EYAK/SEO		2,469		2,469
	Total	5,347	4,080	5,347	4,080

Dusky Rockfish

The SSC reviewed the executive summary of the GOA dusky rockfish assessment. **The SSC accepts the Plan Team and author’s recommendations for ABC and OFL and the area apportionments (in mt).** The author will address several SSC comments and suggestions in the 2015 full assessment. The SSC recommends continuing management for this stock under Tier 3.

Assemblage /Stock	Area	2015		2016	
		OFL	ABC	OFL	ABC
Dusky rockfish	W		296		273
	C		3,336		3,077
	WYAK		1,288		1,187
	EYAK/SEO		189		174
	Total	6,246	5,109	5,759	4,711

Rougheye and Blackspotted Rockfish

Due to the federal government furlough in 2013, a full assessment for the rougheye/blackspotted rockfish complex was presented in 2014 rather than 2013. The 2014 assessment incorporated several new sources of data including: updated catch, new fishery age data from 2009 and 2012, updated fishery length data from 2011, 2013 trawl biomass estimates, 2009 and 2011 trawl ages, and revised longline abundance estimates. The author brought forward models that incorporated these new data.

The SSC agrees with the author and the Plan Team that Relative Population Numbers (RPN) rather than Relative Population Weight (RPW) should be used as the input time series representing the longline abundance time series. The 2013 trawl biomass estimate was the lowest on record, however the 2014 longline RPN showed an increase. The SSC agrees with the Plan Team and the author that Model 2 should be used as the basis for the 2015 stock assessment.

The SSC noted that misreporting rates have decreased in both the survey and the fishery. The SSC continues to be supportive of research that would improve species identification including research projects to assess whether or not there is disproportionate harvest of one of the two species in this complex. The long-term goal is to develop separate species-specific assessments of each stock.

The authors examined the performance of the existing 4:6:9 weighting for area apportionments and the random effects approach. The SSC requests that the authors bring forward both approaches in the full assessment in 2015.

The SSC requests that the authors further examine trawl selectivity, as it seems unusual for age 9-11 rockfish to be selected 20% more than other ages. The SSC supports the authors' intent to re-evaluate that age of the plus group and suggests the authors update with an appendix to acknowledge the restructuring of the observer program.

**Rougheye and blackspotted rockfish are managed as a Tier 3 stock complex. Current stock status places this stock in Tier 3a. The SSC supports the authors' and Plan Team's preferred model (Model 2) and recommended ABCs and OFLs for 2015 and 2016 (in mt).**

Assemblage /Stock	Area	2015		2016	
		OFL	ABC	OFL	ABC
Rougheye/blackspotted rockfish	W		115		117
	C		632		643
	E		375		382
	Total	1,345	1,122	1,370	1,142

Demersal Shelf Rockfish (DSR)

The demersal shelf rockfish (DSR) complex is assessed on a biennial cycle, with full stock assessments typically conducted in odd calendar years. However, a full stock assessment was presented this year to coincide with new survey data and the development of a new model. Historically, the stock assessment was based on relative abundance estimates from a manned submersible, which was retired from use in 2010. As a result, no surveys were conducted in 2010 or 2011. In 2012 and 2013 stock assessment surveys were completed with an ADF&G remotely operated vehicle (ROV). The 2014 survey was cancelled due to weather. The ABC and OFL were based on the most recent ROV and submersible density estimates of yelloweye rockfish in each management area using the historical methodology.

The DSR complex is managed under Tier 4, and is particularly vulnerable to overfishing given the species' longevity, late maturation, and habitat-specific residency. Therefore, as in previous years, the authors and Plan Team recommended a harvest rate lower than the maximum allowed under Tier 4.  $F = M = 0.02$  was used instead of  $F_{ABC} = F_{40\%} = 0.026$  to survey biomass.

**The SSC agrees with the OFLs and ABCs recommended by the authors and Plan Team (in mt). The SSC notes that the continued availability of the ROV is critical to this assessment.**

Stock/Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Demersal rockfish	Total	361	225	361	225

The Team had a number of recommendations to aid in the development of the DSR age structured assessment which the SSC supports, including:

- The Team recommends that an age error matrix for yelloweye rockfish be developed (perhaps using the software and methods provided by Punt et al. 2008).
- The Team supports the SSC recommendation to form a small, informal model-development working group.
- The Team also recommends that the working group evaluate the feasibility of developing a southeast Alaska yelloweye/DSR age structured model and a GOA wide yelloweye/DSR age structured model.

The SSC also recommends the authors complete the stock structure template and provide clarification of what catch data are being used and whether discards are fully incorporated.

### Thornyhead Rockfish

Thornyheads are assessed on a biennial schedule to coincide with the timing of survey data. In this off-cycle year, estimates from 2013 are rolled over for the next two years. An executive summary was presented. New information includes updated 2013 and estimated 2014 catch.

#### **The SSC supports the ABCs and OFLs recommended by the authors and Plan Team (in mt).**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Thornyhead rockfish	W		235		235
	C		875		875
	E		731		731
	Total	2,454	1,841	2,454	1,841

**The SSC notes that continuation of the deep stations in the trawl survey and the timely continuation of the slope survey is necessary for continued assessment of this species group.**

### **GOA Sharks**

There was public testimony by Gerry Merrigan (Freezer Longline Coalition) asking for research on survey catchability for spiny dogfish and discard mortality of shark species from hook and line gear. The SSC supports the on-going research on these two topics.

The shark complex (spiny dogfish, Pacific sleeper shark, salmon shark and other/unidentified sharks) in the Gulf of Alaska (GOA) is assessed on a biennial schedule. Although a full stock assessment would normally have been developed in 2013, an off-year assessment was provided due to the federal government furlough, and another off-year assessment was provided in 2014. Due to the off-season assessment, there was no new assessment methodology. The total catch for the GOA sharks was updated and reported for 2003-2014.

As in previous years, biological reference points for GOA sharks were calculated as the sum of estimates from an “alternative Tier 6” assessment approach used for spiny dogfish and a traditional Tier 6 approach for Pacific sleeper shark, salmon shark, and other/unidentified sharks. **The SSC accepts the authors’ and Plan Team’s recommended 2015 tier designations, and the 2015 and 2016 ABCs and OFLs (in mt) for the shark complex.**

The SSC appreciates the authors’ exploration of biomass and catch methods for the GOA shark assessment. For the full assessment the next year, the SSC looks forward to a comparison of demographic modeling analysis, biomass dynamics models, and length based models for spiny dogfish (tier 5 approach), as well as average catch, maximum catch, and 95% or 99% confidence intervals around catch (tier 6) for both spiny dogfish and other shark species. The SSC supports Plan Team suggestions to investigate using a random effects model for calculating biomass. The SSC also asks that the authors include an explanation as to why each of these methods is or is not appropriate due to the restructured observer program.

The authors addressed four of our research questions regarding treatment of shark catches in area 649/659. The SSC agrees with the authors that it would be difficult to determine whether the large estimated shark catch in the 2013 Pacific halibut target group was an anomaly, a change in fishing behavior, or a result of the restructured observer program. The SSC also agrees that adjustments to the time series of estimated shark catch in areas 649/659 should be delayed until more data are available. When there are more data available for the restructured observer program, the SSC looks forward to an evaluation of a comparison of CAS and HFICE estimates, as well as an exploration of potential recreation of a historical catch time series. The SSC supports the Plan Team’s suggestion to include “other” removals as an appendix or calculate the impacts of these removals on reference points and specifications.

The SSC continues to recommend that deducting catch from areas 649 (Prince William Sound) and 659 (Southeast Inside) from the Federal TACs for federally specified species (50 CFR part 679, Table 2a FMP Groundfish Species) that do not have State GHF fisheries be delayed until the biomass (for Tier 5) or catch (for Tier 6) in state waters can be appropriately accounted for in the stock assessment. Because of this, the SSC asks for next year that authors present catch estimates with and without catch from areas 649 and 659 and provide any results of methods that expand biomass of spiny dogfish into these areas.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Sharks	GOA-wide	7,986	5,989	7,986	5,989

### GOA Skates

A full assessment was presented for GOA skates in 2014, because the federal government furlough prevented one last year. This stock complex is divided into three groups to generate separate recommendations that are aggregated for the entire complex: big skates, longnose skates, and other skates. Generally, there has been a decrease in biomass for big skates and increases for the other two groups. These skate groups are managed under Tier 5 criteria with  $M = 0.1$  and estimated biomass from a random effects model for each group. **The SSC supports this approach as does the Plan Team**, which leads to the overall ABC and OFL recommendations in the table (in mt).

Subarea ABCs are also determined using a random effects model. First, the SSC requests clarification about whether the random effects model is used to determine subarea proportions or subarea totals for big skates and longnose skates. The summary tables in the SAFE starting on page 864 present subarea biomasses that supposedly do not add up to the reported Gulf-wide total, but the difference between the summation and reported values are negligible for both big skates and longnose skates. According to the footnotes, they do not add up, but they should for consistency. Second, it is unclear from the methods whether a random effects model is done or needed for other skates; the table above and the summary table in the SAFE only show a Gulf-wide total. **The SSC suggests that scaling the subarea biomasses to the Gulf-wide total would be a simple solution.**

**Provisionally the SSC accepts the subarea ABCs presented.** An issue that needs attention in the next assessment is created by the many overages in subarea catches in reference to subarea ABCs, especially for big and longnose skates. The stock structure template suggests that skates are vulnerable in their subareas with respect to harvesting. The SSC believes that the subarea ABCs should be considered as real ABCs and not as apportionments. **Thus the SSC is concerned about these overages in subarea ABCs.**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Big skate	W		731		731
	C		1,257		1,257
	E		1,267		1,267
	Total	4,340	3,255	4,340	3,255
Longnose skate	W		152		152
	C		2,090		2,090
	E		976		976
	Total	4,291	3,218	4,291	3,218
Other skates	GOA-wide	2,980	2,235	2,980	2,235

### GOA Sculpins

As this is a rollover, the SSC approves the OFL and ABC determinations (in mt) based on a Tier 5 approach, with species-specific natural mortality and biomass. The author was very responsive to all

Plan Team and SSC comments, including examining species-specific calculation of biomass and reference points and exploration of random effects models for species-specific biomass. The author conducted several analyses related to species-specific calculations, which resulted in the Plan Team recommendation that they apply species-specific Ms to respective biomass estimates (summed) for ABC and OFL calculations. Furthermore, it appears that random effects models are viable for biomass calculations. **Thus the SSC supports the use of random effects models with species-specific calculations in the future.**

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Sculpins	GOA-wide	7,448	5,569	7,448	5,569

#### GOA Squid

As this is a rollover, the SSC approves the OFL and ABC determinations (in mt) based on a Tier 6 approach.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Squid	GOA-wide	1,530	1,148	1,530	1,148

#### GOA Octopus

As this is a rollover, the SSC approves the OFL and ABC determinations (in mt) based on a modified Tier 6 approach.

Stock/ Assemblage	Area	2015		2016	
		OFL	ABC	OFL	ABC
Octopus	GOA-wide	2,009	1,507	2,009	1,507

#### Groundfish SAFE Appendices

##### GOA – BSAI Grenadiers

In August 2014, amendments to the BSAI and GOA FMPs were approved to add grenadiers as Ecosystem Components (EC). The final rule will likely be effective for the beginning of the 2015 fishing year. As an EC species, no stock assessment is required for grenadiers and no OFLs/ABCs are set. However, the SSC received an abbreviated SAFE report for the BSAI/GOA combined for the purposes of tracking abundance and catch trends. **The SSC agrees with the Plan Team recommendation that an abbreviated assessment for grenadiers be produced every other year for both regions.**

Though these values are not used for management, unofficial OFL/ABC values were calculated using Tier 5 calculations based on giant grenadiers, the most common grenadier species. A new random effects model was used to estimate current exploitable biomass in the GOA from trawl survey data. In the BSAI, the average of the three most recent trawl surveys with data to 1,000 m estimates exploitable biomass. Catches are well below the unofficial OFLs and ABCs. To determine AI biomass estimates from trawl survey data, which do not extend deeper than 500m, an expansion method was used that uses a ratio estimator between the trawl and longline surveys, making a critical assumption that the ratio between these surveys does not differ with depth. The SSC appreciates the authors' effort to validate this assumption.

##### GOA Forage Fish

The SSC appreciates the efforts of the author to provide a comprehensive overview of forage species in the GOA and the alternating biennial focus on the GOA and the BSAI. The distribution of forage species catches in various surveys provides some of the most helpful information on the distributions of these species and some of the only information on the distribution of these species when they are not near shore. The SSC appreciates the author's responses to SSC comments from December 2011. The SSC encourages continued effort towards addressing remaining comments, such as including the development

of a table or set of figures that would show the importance of forage species in the diets of their major predators, including fish, marine mammals and seabirds. This information would provide a clear picture of the importance of forage species in each of the managed ecosystems, and would be beneficial for fishery management. It would also be helpful to include a “data gaps and research priorities” section, similar to those in traditional stock assessments.

The present forage fish contribution is one of several in the SAFE documents, and it would be useful to cross-list all of the various forage fish contributions (Ressler et al., on acoustic surveys of euphausiids; Zador et al., analyses of forage fish use by seabirds). This would help make readers aware that there are several efforts to assess inter-annual variation in forage fish abundance and use by predators.

Finally, it would be helpful to include a map of where the data presented in Figures 14, 24, 25, and 26 were obtained with a code for each location which could then be inserted at the end of each line of data in the figures.

### **Ecosystem Considerations**

The SSC received a report on the Ecosystem Considerations SAFE chapter from Stephani Zador (NMFS-AFSC). There were no public comments.

The SSC acknowledges the tremendous amount of effort that compiling this document takes for the editor and the contributors, and thanks the editor for her presentation to the SSC. We appreciate the editor’s changes to the format and the steady increase in the quantity and quality of the content. The SSC commends the attempts to align this document with the ongoing Integrated Ecosystem Assessments and with species-specific stock assessments; these efforts will only improve the utility of the document. The authors and editor have been very responsive to SSC comments, and this year is no exception. Many of our comments from 2013 were directly addressed or are now active areas of effort.

The SSC appreciated the updated regional ecosystem assessments for all four regions, and specifically, the progress that has been made to develop a GOA assessment with an initial list of appropriate ecosystem indicators. The SSC looks forward to the inclusion of a GOA report card and ecosystem assessment in the near future. The continued efforts to expand the Arctic assessment and the responsiveness to our comments regarding this region’s assessment from last year are extremely valuable. We would reiterate our request for the development of an Arctic report card in the future. Also, the SSC appreciated the general effort towards using the information within the entire chapter to begin to predict future conditions, and specifically, highlighting the preliminary forecast of conditions in the EBS for 2015. These predictive capabilities will improve as the time series on which they are based grow. Effort should be made to relate these indices to process-oriented models, or to develop process-oriented models that will provide a mechanistic understanding of the ecological basis of the index, which would provide additional confidence in the predictions. The SSC further suggests looking at NOAA’s climate forecast system for the GOA (Saha et al. 2012 and Saha et al. 2014).

The SSC had a short list of additional sections for consideration. First, the SSC suggested including relevant terrestrial indicators, which may strongly influence marine systems. Two such indicators include estimated freshwater contributions resulting from glacial melt and permafrost thaw. Second, the SSC suggested developing a Disease Ecology (or similarly named section) section under Ecosystem Indicators to allow for the inclusion and tracking of available information about diseases and parasites, such as the mushy halibut syndrome or *Ichthyophonus*. Third, the SSC suggested developing a Tradeoffs (or similarly named) section under Ecosystem-Based Management (Fishing-related) Indicators which includes conceptual models depicting the expected interactions / effects of management actions on relevant ecosystem indicators.

In addition to updates to a large number of ecosystem indicators, there are new contributions to the list of indicators, for example, the Chinook salmon abundance index for SE Alaska and the preliminary

euphausiid index in the GOA. The SSC notes the multiple new indicators in the Groundfish section, primarily the addition of the groundfish condition contributions for the GOA and the AI. Here, weight-at-age for groundfish stocks, where age information is available, may be an alternative to length-weight residuals for groundfish condition. This would allow assessment of the impacts of year-classes on the condition indicator. A potential new ecosystem indicator estimating centers of distribution of specific fish species over time in the EBS, GOA and AI is available on the OceanAdapt website (<http://oceanadapt.rutgers.edu/>). Finally, the SSC appreciated the ongoing effort to improve the implications sections for each of the ecosystem indicators and would like to see these efforts continued, as the quality of the implications sections remains variable.

The SSC particularly noted the strong positive SST anomalies that impacted the North Pacific in late 2013 and persisted into 2014, which influenced physical conditions in all of the regions and is exemplified in the “warm blob” in the GOA discussed in the hot topics section. The SSC commends the contributors and editor for attempting to incorporate this information into explanations of why other indicators may be changing, for example, into the discussions regarding the generally successful year for seabird reproduction and some of the groundfish biomass indicators. Importantly, the PDO transitioned to positive in 2014. Regarding the regime shift indicator, newly separated into EBS and GOA components, the SSC noted the timing when the leading principal component of the 16 biological time series went negative was also a period when pollock biomass was quite high and still rising. It would be interesting to know if pollock was driving this, or simply responding.

In the Western Aleutian Islands, the negative weight–length residuals of groundfish suggest some sort of bottom-up limitation. It would be of interest to pull together oceanographic data that might shed light on whether there may be bottom-up limitation of fish growth there.

Specific to the EBS, a serious omission is the lack of recent data from the two time series on Bering Sea copepods. The zooplankton time series are extremely important for relating variations in pollock recruitment to climate variability. Both the sampling in spring and the BASIS sampling in late summer/fall are needed.

In the AI, care is needed in interpreting forage fish abundance trends from the tufted puffin chick meals. The decline in use of a particular prey may indicate a decline in the abundance or availability of that prey, or it may signal that an alternative prey has become more available. That said, it could be useful to explore the feasibility of the use of squid by puffins as an indicator of squid abundance. Additionally, a negative winter NPI is most likely to affect the auklet breeding by depriving them of food in winter so that they are in too poor condition to breed successfully. The SSC also agrees that reproductive anomalies may be a better indicator for planktivorous fish species than chick diets, as breeding success integrates environmental conditions over a long period of time, at least from when the birds return to the colonies in spring until the chicks fledge in late summer or fall.

In the GOA, the OCSEAP time series was focused on upwelling and the foraging of shearwaters along the rims of the troughs or canyons; this may help to explain why euphausiids are changing in this area. Again, the SSC noted the new salmon indicators included in the GOA assessment, and it is very encouraging to see these developing indices and the attempts to relate them to the physical environment. Sydeman and colleagues have developed some indicators using birds in the California Current System (Progress in Oceanography, 101, 1-146, August 2012), and the EBS (Deep-Sea Research II 55 (2008) 1877– 1882) that could be useful in this regard.

Trends in non-target species suggest another case of odd/even year differences; specifically, more jellyfish were caught in even years. It might be useful to pull together all of the examples of odd/even year differences in abundance, reproduction, etc., and see if there are any connections of interest.

As a final point, the SSC echoes the concerns brought up by the Plan Team regarding the ecosystem indicator that describes the trawl disturbance area. As currently estimated, there is potential for underestimating reductions in trawl effort and the SSC supports the Plan Team recommendation that alternatives to this index be investigated.

### **C-6 GOA Sablefish Pots**

The SSC received a presentation of the Initial Review Draft of the GOA Sablefish Pot Longline proposed action from Sam Cunningham (NPFMC). Public testimony was provided by Jan Standert (Deep-Sea Fisherman's Association), Bernie Burkholder and Paul Clampett (fishermen), and Linda Behnken (ALFA).

This action is being considered by the Council as a means to address a recent, but chronic problem in the current GOA sablefish IFQ fishery, involving depredation of "hooked" fish during haul-back by sperm and killer whales. This depredation behavior raises a series of management concerns, including increased risk of gear entanglement of ESA and MMPA protected species; unknown and unaccounted for mortality incurred by GOA sablefish stocks, with accompanying risk of adverse impacts on stock abundance indices, assessment modeling, ABC, and TAC estimates; reduced CPUEs, associated gross revenue losses and increases in operating costs. The action alternative would permit, but not require, the use of long-line pot gear when fishing sablefish IFQ in Federal GOA management areas.

The SSC believes the initial draft EA/RIR/IRFA should incorporate the revisions outlined below, with respect to misstatements of the Council Purpose and Need, and the nature of monitoring and enforcement aspects of the action alternative, before release. The other recommended changes should also be undertaken, to extent practicable. **Upon completion of feasible revisions, the SSC recommends that the draft be made available for public review.**

The draft analysis does a very impressive job, in general, of documenting the problems faced by GOA sablefish IFQ hook-and-line (HAL) fishermen due to cetacean depredation. The narrative is comprehensive in its treatment of the historical commercial experience of this fishery in the GOA, including the short-lived use of sablefish pots. It describes how HAL operators, confronted with whale depredation, have sought operation-based solutions, with limited success, leading to an appeal from industry members for regulatory relief through gaining the option to employ pots, which physically isolates catch from depredation. The document would benefit from a table in the executive summary that contains a list of the alternatives with each of their potential benefits, key concerns, and major trade-offs.

The requested opportunity to fish pot gear is acknowledged to have a number of implications, both positive and negative, for the GOA sablefish IFQ sectors. The description of possible operational responses and logistical burdens for commercial fishery participants is clear and comprehensive. The draft identifies a suite of potential changes in the fishery that may accompany a mixed gear sablefish IFQ management structure comprised of the elements contained in the action alternative. The likelihood of impacts on gross operating costs, needed capital outlays, and economic incentives to undertake vessel modification should pots become an available option are all appropriately highlighted. As is often the case at initial review, some analytical arguments could be enhanced with reasonably obvious elaboration, both quantitatively and qualitatively. These elaborations should include the prospective economic, social, and operational effects that extend beyond the commercial ex vessel and first wholesale levels. These include expected implications for sablefish markets and consumers of sablefish products; non-market effects on subsistence users; impacts on demand for, and price effects on, sablefish IFQ shares.

The SSC has identified a list of specific concerns with the current draft, each of which requires resolution. First, there is a repeated "misstatement" of the Council's Purpose and Need for the action. The Council's Purpose and Need statement expressed its intent that, "*The use of pot gear for sablefish could reduce sperm whale and killer whale interactions with fishing gear in the Gulf of Alaska*". The analysis, however, asserts that "... *the Council's purpose and need for this action (is) specifically, reducing the*



*amount of prey availability for marine mammals and seabirds (sablefish and other groundfish hooked on HAL gear).*” There is a substantial difference between these two expressions of the Council’s motivation for the action. The document should adhere to the Council’s articulated rationale (i.e., modify the conflicting text before release).

The draft also reflects incorrect application of terminology, as pertaining to the GOA Groundfish FMP. In addition to the misuse of bycatch, when PSC is the correct term, the document identifies Pacific halibut as a groundfish; and attributes halibut removals by sablefish HAL fishermen as both bycatch and PSC, in consecutive passages [e.g., Section 4.5.4.2, page 98 and Table 22, with comments]. The document also errs in identifying seabird takes as bycatch, despite the fact that the MSA, under the authority of which the action is proposed, strictly limits application of the term “bycatch” to fish.

There are several sections of the document in which the narrative leaves out key information, necessary for a full understanding of the point being made. In many of these instances, the necessary elaboration is provided, but much later in the document. For example, at Section 2.2, pages 23 and 24, the reader is introduced to an element of the program that would either “require pots to be removed from the grounds upon departure of the vessel” or “allow pots to remain in the water”, with the option of exempting certain vessels from any removal requirement. The information provided here raises obvious questions, e.g., does this mean pots may be stored on the grounds? If so, the definition of what ‘configuration’ the pot must be in is relevant (but unstated). For example, must pots be left unbaited, with escape panels open? If not, the pots are fishing. But the same passage references a requirement that any consequential fish found in the pot “... *may not be retained (must be discarded)* ...” So, are the pots allowed to be baited and left fishing or must they be in a non-fishing condition? It is not until Section 4.7.1.3, on page 124, that a complete explanation of the way pot gear deployment would be handled under this element is offered. Some careful structural editing of the document should be considered to assure all the information necessary for the reader to understand the action is presented when an action element is first introduced.

There are several places in the draft when it is declared that an element of the action cannot be monitored or enforced. Even with the occasional inclusion of a caveat “*with current resources and personnel*”, such assertions establish a very high threshold for the Council to overcome, should it subsequently recommend the subject element as part of its preferred action. It is even more problematic if an assertion is made that monitoring and/or enforcement are impossible. It is not suggested that these references necessarily be omitted, only that each one be carefully reviewed before release of the document, with an emphasis on the strength of the supporting information and arguments for each such conclusion. Monitoring and enforcement of this action alternative is difficult and not yet fully or satisfactorily resolved. The Council and its Enforcement Committee are taking this matter up at this meeting, which will likely lead to better identification of the issues in subsequent drafts.

This action has raised question of possible consolidation that might result. In the sablefish IFQ rationalization structure, shares are capped, IFQ are regionally designated, and vessel-size class categories are attached to shares. All of these Sablefish IFQ FMP features were expressly designed to preclude excessive consolidation, effort concentration, or capacity migration. Emphasizing these existing programmatic elements to control undesirable consolidation and displacement may warrant further emphasis under the section dealing with consolidation concerns. The SSC notes that consolidation has been a positive outcome of some rationalization programs (e.g., ending the race-for-fish in Pacific halibut off Alaska). Consolidation, by definition, has winners and losers, and both aspects need to be accounted for.

The SSC believes that further analysis and discussion of consolidation could be conducted regarding quota share (QS) use caps and vessel IFQ caps. In particular, it would be helpful to a) broaden the discussion of how QS is split across areas and vessel classes; b) calculate the maximum possible consolidation that could occur within a vessel class/area combination, using both QS use caps and vessel

IFQ caps; and c) compare the maximum possible consolidation with the status quo. In this sense, the analyst can portray how much “room” there is for consolidation, within a vessel class and area. The analysis would also benefit from showing recent trends in consolidation, rather than just showing how much consolidation has occurred since IFQ implementation.

In the sections pertaining to gear retrieval requirements, the analysis reports that “... *small vessel operators have suggested to the analysts that they are interested in contracting with larger vessels for assistance in moving pots onto the fishing grounds.*” The SSC recommends that the details of such an option be explicitly stated. One could interpret the reported interest to mean a “smaller” sablefish IFQ pot boat may wish to contract with a “larger” sablefish IFQ boat to move the former’s pots onto and off of the grounds. The necessary incentive structure that would be required to see such an arrangement emerge should be addressed. The SSC notes that if the larger vessels, referenced in this passage, are not sablefish IFQ-licensed vessels, there is some question as to whether a non-IFQ licensed vessel would be permitted to carry, set, and retrieve pots on sablefish fishing grounds. It could be difficult to distinguish this activity from “fishing sablefish” by the unlicensed vessel. If the Council does not choose to incorporate this concept into the action alternative, further clarification may be unnecessary.

The analysis contains a good discussion of the changes in the sablefish fishery pre- and post- IFQ, but elsewhere implies influences of the “race-for-fish” model linger in this fishery. The argument that small boats are vulnerable to being out-competed by the larger vessels may be of dubious merit, given it seems to stem, in large part, from the old “race-for-fish” management model. When IFQ largely ended that race, it substantially reduced, if not completely eliminated the influence of capital-stuffing among fleet members.

The RIR cites what it acknowledges are very limited empirical data on ex vessel price differentials, paid for HAL and pot-caught IFQ sablefish in the BSAI. Based on these data, the text suggests, with caveats, that for sablefish processor impacts, “*A shift to more pot catch could increase margins for processing plants, if the difference in wholesale revenues generated by each gear type were similar.*” Implicit in this assertion is the notion that processors will incur no additional cost to process, nor realize effects on product recovery-rates or product quality, between HAL and pot-caught sablefish; yet, they are assumed to simply continue to “pay” fishermen less for pot-caught sablefish, extracting excess rents from the pot-gear segment of the fishery. The evidence presented does not adequately provide support that this is a sustainable long-term solution. Either supporting evidence should be provided or the conclusions revisited.

Treatment of implicit tax effects of the proposed action alternative requires further examination or more compelling evidence for the conclusions asserted. Sablefish IFQs and halibut IFQs are area-specific. Sablefish are a high valued and relatively perishable species, demanding care in handling and transporting. Small boat operators fishing sablefish IFQ likely have limited alternative delivery options or locations. That being so, local tax implications (to the degree they exist at all) are inter-community transfers, neither costs nor benefits.

The Cumulative Effects section of the EA should also consider how the proposed action might interact with the PSC and bycatch measures being considered for the Gulf of Alaska groundfish trawl fisheries. The IRFA is, as would be expected at initial review, incomplete. Nonetheless, the small entity size thresholds contained in the draft have been superseded by SBA guidance. When the IRFA is prepared in the next iteration, the analysis should reflect the then-prevailing thresholds.

Finally, there are the unavoidable shortcomings of an initial draft that should be resolved, to the extent time allows; for example, there are tables without associated units identified. A number of minor editorial recommendations have been noted in a mark-up of the document that will be provided to the analysts.

Despite the preceding comments, the SSC observes that the document is a well-designed EA/RIR/IRFA initial package. It is thorough in identifying and documenting the important data sources, interpreting and applying them effectively, and building descriptions of the likely nature of attributable costs and benefits, as well as distributional impacts. The draft identifies information shortfalls and critical data gaps, as well as highlights many of the questions remaining to be addressed by the Council.

As a final note, the SSC notes the possible option of initially applying the proposed management measure to just a few management areas, as opposed to the entire GOA. Including more information on experiences in multiple gear usage in sablefish fisheries off the west coast might also be informative to the analysis. The document could also benefit from the inclusion of a table of alternatives and options that describes the key concerns and tradeoffs of each.

## **Draft Motion**

**I move, under the provisions of Section 305(c) of the Magnuson-Stevens Act that the Council recommend to the Secretary the promulgation of emergency regulations to reduce the 2015 BSAI halibut bycatch allocation by 33%. This action would be for the maximum duration allowed by the MSA (360 days) so as to allow for the Council's BSAI halibut bycatch reduction amendment package to "catch up" with the regulation.**

Comment:

Emergency Provisions under Section 305(c) of the Magnuson-Stevens Fisheries Conservation and Management Act should be limited to "special circumstances where substantial harm to or disruption of the resource, fishery or community would be caused in the time it would take to follow standard rulemaking procedures." The proposed motion to request an emergency rule to reduce the 2015 BSAI halibut bycatch allocation by 33% is a special circumstance where substantial and irrevocable harm or disruption to a fishery and a community or group of communities will occur if our standard rule making procedures are followed.

The regulations for an emergency rule outline that an "emergency" involving a fishery exists when there are 1. "recent, unforeseen events or recently discovered circumstances and 2. when these events present serious conservation and management problems in the fishery and 3. when the benefits of the emergency action outweigh the value of advanced notice. Unforeseen events or recently discovered circumstances, serious management problems in the fishery and benefits outweighing the value of process are three cumulative criteria for proposing an emergency rule.

The situation regarding the Area 4CDE directed halibut fishery and its relationship to annual halibut bycatch allocations in the Bering Sea has a number of unforeseen events and recently discovered circumstances. Remember the calculus for what would be "unforeseen" would need to reach back over the past 18-24 months for what would have been known in time for the "normal regulatory process" that would have allowed the Council to make adjustments to the

2015 BSAI halibut bycatch allocations. Some would argue that the Council could have foreseen in December 2013 the need for reducing halibut bycatch and should have acted and others would argue that the Council saw the need in June 2014 when initiating the halibut bycatch reduction motion. However, either date would still fall within the time frame for what was "unseen" for the "normal regulatory process" that could have addressed BSAI halibut bycatch reductions for the 2015 season. It is also important to note that emergency action started prior to December 2014, given its 360 day reach, might not have allowed the entire 2015 season or allowed time for the Council's normal regulatory process to "catch up".

Among the many Area 4CDE circumstances that were unforeseen to the Council over the past 18 months were: 1. The most recent IPHC set line survey, including growth rates, abundance and/or recruitment. 2. The results and calculations for the 2013 set line surveys which radically altered estimates of halibut available to Area 4CDE directed halibut fishermen. 3. November 2014 information about the amount of BSAI halibut bycatch in Areas 4CDE that is U32" and O32". 4. The implications of the U32" and O32" calculations --- especially the magnitude of the reductions to fish available to the commercial directed fishery. 5. The IPHC "blue line" calculations for the 2015 Areas 4CDE commercial directed fishery. 6. The possible or probable loss of processing capacity in St. Paul and that the loss of the only area processor would effectively stop much of the directed commercial fisher in this area. 7. The resultant economic change that makes fishing in Area 4CDE for small amounts of quota, like that projected in 2015, unprofitable for many Western Alaska small boat fishermen. 8. That the most recent IPHC figures show 93% of BSAI halibut is taken as bycatch and only 7% by directed fishermen

Moreover, recently discovered circumstances --- remember either or both unforeseen circumstances and recently discovered circumstances justify an emergency regulation --- include:

1. The limited success of voluntary halibut reduction measures in the later ½ of 2014 despite the Council's strong directive to industry regarding the need to conserve halibut
2. Increased overall halibut bycatch in 2014 despite the respective sectors awareness of the dramatically lower area 4CDE 2014 directed commercial allocation. And 3, new IPHC calculations regarding actual halibut bycatch in management areas 4CDE.

The second calculus, "serious management problems" for the area 4CDE directed halibut fishery include the loss of vessels and crews to the fishery because low volumes do not pay basic operating expenses and the potential or probable loss of processing and/or market opportunities due to low harvest volumes. Management problems include a fixed bycatch allocation within a dynamic fishery that has seen substantial abundance declines and now, the continued opportunities of halibut bycatch users to enjoy the full utilization of their directed allocations with the related halibut bycatch while the directed fishery halibut fishermen can't afford to continue fishing or have may have lost their market. Sharing the conservation burden does not mean eliminating or virtually eliminating one fishery so another can continue without impact. Virtual elimination of an entire fishery is, by definition, a fishery management problem.

Then third, the Council must weigh the benefits of BSAI halibut bycatch reduction emergency management measures that attempt to maintain a minimal Area 4CDE directed halibut fishery against the benefits of advance notice and opportunity to comment. That is to say the irreversible harm that will occur to the community of St. Paul, smaller Alaskan communities, Areas 4CDE halibut fishermen, halibut crewmembers, processing interests and their crews as well as support businesses must be weighed against the Council's 18 to 36 month process to take action and implement a rule. Once jobs are lost and halibut fishing income eliminated, paying basic bills becomes a serious issue for many community residents. Once fishermen in the area loose or sell their Areas 4CDE quota shares because of quota loan payments, it is unlikely that they can be recovered. Once vessels are not used for a year or more, especially in Alaska's harsh environment, refurbishing the vessel for a fishery requires significant investment --- and this from fishermen that haven't had fishing related income for a year or more. Once crew members and support services lose their jobs and customers they disappear and don't reappear when the halibut come back. Finally if area halibut processing is closed and markets lost, restarting processing in a community requires far more effort and capital investment then maintaining processing capacity and regular product shipments. All of these impacts from the proposed 2015 Area 4CDE directed fishing allocation heavily outweigh the benefits of advance notice and opportunity to comment. Moreover, the public and interested stakeholders have had the opportunity to comment on the Councils existing BSAI halibut bycatch reduction package as well as the current emergency action proposal.

In addition to unforeseen events or recently discovered circumstances, fishery management problems and weighing the benefits of the emergency action, the MSA emergency guidelines further detail that an emergency action can be "justified if the time it would take to complete notice and comment rulemaking would result in substantial damage or loss to a fishery, industry participants or communities."

The substantial loss that could result to Areas 4CDE directed halibut fishery from the time it takes to complete notice and comment rule making could be a 70% reduction in the available quota and the virtual elimination of the fishery. Consequently, again because of the time it takes to complete notice and comment rule making, "industry participants" will lose the opportunity to fish and may lose assets such as vessels or halibut quota or processing opportunities or jobs supporting the halibut fishing industry. Communities with little or no alternative economic opportunities will lose resident fishing jobs and some fishermen and crew may not be able to continue living in remote, expensive, fishery dependent communities. Likewise, communities will lose fishing revenue from lost fishing wages and, for some communities, lost fishery taxes. The communities will lose fishery support infrastructure and, perhaps, processing capacity. In addition, communities will lose one of the fundamental reasons for residency in the community -- fishing.

It is important to note that the regulatory guidelines for emergency action place social criteria such as substantial damage to "communities" and "industry participants" on par with concerns about "habitat" the "resource" and "public health". Virtually eliminating the Areas 4CDE directed halibut fishery by failing to act quickly to reduce BSAI halibut bycatch unravels the social fabric of fishing communities and challenges the community identity. Halibut as a food source is critical to the psychological, social, and cultural identity of dependent Alaska Native communities and the federally recognized tribes in the region. In addition the consequential social impacts to one or more fishing communities are spread throughout the region as jobs are lost income forgone and families move. It is hard to imagine any area in the country where isolated fishing communities rely more on a specific commercial fishery than in Area 4CDE communities. It would appear that circumstances such as are before us today are the very reason

the criteria for Emergency Rule making equally assesses substantial damage to communities and industry participants as a basis for action as well as habitat, the resource and public health.

I understand that the reduction of the 2015 BSAI halibut bycatch allocation by 30 percent is not a precise number that may make Area 4CDE halibut fishermen whole or even preserve the status quo for the fishery. I further appreciate that reduction of BSAI halibut bycatch has impacts broader than Areas 4CDE and that there is not a one to one correspondence between BSAI bycatch reduction pounds and additional pounds to the areas 4CDE directed halibut fishery. If I could find a more surgical focus for an emergency rule that could directly impact the 2015 Area 4CDE directed fishery quota, I would have used it. However, given the Council's agenda regarding 2015 halibut bycatch allocations and the way BSAI halibut bycatch is apportioned and distributed spatially, I don't believe the Council can impact the 2015 Areas 4CDE directed halibut fishery with another approach.

I also recognize that the International Pacific Halibut Commission, ultimately, sets the annual directed fishing quota (FCEY) for halibut in Areas 4CDE and that they could, like was done in 2014, continue to set an annual area 4CDE quota above the recommended threshold without the Council taking action. However, for the Council to avoid emergency action for the Area 4CDE directed halibut fishery is to shirk our responsibility for fisheries management. Inaction ignores the purpose for which the emergency regulation provisions were created and it neglects the provisions of National Standard 8 to preserve the sustained participation of communities in the fishery as well as to minimizing adverse economic impacts on communities as well as National Standard 9 to minimize bycatch to the extent practicable. Moreover, such an approach shifts the entire burden of management to the IPHC and will continue a downward spiral that will negatively impact the halibut resource itself. In short, the Council should not stand by while, in 2015, the non-directed halibut fishery discards over 90% of the available BSAI halibut resource.

The better approach is to recognize that both the Council and the IPHC have responsibilities to address maintaining an Area 4CDE fishery at a sustainable level and for each body to take action within their regulatory structures to achieve this goal. This motion is an attempt by one Council member to work in concert with the IPHC and take an immediate first step toward addressing



Areas 4CDE directed halibut fishery concerns. The IPHC can also take steps toward resolution of the Area 4CDE issue by refining or clarifying their bycatch accounting and evaluating risks associated with allocations above the "blue line" while balancing these with increased allocations.

In conclusion let me address the proposed 33% reduction in the BSAI halibut allocation. First, I believe the Council should work from the bycatch numbers that the Nation Marine Fisheries Service develops. Second, current 2014 bycatch is approximately 22.5% below the annual or 2014 BSAI halibut bycatch allocation. Consequently a 22.5% reduction in the BSAI halibut bycatch allocation does nothing to insure actual bycatch reductions. Third, based on public testimony, I set a target to maintain the area 4CDE directed halibut fishery at a minimum sustainable level or a caretaker level of around the 2014 level of 1,290,000#. With this goal in mind, I worked informally with State and IPHC staff to calculate the needed reduction of the 2015 BSAI halibut bycatch that would allow the IPHC to establish a area 4CDE "blue line" at about 1.29 million pounds. The math, apportioning an historical percentage of 78.6% of entire BSAI bycatch to Area 4CDE as well as accounting for O26 and U26 fish would require a 2015 BSAI bycatch reduction of about 42% or approximately 19.5% below the actual 2014 BSAI halibut bycatch. Rather than request the entire 42% as an emergency bycatch reduction measure, I thought the Council could meet the IPHC about half way and seek to reduce actual 2014 bycatch by approximately 10.5% for a total 2015 bycatch allocation reduction of 33%. Let me repeat, the impact of this motion is to require an additional 10.5% halibut bycatch reduction from 2014 bycatch levels. I believe this half way measure demonstrates the Council's understanding of the need for the emergency rule and the seriousness of the situation while at the same time recognizing that the IPHC also has a responsibility to ensure that the Area 4CDE directed halibut fishery remains viable.

Thank you for your consideration of this motion for emergency action.

Council adopted TACs, OFLs and ABCs (metric tons) for GOA Groundfish, 2015-2016

Species	Area	2014			Catch as of 11/8/14	2015			2016		
		OFL	ABC	TAC		OFL	ABC	TAC	OFL	ABC	TAC
Pollock <sup>a/</sup>	W (61)	n/a	36,070	36,070	13,318	n/a	31,634	31,634	n/a	41,472	41,472
	C (62)	n/a	81,784	81,784	83,049	n/a	97,579	97,579	n/a	127,936	127,936
	C (63)	n/a	39,756	39,756	42,068	n/a	52,594	52,594	n/a	68,958	68,958
	WYAK	n/a	4,741	4,741	1,317	n/a	4,719	4,719	n/a	6,187	6,187
	Subtotal	211,998	162,351	162,351	139,752	256,545	191,309	186,526	321,067	250,824	244,553
	EYAK/SEO	16,833	12,625	12,625	1	16,833	12,625	12,625	16,833	12,625	12,625
	Total	228,831	174,976	174,976	139,753	273,378	203,934	199,151	337,900	263,449	257,178
Pacific Cod	W	n/a	32,745	22,922	20,910	n/a	38,702	27,091	n/a	38,702	27,091
	C	n/a	53,100	39,825	38,429	n/a	61,320	45,990	n/a	61,320	45,990
	E	n/a	2,655	1,991	294	n/a	2,828	2,121	n/a	2,828	2,121
	Total	107,300	88,500	64,738	59,633	140,300	102,850	75,202	133,100	102,850	75,202
Sablefish	W	n/a	1,480	1,480	1,195	n/a	1,474	1,474	n/a	1,338	1,338
	C	n/a	4,681	4,681	4,706	n/a	4,658	4,658	n/a	4,232	4,232
	WYAK	n/a	1,716	1,716	1,655	n/a	1,708	1,708	n/a	1,552	1,552
	SEO	n/a	2,695	2,695	2,819	n/a	2,682	2,682	n/a	2,436	2,436
	Total	12,500	10,572	10,572	10,375	12,425	10,522	10,522	11,293	9,558	9,558
Shallow-Water Flatfish	W	n/a	20,376	13,250	243	n/a	22,074	13,250	n/a	19,577	13,250
	C	n/a	17,813	17,813	4,144	n/a	19,297	19,297	n/a	17,114	17,114
	WYAK	n/a	2,039	2,039	1	n/a	2,209	2,209	n/a	1,959	1,959
	EYAK/SEO	n/a	577	577	1	n/a	625	625	n/a	554	554
	Total	50,007	40,805	33,679	4,389	54,207	44,205	35,381	48,407	39,204	32,877
Deep-Water Flatfish	W	n/a	302	302	68	n/a	301	301	n/a	299	299
	C	n/a	3,727	3,727	271	n/a	3,689	3,689	n/a	3,645	3,645
	WYAK	n/a	5,532	5,532	5	n/a	5,474	5,474	n/a	5,409	5,409
	EYAK/SEO	n/a	3,911	3,911	4	n/a	3,870	3,870	n/a	3,824	3,824
	Total	16,159	13,472	13,472	348	15,993	13,334	13,334	15,803	13,177	13,177
Rex Sole	W	n/a	1,270	1,270	124	n/a	1,258	1,258	n/a	1,234	1,234
	C	n/a	6,231	6,231	3,382	n/a	5,816	5,816	n/a	5,707	5,707
	WYAK	n/a	813	813	1	n/a	772	772	n/a	758	758
	EYAK/SEO	n/a	1,027	1,027	-	n/a	1,304	1,304	n/a	1,280	1,280
	Total	12,207	9,341	9,341	3,507	11,957	9,150	9,150	11,733	8,979	8,979
Arrowtooth Flounder	W	n/a	31,142	14,500	1,875	n/a	30,752	14,500	n/a	29,545	14,500
	C	n/a	115,612	75,000	33,085	n/a	114,170	75,000	n/a	109,692	75,000
	WYAK	n/a	37,232	6,900	50	n/a	36,771	6,900	n/a	35,328	6,900
	EYAK/SEO	n/a	11,372	6,900	16	n/a	11,228	6,900	n/a	10,787	6,900
	Total	229,248	195,358	103,300	35,026	226,390	192,921	103,300	217,522	185,352	103,300
Flathead Sole	W	n/a	12,730	8,650	212	n/a	12,767	8,650	n/a	12,776	8,650
	C	n/a	24,805	15,400	2,284	n/a	24,876	15,400	n/a	24,893	15,400
	WYAK	n/a	3,525	3,525	1	n/a	3,535	3,535	n/a	3,538	3,538
	EYAK/SEO	n/a	171	171	-	n/a	171	171	n/a	171	171
	Total	50,664	41,231	27,746	2,497	50,792	41,349	27,756	50,818	41,378	27,759

a/ 2015-2016 W/C/WYAK Subarea amounts for pollock are apportionments of subarea ACL that allow for regulatory reapportionment.

b/ Note 1 mt moved from the northern rockfish stock EGOA allocation to EGOA "other rockfish" category.

Council adopted TACs, OFLs and ABCs (metric tons) for GOA Groundfish, 2015-2016

Species	Area	2014			Catch as of 11/8/14	2015			2016		
		OFL	ABC	TAC		OFL	ABC	TAC	OFL	ABC	TAC
Pacific Ocean Perch	W		2,399	2,399	2,063		2,302	2,302		2,358	2,358
	C		12,855	12,855	13,434		15,873	15,873		16,184	16,184
	WYAK		1,931	1,931	1,871		2,014	2,014		2,055	2,055
	W/C/WYAK	19,864			17,368	23,406	20,189	20,189	23,876	20,597	20,597
	SEO	2,455		2,124	-	954	823	823	973	839	839
	E(subtotal)				1,880		2,837	2,837		2,894	2,894
Total		22,319	19,309	19,309	17,368	24,360	21,012	21,012	24,849	21,436	21,436
Northern Rockfish <sup>a/</sup>	W	n/a	1,305	1,305	802	n/a	1,226	1,226	n/a	1,158	1,158
	C	n/a	4,017	4,017	3,410	n/a	3,772	3,772	n/a	3,563	3,563
	E	n/a	-	-	-	n/a	-	-	n/a	-	-
	Total	6,349	5,322	5,322	4,212	5,961	4,998	4,998	5,631	4,721	4,721
Shortraker Rockfish	W	n/a	92	92	73	n/a	92	92	n/a	92	92
	C	n/a	397	397	323	n/a	397	397	n/a	397	397
	E	n/a	834	834	253	n/a	834	834	n/a	834	834
	Total	1,764	1,323	1,323	649	1,764	1,323	1,323	1,764	1,323	1,323
Dusky Rockfish	W	n/a	317	317	134	n/a	296	296	n/a	273	273
	C	n/a	3,584	3,584	2,825	n/a	3,336	3,336	n/a	3,077	3,077
	WYAK	n/a	1,384	1,384	87	n/a	1,288	1,288	n/a	1,187	1,187
	EYAK/SEO	n/a	201	201	4	n/a	189	189	n/a	174	174
	Total	6,708	5,486	5,486	3,050	6,246	5,109	5,109	5,759	4,711	4,711
Rougheye and Blackspotted Rockfish	W	n/a	82	82	25	n/a	115	115	n/a	117	117
	C	n/a	864	864	536	n/a	632	632	n/a	643	643
	E	n/a	298	298	172	n/a	375	375	n/a	382	382
	Total	1,497	1,244	1,244	733	1,345	1,122	1,122	1,370	1,142	1,142
Demersal shelf rockfish	Total	438	274	274	104	361	225	225	361	225	225
Thornyhead Rockfish	W	n/a	235	235	237	n/a	235	235	n/a	235	235
	C	n/a	875	875	666	n/a	875	875	n/a	875	875
	E	n/a	731	731	218	n/a	731	731	n/a	731	731
	Total	2,454	1,841	1,841	1,121	2,454	1,841	1,841	2,454	1,841	1,841
Other Rockfish <sup>b/</sup> (Other slope)	WGOA & CGOA	n/a	-	-	-	n/a	-	-	n/a	-	-
	WYAK	n/a	1,031	1,031	940	n/a	1,031	1,031	n/a	1,031	1,031
	EYAK/SEO	n/a	580	580	53	n/a	580	580	n/a	580	580
	EYAK/SEO	n/a	2,470	200	37	n/a	2,469	200	n/a	2,469	200
	Total	5,347	4,081	1,811	1,030	5,347	4,080	1,811	5,347	4,080	1,811
Atka mackerel	Total	6,200	4,700	2,000	981	6,200	4,700	2,000	6,200	4,700	2,000
Big Skate	W	n/a	589	589	135	n/a	731	731	n/a	731	731
	C	n/a	1,532	1,532	1,150	n/a	1,257	1,257	n/a	1,257	1,257
	E	n/a	1,641	1,641	94	n/a	1,267	1,267	n/a	1,267	1,267
	Total	5,016	3,762	3,762	1,379	4,340	3,255	3,255	4,340	3,255	3,255
Longnose Skate	W	n/a	107	107	51	n/a	152	152	n/a	152	152
	C	n/a	1,935	1,935	1,031	n/a	2,090	2,090	n/a	2,090	2,090
	E	n/a	834	834	336	n/a	976	976	n/a	976	976
	Total	3,835	2,876	2,876	1,418	4,291	3,218	3,218	4,291	3,218	3,218
Other Skates	Total	2,652	1,989	1,989	1,559	2,980	2,235	2,235	2,980	2,235	2,235
Sculpins	GOA-wide	7,448	5,569	5,569	1,075	7,448	5,569	5,569	7,448	5,569	5,569
Sharks	GOA-wide	7,986	5,989	5,989	1,188	7,986	5,989	5,989	7,986	5,989	5,989
Squids	GOA-wide	1,530	1,148	1,148	92	1,530	1,148	1,148	1,530	1,148	1,148
Octopuses	GOA-wide	2,009	1,507	1,507	1,057	2,009	1,507	1,507	2,009	1,507	1,507
Total		790,468	640,675	499,274	292,544	870,064	685,597	536,158	910,895	731,049	590,161

a/ 2015-2016 W/C/WYAK Subarea amounts for pollock are apportionments of subarea ACL that allow for regulatory reapportionment.

b/ Note 1 mt moved from the northern rockfish stock EGOA allocation to EGOA "other rockfish" category.

OFL, ABC and TAC for 2015 and 2016 (12.13.2014)											
Species	Area	2014				2015			2016		
		OFL	ABC	TAC	Catch 11/29	OFL	ABC	TAC	OFL	ABC	TAC
Pollock	EBS	2,795,000	1,369,000	1,267,000	1,296,337	3,330,000	1,637,000	1,310,000	3,490,000	1,554,000	1,310,000
	AI	42,811	35,048	19,000	2,375	36,005	29,659	19,000	38,699	31,900	19,000
	Bogoslof	13,413	10,059	75	427	21,200	15,900	100	21,200	15,900	100
Pacific cod	BS	299,000	255,000	246,897	218,759	346,000	255,000	240,000	389,000	255,000	240,000
	AI	20,100	15,100	6,997	6,145	23,400	17,600	9,422	23,400	17,600	9,422
Sablefish	BS	1,584	1,339	1,339	314	1,575	1,333	1,333	1,431	1,211	1,211
	AI	2,141	1,811	1,811	818	2,128	1,802	1,802	1,934	1,637	1,637
Yellowfin sole	BSAI	259,700	239,800	184,000	152,742	266,400	248,800	149,000	262,900	245,500	149,000
Greenland turbot	BSAI	2,647	2,124	2,124	1,655	3,903	3,172	2,648	6,453	5,248	2,648
	BS	n/a	1,659	1,659	1,478	n/a	2,448	2,448	n/a	4,050	2,448
	AI	n/a	465	465	177	n/a	724	200	n/a	1,198	200
Arrowtooth flounder	BSAI	125,642	106,599	25,000	18,926	93,856	80,547	22,000	91,663	78,661	22,000
Kamchatka flounder	BSAI	8,270	7,100	7,100	6,441	10,500	9,000	6,500	11,000	9,500	6,500
Northern rock sole	BSAI	228,700	203,800	85,000	51,793	187,600	181,700	69,250	170,100	164,800	69,250
Flathead sole	BSAI	79,633	66,293	24,500	16,261	79,419	66,130	24,250	76,504	63,711	24,250
Alaska plaice	BSAI	66,800	55,100	24,500	19,320	54,000	44,900	18,500	51,600	42,900	18,500
Other flatfish	BSAI	16,700	12,400	2,650	4,397	17,700	13,250	3,620	17,700	13,250	3,620
Pacific Ocean perch	BSAI	39,585	33,122	33,122	32,379	42,558	34,988	32,021	40,809	33,550	31,991
	BS	n/a	7,684	7,684	7,435	n/a	8,771	8,021	n/a	8,411	8,021
	EAI	n/a	9,246	9,246	9,021	n/a	8,312	8,000	n/a	7,970	7,970
	CAI	n/a	6,594	6,594	6,438	n/a	7,723	7,000	n/a	7,406	7,000
	WAI	n/a	9,598	9,598	9,485	n/a	10,182	9,000	n/a	9,763	9,000
Northern rockfish	BSAI	12,077	9,761	2,594	2,346	15,337	12,488	3,250	15,100	12,295	3,250
Blackspotted/Rougheye rockfish	BSAI	505	416	416	196	560	453	349	688	555	349
	EBS/EAI	n/a	177	177	98	n/a	149	149	n/a	178	149
	CAI/WAI	n/a	239	239	98	n/a	304	200	n/a	377	200
Shortraker rockfish	BSAI	493	370	370	196	690	518	250	690	518	250
Other rockfish	BSAI	1,550	1,163	773	936	1,667	1,250	880	1,667	1,250	880
	BS	n/a	690	300	319	n/a	695	325	n/a	695	325
	AI	n/a	473	473	617	n/a	555	555	n/a	555	555
Atka mackerel	BSAI	74,492	64,131	32,322	30,946	125,297	106,000	54,500	115,908	98,137	54,817
	EAI/BS	n/a	21,652	21,652	21,184	n/a	38,492	27,000	n/a	35,637	27,317
	CAI	n/a	20,574	9,670	9,520	n/a	33,108	17,000	n/a	30,652	17,000
	WAI	n/a	21,905	1,000	242	n/a	34,400	10,500	n/a	31,848	10,500
Skates	BSAI	41,849	35,383	26,000	25,990	49,575	41,658	25,700	47,035	39,468	25,700
Sculpins	BSAI	56,424	42,318	5,750	4,720	52,365	39,725	4,700	52,365	39,725	4,700
Sharks	BSAI	1,363	1,022	125	130	1,363	1,022	125	1,363	1,022	125
Squids	BSAI	2,624	1,970	310	1,678	2,624	1,970	400	2,624	1,970	400
Octopuses	BSAI	3,450	2,590	225	400	3,452	2,589	400	3,452	2,589	400
<b>Total</b>	BSAI	<b>4,196,553</b>	<b>2,572,819</b>	<b>2,000,000</b>	<b>1,896,627</b>	<b>4,769,174</b>	<b>2,848,454</b>	<b>2,000,000</b>	<b>4,935,285</b>	<b>2,731,897</b>	<b>2,000,000</b>

Final 2014 OFLs, ABCs, and TACs from 2014-2015 final harvest specifications, as revised; total catch updated through November 29, 2014.

Final 2015 - 2016 OFLs and ABCs from November Plan Team results

December 2014 appointments:

Plan Team

Laura Stichert appointed to Crab Plan Team

Pacific Northwest crab industry advisory committee (PNCIAC) for 2015/2016:

Keith Colburn   Lance Farr   Kevin Kaldestad   Steve Minor   Gary Painter  
Kirk Peterson   Dale Schwarzmiller   Gary Stewart   Tom Suryan   Elizabeth Wiley  
Mark Gleason   Christopher Pugmire   Ray Naomura   Brett Reasoner  
Ruth Christensen (non-voting, Secretary)

SSC for 2015:

Chris Anderson   Jennifer Burns   Robert Clark   Alison Dauble   Sherrie Dressel  
Anne Hollowed   George Hunt   Gordon Kruse (Milo Atkinson Alternate)  
Seth Macinko   Steve Martell   Franz Mueter   Terry Quinn   Kate Reedy-Mashner  
Lew Quierolo   Matt Reimer   Farron Wallace   Brad Harris

(NOTE: WDFW and AFSC may each nominate an additional member in 2015 for Council consideration)

AP

Ruth Christiansen   Kurt Cochran   John Crowley   Jerry Downing   Jeff Farvour  
Becca Robbins-Gisclair   John Gruver   Andy Mezirow   Jeff Kaufman  
Mitch Kilborn   Alexis Kwachka   Craig Lowenberg   Anne Vanderhoven  
Chuck McCallum   Joel Peterson   Theresa Peterson   Matt Upton  
Ernie Weiss   Sinclair Wilt   Jeff Stephans (to complete 2 year term of Brian Lynch)  
Paddy O'Donnell (one year term)

Dan Hull  
Chairman  
Chris Oliver  
Executive Director

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# News & Notes

## North Pacific Fishery Management Council

December 2014

## Council Appointments

The Council re-appointed all its members of the SSC to another year term and added new member Brad Harris, who had been an alternate on the committee from the University of Alaska. The Council also said goodbye to Pat Livingston, who has served on the SSC, and partially as Chair, for 12 years. The Council thanked her for her service, and congratulated her on her retirement. New appointees to the Advisory Panel include Andy Mezirow from the charter sector, Jeff Stephan, of the United Fishermen's Marketing Association, and Matt Upton, of US Seafoods. Other AP members include: Ruth Christiansen, Kurt Cochran, John Crowley, Jerry Downing, Jeff Farvour, Becca Robbins-Gisclair, John Gruver, Jeff Kauffman, Mitch Kilborn, Alexis Kwachka, Craig Lowenberg, Anne Vanderhoeven, Chuck McCallum, Joel Peterson, Theresa Peterson, Ernie Weiss, Sinclair Wilt, and Paddy O'Donnell (one-year term). Laura Stichert, of ADF&G Commercial Fisheries in Kodiak, was appointed to the Crab Plan Team. Welcome, and we look forward to working with you in 2015.



Pat Livingston is retiring after 37.5 years from AFSC, and will be missed as Chairman of the SSC.



Photo: Karla Bush

## Observer Program

### *Electronic Monitoring*

The Council reviewed the EM Workgroup's progress with developing a cooperative research plan for 2015, and moving towards pre-implementation of EM in 2016. 2015 fieldwork will focus both on operational testing of EM camera systems in the under 58 ft longline fleet, as well as further research on all EM systems to evaluate whether they will successfully achieve the Council's goal to integrate EM used for catch estimation into the Observer Program. The Workgroup outlined a timeframe for how the fieldwork and pre-implementation years will intersect with the Council's analytical process and EM's eventual integration into the Annual Deployment Plan process. The Workgroup also reported on the budget and funding for the 2015 fieldwork, and opportunities for funding for the 2016 pre-implementation year. The Council concurred with the Workgroup's direction for developing the cooperative research plan, which will be reviewed by the SSC in February 2015.

The Council also received the latest draft of the Alaska Regional Implementation Plan for Electronic Technologies. All the NMFS regions have been requested to develop and submit such a plan to headquarters by the end of the year. At the Council's request, the Workgroup reviewed the plan at their last meeting, and provided clarifications with respect to the reporting of proposed costs.

### *Small Catcher/Processors*

At this meeting, the Council adopted a purpose and need statement and alternatives for a regulatory amendment analysis to revise the allowances for placing small catcher/processors in the partial

coverage category. The Council had previously identified this regulatory change as a high priority for potential regulatory amendments to the Observer Program. Currently, under the Program, there is a general requirement that all catcher/processors are placed in the full coverage category, with two limited exceptions based on a vessel's activity from 2003 through 2009, and one exception based on a minimal amount of daily processing. The Council reviewed a discussion paper, prepared by NMFS staff, evaluating different ways that the Council might consider revising the thresholds, while still maintaining an appropriate balance between data quality and the cost of observer coverage, and ensuring the threshold is not unduly difficult to apply and enforce. The motion is posted online. Council contact is Diana Evans.

### *LL2 Workgroup*

The Council received a report on the efforts of observer providers, the freezer longline fleet, and NMFS to collectively come up with immediate solutions to the current shortage of qualified level 2 fixed gear observers, which are required for freezer longline vessels operating in the Bering Sea. Participants in the workgroup committed to pursuing a variety of actions in the short term. The report is available online, under the Council's December 2014 B2 agenda item.



Retiring Martin Loefflad was presented with a plaque noting his 37 years of service with NMFS and Alaska Fisheries, and with the Alaska Observer Program. Best wishes in new endeavors.



# Halibut and Sablefish Vessel IFQ Caps

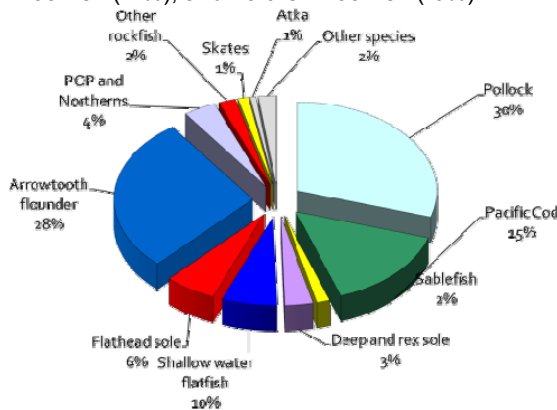
The Council received a discussion paper on vessel IFQ caps which considered proposals seeking to change the way vessel IFQ caps affect participants in the sablefish and/or halibut IFQ fishery. This discussion was instigated by submission and continued interest by stakeholders in a proposal to increase vessel IFQ caps for sablefish A quota shares. This proposal was augmented with a separate proposal to create a floor in the vessel IFQ cap for halibut IFQ. Several other approaches for modifying vessel IFQ caps were also recommended in written and spoken public testimony to the Council. After a lengthy discussion on the appropriate scope and potential distribution of benefits of action, the Council chose to take no action on this issue. Staff contact is Sarah Marrinan.

# GOA Skate MRA

The Council reviewed the Final EA/RIR/IRFA on an action to revise the Maximum Retainable Amount (MRA) for all skate species in the Gulf of Alaska fisheries. The Council adopted Alternative 4, the Preliminary Preferred Alternative, and the alternative recommended by the AP, as its Preferred Alternative. The Preferred Alternative would reduce the MRA for all skates in all GOA groundfish fisheries to 5%. Staff contact is Steve MacLean.

# GOA Groundfish Specifications

The Council approved the Gulf of Alaska Stock Assessment and Fishery Evaluation (SAFE) report and recommended final catch specifications for the 2015 and 2016 groundfish fisheries. As part of the Plan Team presentations and Council deliberations, the updated ecosystem SAFE report sections were presented. The sum of the Plan Team recommended ABCs increased by 7% compared with last year. This is primarily driven by projected increases in pollock (+17%), Pacific cod (+16%), Pacific ocean perch (+9%), and shallow water flatfish (+8%). Notable declines were projected in demersal shelf rockfish (-18%), big skate (-13%), roughey and blackspotted rockfish (-10%), dusky rockfish (-7%), and northern rockfish (-6%).



Percentage breakouts of 2015 ABCs by species and stock complexes. Source Dr. Jim Ianelli.

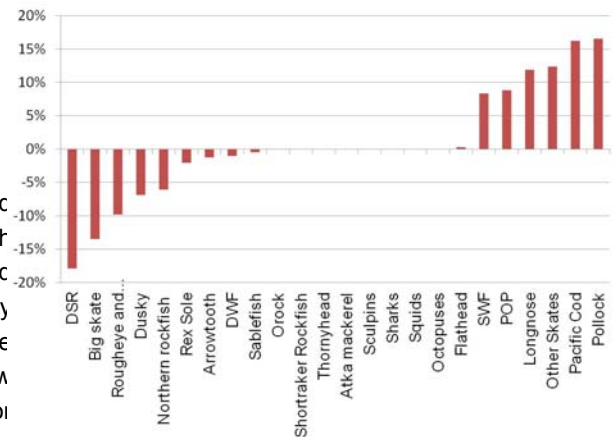
The abundances of Pacific cod, Dover sole, flathead sole, northern and southern rock sole, arrowtooth flounder, Pacific ocean perch, roughey and blackspotted rockfish, northern rockfish, and dusky rockfish are above target stock size. The abundances of pollock and sablefish are below target stock size. 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, demersal shelf rockfish, thornyhead rockfish, Atka mackerel, skates, sculpins, squid, octopus, and sharks are unknown.

For most stocks the Council established TACs equal to ABCs with some exceptions. For Pacific cod the ABC was reduced 25% in EGOA and CGOA and by 30% in WGOA to account for removals in the state managed fishery. Pollock TAC in W/C/WYAK was reduced 2.5% to account for GHM in Prince William Sound. Additional exceptions include those fisheries

where the bycatch of other target species is a concern, specifically shallow water flatfish (W and C GOA), flathead sole (W and C GOA), arrowtooth flounder (GOA wide) and other rockfish (EYAK/SEO). For those fisheries, the TAC is also set below the ABC. Atka mackerel was established at levels to meet incidental catch needs in other fisheries only (no directed fishing is allowed). Specifications for 2015-2016 are posted on the Council's website.

### Prohibited Species Catch Limits:

The Council adopted halibut prohibited species catch limits, by season and gear apportionment for 2015-2016 and further specified apportionments of the 'other hook and line fisheries' annual halibut PSC allowance between the hook-and-line gear catcher vessel and catcher/processor sectors following the Pacific cod sector split allocation implemented in 2012. The PSC numbers for 2015 include the additional 5% (12% cumulative) reduction in year two of the three year stairs-step reduction in Halibut PSC limits based upon the action taken under Amendment 95 to the FMP. The Council recommended OFLs, ABCs and TACs for 2015 and 2016, the SAFE report for GOA groundfish, the Ecosystem Considerations Chapter and the Economic SAFE report is on the Council's website. Staff contact is Jim Armstrong.

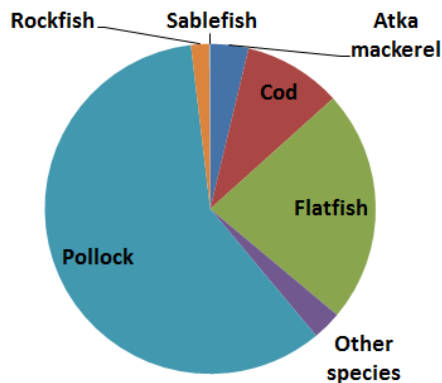


Estimated percent change in ABC in 2015 relative to 2014 for GOA stocks. Source Dr. Jim Ianelli.

Hristos se rodi **God Jul**  
 Glædelig Jul Mele Kalikimaka Feliz Navidad  
 FELIZ NATAL Mitho Makosi Kesikansi  
 Kjesale hody a shrove nowe leto Do Nada Sung Tan Chuk Ha  
**GLEDILEG JOL** Feliz Natal  
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 Noel Merry Christmas  
 Maligayang Pasko BUONE FESTE NATALIZIE  
 GAJAN KRISTNASKON MERRY KESHMISH

# BSAI Harvest Specifications

The Council adopted the BSAI Groundfish SAFE report and annual catch limits based on recommendations from its advisory committees. The sum of the total allowable catches (TACs) or quotas for all BSAI groundfish is 2 million t for 2015 and 2016. The TACs were set below the sum of the recommended ABCs. The sum of the recommended ABCs for 2015 and 2016 are 2,842,543 t and 2,728,127 t, respectively. Overall, the status of the stocks continues to appear favorable. Nearly all stocks are above their target biomass size ( $B_{MSY}$ ). The sum of the biomasses for 2015 represents a 7% increase from 2014.



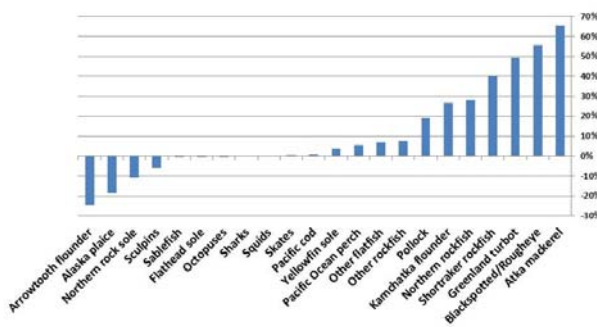
Relative breakouts of biomass of major species groups in the BSAI

In conjunction with the implementation of Amendment 105 to the BSAI Groundfish FMP, the Council also set the annual ABC reserve for three flatfish species, northern rock sole, flathead sole and yellowfin sole. The Council established the entire ABC surplus as the ABC reserve. This ABC surplus is used to allow for more efficiency in the harvest of these flatfish species. NMFS will provide an annual report to the Council on the flatfish exchanges by the Amendment 80 fleet in utilizing this increased flexibility. This report is designed to assist the Council in future specifications as to whether or not setting a discretionary buffer in the ABC reserve is desirable.

The Council also adopted revised PSC limits for crab stocks, Pacific halibut, and herring. The final BSAI groundfish harvest specifications will be published as a final rule in the Federal Register by late February/early March 2015. They will replace the current 2015 harvest specifications that were adopted by the Council in December 2013.

Groundfish specifications for 2015-2016 are available on the Council's website. Staff Contact is Diana Stram.

## Change in ABC from 2014 to 2015



## GOA Sablefish Longline Pots

The Council refined alternatives for an action that would allow pot longline gear in the GOA sablefish IFQ fishery. The option to use pot longline gear could be granted for all GOA areas – Western GOA, Central GOA, West Yakutat, and Southeast Outside – or only for the GOA areas specified in final action. The analysis was released for public review.

The Council refined elements of the action alternative, with a focus on managing the potential grounds preemption and gear conflict challenges associated with adding pot gear to existing hook-and-line areas. A range of per-vessel pot limits was defined for analysis (limit of 60 to 400 pots). The efficacy and cost of gear tracking measures, such as pot tags and buoy transponders, will also be analyzed. The Council will consider pot gear retrieval requirements that are designed to reduce the length of time that grounds are preempted, and likelihood of hang-ups on gear that is already set. Those measures include an electronic database of pots that have been set, left, or lost on the grounds, and a requirement to tend or remove gear within a certain number of days after fishing is commenced.

Among the additional information that staff will provide is a more detailed accounting of whale deterrence efforts that stakeholders have undertaken, and continue to test. Final action is scheduled for April 2015. Staff contact is Sam Cunningham.

## Walker, Sullivan Address Council

Newly elected Alaska Governor Bill Walker and Alaska Senator Dan Sullivan both took the opportunity to address the Council. Walker spoke to the Council on Thursday the 11<sup>th</sup>, and emphasized his commitment to maintaining the health and sustainability of Alaska's fisheries while supporting communities. He commented on the cooperative nature of the Council working with the agencies in both Washington and Oregon, and affirmed his support of the work that is done. Sullivan outlined his upcoming work in his committee appointments, specifically the Senate Commerce Committee.



Sullivan confirmed his commitment to working closely with the Council on the Magnuson-Stevens Re-Authorization Act along with other issues affecting Alaska's fishing industry and requested Council input on various issues.



## Pribilof Canyon Corals

In April 2014, the Council adopted a Purpose and Need Statement for an action to determine whether and how the Council should recommend amendment of the BSAI Groundfish and Crab FMPs to protect known, significant concentrations of deep-sea corals in the Pribilof Canyon and adjacent slope from fishing impacts. At the same time, the Council requested that time be scheduled to allow for public scoping on two topics: (1) the general range of alternatives that should be considered under this action, and (2) the best process by which to identify, develop, and refine alternatives. That opportunity was provided during the December Council meeting, and the Council heard from a number of stakeholders. After receiving input, the Council directed staff, during Staff Tasking, to begin an informal dialogue with AFSC researchers to discuss potential criteria that the Council could use to develop and evaluate protection alternatives for corals on the Bering Sea slope. Staff contact is Steve MacLean.

## Openings at AOOs

The Alaska Ocean Observing System is hiring two staff positions - one for Operations Director (a new position) and another for Program Coordinator. To apply, Please submit a letter of interest, resume and 3 references to Cindy Ecklund at [cindy@alaskasealife.org](mailto:cindy@alaskasealife.org) by COB January 26, 2015. More information and full descriptions available at [www.aooos.org](http://www.aooos.org).

## Charter Halibut Management

The Charter Management Implementation Committee met in October 2015 and again in December 2015 to consider management measures that are intended to keep the charter halibut harvest within each area's (2C and 3A) 2015 allocation. The Council received a report from the Committee that identified those recommended management measures and received a report from Scott Meyer (ADF&G Sportfish Division) that projected the effects of those management measures on the expected 2015 charter halibut harvest. Based on an Area 2C halibut allocation of 0.787 million pounds and an Area 3A allocation of 1.89 million pounds, the Charter Management Implementation Committee recommended, and the Council approved, the following management measures for recommendation to the International Pacific Halibut Commission:

For Area 2C:

- One-fish daily bag limit
- Reverse slot limit of U40" – O80" (must be ≤40 inches or ≥ 80 inches)

If the final charter allocation is sufficiently higher than the "blue line" to accommodate a change in the reverse slot limit, adjust the size of the lower limit up ward to meet the allocation.

For Area 3A:

- Two-fish daily bag limit (one of any size)
- Maximum size of one of the two fish is 29" (if only one fish is harvested, it may be any size)
- One trip per day (limit each vessel to one trip per calendar day)
- Prohibition on halibut charter fishing on Thursdays, during June 15 – August 31.

If the final charter allocation is sufficiently higher than the "blue line", adjust the maximum size of the second fish upward to meet the allocation.

The regulations for GAF remain the same. **Additionally, the Council is soliciting names for appointments to the Recreational Quota Entity workgroup. Applicants from the Charter industry as well as people involved in the halibut longline fishery are encouraged to apply for appointment. Deadline is January 23, 2015. Nominations can be mailed to the office, or emailed to [npfmc.comments@noaa.gov](mailto:npfmc.comments@noaa.gov).**

Staff contact is Steve MacLean.

## Vessel Monitoring System

At this meeting, the Enforcement Committee provided a report to the Council that assesses the utility of several advanced Vessel Monitoring System (VMS) in the North Pacific. These features include geo-fencing, increased polling rates, declarations of species, gear, and area, and two-way communication. The report was tasked to the Committee following a series of discussion papers during 2012 that evaluated the use and requirement of VMS in the North Pacific fisheries and other regions. The report provided an overview of VMS program, advanced features of the VMS not currently utilized in the North Pacific, uses of VMS by the different user groups, where VMS fits into the Strategic Plan for Electronic Monitoring/Electronic Reporting (EM/ER) in the North Pacific, and the Enforcement Committee's implementation recommendations to the Council.

After reviewing the report, the Council tasked the Enforcement Committee to review its April 2005 "Enforcement Considerations for NOAA Fisheries and North Pacific Fishery Management Council Staff" (precepts) paper to include advanced VMS features where appropriate in the matrix of different management measures. In addition, the Council also tasked the Committee to review other enforcement considerations in other regions to determine if there are other enforcement tools that might be of use for the North Pacific. Finally, the Council tasked staff to prepare a technical document on VMS usage for the universe of non-VMS vessels in the North Pacific for use by the Council in considering enforcement and electronic monitoring issues associated with future FMP and regulatory actions. Staff contact is Jon McCracken.



## Amendments for LLP Exemptions

The Council took action to amend typographical errors in three of the Fisheries Management Plans (FMP): the FMP for Groundfish of the Bering Sea/Aleutian Islands (BSAI), Groundfish of the Gulf of Alaska (GOA), and BSAI King and Tanner Crab. Errors were discovered in the length thresholds of vessels exempt from the License Limitation Program (LLP) requirements in these three FMPs. The Council's original intention in establishing the LLP was to allow for an exemption for vessels *less than or equal to* 32 ft length overall (LOA) in the BSAI, and vessels *less than or equal to* 26 ft LOA in GOA. However these thresholds were mistakenly specified as *less than* 32 ft LOA and *less than* 26 ft LOA, respectively in the FMPs.

Amendments will align the FMP text with current Federal regulations that correctly captures the Council's original intent as well as current operations in the fisheries. These changes are not expected to have impacts on stakeholders in these fisheries, or the nature of the fisheries in any way. Staff contact is Sarah Marrinan.

## NPRB Seeking Nominations

On July 21, 2015, one Board member seat representing the interests of the fishing industry will become available. NPRB is currently seeking nominations for its twentieth member that represents the fishing industry, is appointed by the Secretary of Commerce, and serves on the NPRB Executive Committee. This seat has a three-year term. Specific criteria are used by the Board in making a selection from among nominees for the fishing industry seat which is subject to approval by the Secretary of Commerce. More information and the criteria is available at [nprb.org](http://nprb.org).

*December 2014 Council meeting.*



## Staff Tasking

In addition to discussing the timing and relative priority of previously tasked projects, and tasking for various workgroups and committees, the Council provided clarifications on several important issues. Additionally, the Council tasked the following:

- Re-solicit nominations for the Charter Halibut RQE workgroup.
- Request staff to provide draft structure and guidance for possible establishment of a standing Protected Resources Committee.
- Publicize the proposed USGC Arctic Port Access Route Study and request for comments in the newsletter.
- Request the plan teams convene a working group on stock complexes that would discuss the implications of breaking out species from individual complexes. Also, have the group consider and provide a recommendation regarding a standing committee to address all National Standard 1 issues.
- Request the Enforcement Committee to review the "Enforcement Precepts" paper, incorporate the new VMS information, and post the paper on our website when finalized.
- Share testimony regarding criteria and data thresholds for Pribilof corals with the AFSC researchers with the objective of providing the data for possible use in this fashion when the AFSC finalizes its report to the Council in June.
- Task staff to prepare a discussion paper addressing the 10 items relative to the GOA trawl bycatch management project for review in October, rather than April as had been previously scheduled.
- Expedite the review and consultation of the halibut deck sorting EFP for additional work in 2015, and send a letter to the IPHC informing them of deck sorting studies.

## Upcoming Meetings

**EM Workgroup:** January 12-13, 2015 – Anchorage

**PNCIAC: January 12,** 9am-12  
Fishermen's Terminal, Seattle

**Crab Modeling Workshop:**  
January 13-15, 2015 – AFSC,  
Seattle

**Crab Plan Team:** January 16,  
2015 – AFSC, Seattle

**Salmon Bycatch Outreach:**  
January 20, Nome, AK

**Scallop Plan Team:** TBD,  
tentatively late January

**Ecosystem Committee:** TBD,  
tentatively early March

## Comment Opens for BSAI Crab C Share Eligibility

Comment is open on Amendment 31, which would temporarily expand the eligibility requirements for individuals wishing to acquire C share Quota Share by transfer; establish minimum participation requirements for C share QS holders to be eligible to receive an annual allocation of Individual Fishing Quota; to retain their C share QS and establish an administrative process for revocation if he or she fails to satisfy the minimum participation requirements; establish a regulatory mechanism to ensure that three percent of the total allowable catch for each CR Program crab fishery is allocated as IFQ to holders of C share QS; and remove the prohibition on leasing C share IFQ. Submit comments by: *Electronic Submission:* [www.regulations.gov/#/docketDetail;D=NOAA-NMFS-2010-0265](http://www.regulations.gov/#/docketDetail;D=NOAA-NMFS-2010-0265), click the "Comment Now!" icon OR *Mail:* Sustainable Fisheries Division, ATTN: Ellen Sebastian; Alaska Region NMFS P.O. Box 21668, Juneau, AK 99802-1668. Deadline is Feb 13.

## Bering Sea Halibut Bycatch

During the course of the meeting, the Council had reports, testimony, and discussion about levels of halibut bycatch in the Bering Sea in 2014, and the interaction between bycatch levels and harvest allocations for the 2015 directed halibut fisheries. A motion for emergency action failed on a tied vote. In February, the Council will be reviewing an analysis to reduce PSC limits for halibut in BSAI groundfish fisheries, and will hear reports from industry sectors about the extent to which they have achieved the 10% reduction in BSAI halibut PSC use (from average usage over 2009-2013), which they were requested to voluntarily undertake in 2014-2015. The Council will also be meeting jointly with the IPHC to discuss halibut PSC limits, total mortality accounting for halibut, avenues for coordinated bycatch reduction (including incentives in the GOA and BSAI), and reconciliation of bycatch estimation between NMFS and IPHC areas and fisheries. Additionally, the Council heard from the trawl industry about the potential to accelerate deck sorting proposals designed to minimize the mortality associated with halibut bycatch in the trawl fisheries, in an effort to get a program in place for 2015. The Council supports industry efforts to reduce bycatch through all available means.

## Bering Sea Salmon Bycatch

The Council took initial review of an analysis to modify bycatch management in the Bering Sea pollock fishery for Chinook and chum salmon. The analysis summarized the impacts of broad management measures, including combined management measures for Chinook and chum salmon under pollock industry-run incentive plan agreements (IPAs), modifications to pollock seasons, modifications to management for Chinook under the IPAs, and a lower benchmark (performance standard) for Chinook bycatch under conditions of low western Alaska Chinook abundance. The Council has noted that while current bycatch levels for Chinook salmon are low compared to historical levels, there may be an opportunity for improvement in both vessel behavior and overall bycatch levels, particularly in light of the continued extremely poor stock status of Chinook salmon in western Alaska.

The analysis indicated that moving chum salmon into IPA management would likely be beneficial and provide for more comprehensive management of both species. Measures to incrementally create more stringent incentives within the IPAs for Chinook salmon were expected to be successful in reducing some additional Chinook salmon bycatch, although the actual savings would be contingent on the magnitude of the incentives and vessel-level responses. Measures to modify the pollock B- season were also expected to result in savings of Chinook salmon as they reduced the need to fish in September and October when Chinook bycatch rates are highest, however this could increase chum salmon bycatch incrementally as well as result in the potential for forgone pollock harvest, particularly at the vessel-level. Reducing the performance standard to which the IPAs are evaluated annually was expected to result in some bycatch reduction dependent upon the magnitude of the reduction and the response by IPAs overall and vessel-level behavior. Under all of the alternatives evaluated, the magnitude of the reduction in bycatch was difficult to estimate given the need to better understand the relative constraints and increased incentives created by modifying current management measures.

The Council heard public testimony from western Alaska in-river salmon users regarding the restrictions they have faced in harvesting salmon in-season in an attempt to conserve Chinook

salmon. The Council also heard from the pollock industry on their continued efforts to reduce bycatch and impose more stringent management measures on their participants voluntarily. The industry provided specific information for analysis of proposed modifications to their programs to meet the Council's intent. The pollock industry also indicated that a better approach to reducing B-season Chinook bycatch may be to shift some of the available quota to the winter ('A') season in order to avoid harvesting pollock at the latter part of the summer fishery when Chinook bycatch rates are higher.

After considerable discussion and deliberation, the Council modified the alternatives under consideration. Two major changes include:

- 1) Modification of the seasonal apportionment of pollock TAC from A to B season. Options included shifting 5-10% of the B-season quota into the A-season.
- 2) Reducing both the performance standard and the overall PSC limit (60,000 hard cap) by the same percentage reductions (25-60%) in times of low western Alaska Chinook abundance.

The Council is scheduled for final action at the April 2015 meeting. The Council will be engaging in outreach efforts to western Alaskan communities in February and March 2015 to provide information regarding the management measures under consideration, the timeline for action, and to provide a greater opportunity for rural residents to submit public comment. A schedule is under development and will include a statewide teleconference to explain the Council action, timing and schedule and answer questions from the public as well as targeted outreach meetings to various western Alaskan communities. These meetings will be integrated into specific Federal Subsistence Regional Advisory Council (RAC) meetings where possible. Participation at meetings with additional western Alaskan organizations will be considered as timing and scheduling allows. Council members and Council staff will participate in these meetings, and documentation will be made available to the public and the Council prior to final action. A schedule and overview of outreach efforts for this action will be posted to the Council website soon. The full Council motion including the purpose and need and the alternatives being considered is available on the Council's website. A revised public review draft of the analysis will be available in mid-March. Staff contact is Diana Stram.



Council adopted TACs, OFLs and ABCs (metric tons) for GOA Groundfish, 2015-2016

Species	Area	2014			Catch as of 11/8/14	2015			2016		
		OFL	ABC	TAC		OFL	ABC	TAC	OFL	ABC	TAC
Pollock <sup>a/</sup>	W (61)	n/a	36,070	36,070	13,318	n/a	31,634	31,634	n/a	41,472	41,472
	C (62)	n/a	81,784	81,784	83,049	n/a	97,579	97,579	n/a	127,936	127,936
	C (63)	n/a	39,756	39,756	42,068	n/a	52,594	52,594	n/a	68,958	68,958
	WYAK	n/a	4,741	4,741	1,317	n/a	4,719	4,719	n/a	6,187	6,187
	Subtotal	211,998	162,351	162,351	139,752	256,545	191,309	186,526	321,067	250,824	244,553
	EYAK/SEO	16,833	12,625	12,625	1	16,833	12,625	12,625	16,833	12,625	12,625
	Total	228,831	174,976	174,976	139,753	273,378	203,934	199,151	337,900	263,449	257,178
Pacific Cod	W	n/a	32,745	22,922	20,910	n/a	38,702	27,091	n/a	38,702	27,091
	C	n/a	53,100	39,825	38,429	n/a	61,320	45,990	n/a	61,320	45,990
	E	n/a	2,655	1,991	294	n/a	2,828	2,121	n/a	2,828	2,121
	Total	107,300	88,500	64,738	59,633	140,300	102,850	75,202	133,100	102,850	75,202
Sablefish	W	n/a	1,480	1,480	1,195	n/a	1,474	1,474	n/a	1,338	1,338
	C	n/a	4,681	4,681	4,706	n/a	4,658	4,658	n/a	4,232	4,232
	WYAK	n/a	1,716	1,716	1,655	n/a	1,708	1,708	n/a	1,552	1,552
	SEO	n/a	2,695	2,695	2,819	n/a	2,682	2,682	n/a	2,436	2,436
	Total	12,500	10,572	10,572	10,375	12,425	10,522	10,522	11,293	9,558	9,558
Shallow-Water Flatfish	W	n/a	20,376	13,250	243	n/a	22,074	13,250	n/a	19,577	13,250
	C	n/a	17,813	17,813	4,144	n/a	19,297	19,297	n/a	17,114	17,114
	WYAK	n/a	2,039	2,039	1	n/a	2,209	2,209	n/a	1,959	1,959
	EYAK/SEO	n/a	577	577	1	n/a	625	625	n/a	554	554
	Total	50,007	40,805	33,679	4,389	54,207	44,205	35,381	48,407	39,204	32,877
Deep-Water Flatfish	W	n/a	302	302	68	n/a	301	301	n/a	299	299
	C	n/a	3,727	3,727	271	n/a	3,689	3,689	n/a	3,645	3,645
	WYAK	n/a	5,532	5,532	5	n/a	5,474	5,474	n/a	5,409	5,409
	EYAK/SEO	n/a	3,911	3,911	4	n/a	3,870	3,870	n/a	3,824	3,824
	Total	16,159	13,472	13,472	348	15,993	13,334	13,334	15,803	13,177	13,177
Rex Sole	W	n/a	1,270	1,270	124	n/a	1,258	1,258	n/a	1,234	1,234
	C	n/a	6,231	6,231	3,382	n/a	5,816	5,816	n/a	5,707	5,707
	WYAK	n/a	813	813	1	n/a	772	772	n/a	758	758
	EYAK/SEO	n/a	1,027	1,027	-	n/a	1,304	1,304	n/a	1,280	1,280
	Total	12,207	9,341	9,341	3,507	11,957	9,150	9,150	11,733	8,979	8,979
Arrowtooth Flounder	W	n/a	31,142	14,500	1,875	n/a	30,752	14,500	n/a	29,545	14,500
	C	n/a	115,612	75,000	33,085	n/a	114,170	75,000	n/a	109,692	75,000
	WYAK	n/a	37,232	6,900	50	n/a	36,771	6,900	n/a	35,328	6,900
	EYAK/SEO	n/a	11,372	6,900	16	n/a	11,228	6,900	n/a	10,787	6,900
	Total	229,248	195,358	103,300	35,026	226,390	192,921	103,300	217,522	185,352	103,300
Flathead Sole	W	n/a	12,730	8,650	212	n/a	12,767	8,650	n/a	12,776	8,650
	C	n/a	24,805	15,400	2,284	n/a	24,876	15,400	n/a	24,893	15,400
	WYAK	n/a	3,525	3,525	1	n/a	3,535	3,535	n/a	3,538	3,538
	EYAK/SEO	n/a	171	171	-	n/a	171	171	n/a	171	171
	Total	50,664	41,231	27,746	2,497	50,792	41,349	27,756	50,818	41,378	27,759

a/ 2015-2016 W/C/WYAK Subarea amounts for pollock are apportionments of subarea ACL that allow for regulatory reapportionment.

b/ Note 1 mt moved from the northern rockfish stock EGOA allocation to EGOA "other rockfish" category.

Council adopted TACs, OFLs and ABCs (metric tons) for GOA Groundfish, 2015-2016

Species	Area	2014			Catch as of 11/8/14	2015			2016		
		OFL	ABC	TAC		OFL	ABC	TAC	OFL	ABC	TAC
Pacific Ocean Perch	W		2,399	2,399	2,063		2,302	2,302		2,358	2,358
	C		12,855	12,855	13,434		15,873	15,873		16,184	16,184
	WYAK		1,931	1,931	1,871		2,014	2,014		2,055	2,055
	W/C/WYAK	19,864			17,368	23,406	20,189	20,189	23,876	20,597	20,597
	SEO	2,455		2,124	-	954	823	823	973	839	839
	E(subtotal)				1,880		2,837	2,837		2,894	2,894
Total		22,319	19,309	19,309	17,368	24,360	21,012	21,012	24,849	21,436	21,436
Northern Rockfish <sup>a/</sup>	W	n/a	1,305	1,305	802	n/a	1,226	1,226	n/a	1,158	1,158
	C	n/a	4,017	4,017	3,410	n/a	3,772	3,772	n/a	3,563	3,563
	E	n/a	-	-	-	n/a	-	-	n/a	-	-
	Total		6,349	5,322	5,322	4,212	5,961	4,998	4,998	5,631	4,721
Shortraker Rockfish	W	n/a	92	92	73	n/a	92	92	n/a	92	92
	C	n/a	397	397	323	n/a	397	397	n/a	397	397
	E	n/a	834	834	253	n/a	834	834	n/a	834	834
	Total		1,764	1,323	1,323	649	1,764	1,323	1,323	1,764	1,323
Dusky Rockfish	W	n/a	317	317	134	n/a	296	296	n/a	273	273
	C	n/a	3,584	3,584	2,825	n/a	3,336	3,336	n/a	3,077	3,077
	WYAK	n/a	1,384	1,384	87	n/a	1,288	1,288	n/a	1,187	1,187
	EYAK/SEO	n/a	201	201	4	n/a	189	189	n/a	174	174
	Total		6,708	5,486	5,486	3,050	6,246	5,109	5,109	5,759	4,711
Rougheye and Blackspotted Rockfish	W	n/a	82	82	25	n/a	115	115	n/a	117	117
	C	n/a	864	864	536	n/a	632	632	n/a	643	643
	E	n/a	298	298	172	n/a	375	375	n/a	382	382
	Total		1,497	1,244	1,244	733	1,345	1,122	1,122	1,370	1,142
Demersal shelf rockfish	Total	438	274	274	104	361	225	225	361	225	225
Thornyhead Rockfish	W	n/a	235	235	237	n/a	235	235	n/a	235	235
	C	n/a	875	875	666	n/a	875	875	n/a	875	875
	E	n/a	731	731	218	n/a	731	731	n/a	731	731
	Total		2,454	1,841	1,841	1,121	2,454	1,841	1,841	2,454	1,841
Other Rockfish <sup>b/</sup> (Other slope)	WGOA & CGOA	n/a	-	-	-	n/a	-	-	n/a	-	-
	WYAK	n/a	1,031	1,031	940	n/a	1,031	1,031	n/a	1,031	1,031
	EYAK/SEO	n/a	580	580	53	n/a	580	580	n/a	580	580
	EYAK/SEO	n/a	2,470	200	37	n/a	2,469	200	n/a	2,469	200
	Total		5,347	4,081	1,811	1,030	5,347	4,080	1,811	5,347	4,080
Atka mackerel	Total	6,200	4,700	2,000	981	6,200	4,700	2,000	6,200	4,700	2,000
Big Skate	W	n/a	589	589	135	n/a	731	731	n/a	731	731
	C	n/a	1,532	1,532	1,150	n/a	1,257	1,257	n/a	1,257	1,257
	E	n/a	1,641	1,641	94	n/a	1,267	1,267	n/a	1,267	1,267
	Total		5,016	3,762	3,762	1,379	4,340	3,255	3,255	4,340	3,255
Longnose Skate	W	n/a	107	107	51	n/a	152	152	n/a	152	152
	C	n/a	1,935	1,935	1,031	n/a	2,090	2,090	n/a	2,090	2,090
	E	n/a	834	834	336	n/a	976	976	n/a	976	976
	Total		3,835	2,876	2,876	1,418	4,291	3,218	3,218	4,291	3,218
Other Skates	Total	2,652	1,989	1,989	1,559	2,980	2,235	2,235	2,980	2,235	2,235
Sculpins	GOA-wide	7,448	5,569	5,569	1,075	7,448	5,569	5,569	7,448	5,569	5,569
Sharks	GOA-wide	7,986	5,989	5,989	1,188	7,986	5,989	5,989	7,986	5,989	5,989
Squids	GOA-wide	1,530	1,148	1,148	92	1,530	1,148	1,148	1,530	1,148	1,148
Octopuses	GOA-wide	2,009	1,507	1,507	1,057	2,009	1,507	1,507	2,009	1,507	1,507
Total		790,468	640,675	499,274	292,544	870,064	685,597	536,158	910,895	731,049	590,161

a/ 2015-2016 W/C/WYAK Subarea amounts for pollock are apportionments of subarea ACL that allow for regulatory reapportionment.

b/ Note 1 mt moved from the northern rockfish stock EGOA allocation to EGOA "other rockfish" category.

OFL, ABC and TAC for 2015 and 2016 (12.13.2014)											
Species	Area	2014				2015			2016		
		OFL	ABC	TAC	Catch 11/29	OFL	ABC	TAC	OFL	ABC	TAC
Pollock	EBS	2,795,000	1,369,000	1,267,000	1,296,337	3,330,000	1,637,000	1,310,000	3,490,000	1,554,000	1,310,000
	AI	42,811	35,048	19,000	2,375	36,005	29,659	19,000	38,699	31,900	19,000
	Bogoslof	13,413	10,059	75	427	21,200	15,900	100	21,200	15,900	100
Pacific cod	BS	299,000	255,000	246,897	218,759	346,000	255,000	240,000	389,000	255,000	240,000
	AI	20,100	15,100	6,997	6,145	23,400	17,600	9,422	23,400	17,600	9,422
Sablefish	BS	1,584	1,339	1,339	314	1,575	1,333	1,333	1,431	1,211	1,211
	AI	2,141	1,811	1,811	818	2,128	1,802	1,802	1,934	1,637	1,637
Yellowfin sole	BSAI	259,700	239,800	184,000	152,742	266,400	248,800	149,000	262,900	245,500	149,000
Greenland turbot	BSAI	2,647	2,124	2,124	1,655	3,903	3,172	2,648	6,453	5,248	2,648
	BS	n/a	1,659	1,659	1,478	n/a	2,448	2,448	n/a	4,050	2,448
	AI	n/a	465	465	177	n/a	724	200	n/a	1,198	200
Arrowtooth flounder	BSAI	125,642	106,599	25,000	18,926	93,856	80,547	22,000	91,663	78,661	22,000
Kamchatka flounder	BSAI	8,270	7,100	7,100	6,441	10,500	9,000	6,500	11,000	9,500	6,500
Northern rock sole	BSAI	228,700	203,800	85,000	51,793	187,600	181,700	69,250	170,100	164,800	69,250
Flathead sole	BSAI	79,633	66,293	24,500	16,261	79,419	66,130	24,250	76,504	63,711	24,250
Alaska plaice	BSAI	66,800	55,100	24,500	19,320	54,000	44,900	18,500	51,600	42,900	18,500
Other flatfish	BSAI	16,700	12,400	2,650	4,397	17,700	13,250	3,620	17,700	13,250	3,620
Pacific Ocean perch	BSAI	39,585	33,122	33,122	32,379	42,558	34,988	32,021	40,809	33,550	31,991
	BS	n/a	7,684	7,684	7,435	n/a	8,771	8,021	n/a	8,411	8,021
	EAI	n/a	9,246	9,246	9,021	n/a	8,312	8,000	n/a	7,970	7,970
	CAI	n/a	6,594	6,594	6,438	n/a	7,723	7,000	n/a	7,406	7,000
	WAI	n/a	9,598	9,598	9,485	n/a	10,182	9,000	n/a	9,763	9,000
Northern rockfish	BSAI	12,077	9,761	2,594	2,346	15,337	12,488	3,250	15,100	12,295	3,250
Blackspotted/Rougeye rockfish	BSAI	505	416	416	196	560	453	349	688	555	349
	EBS/EAI	n/a	177	177	98	n/a	149	149	n/a	178	149
	CAI/WAI	n/a	239	239	98	n/a	304	200	n/a	377	200
Shortraker rockfish	BSAI	493	370	370	196	690	518	250	690	518	250
Other rockfish	BSAI	1,550	1,163	773	936	1,667	1,250	880	1,667	1,250	880
	BS	n/a	690	300	319	n/a	695	325	n/a	695	325
	AI	n/a	473	473	617	n/a	555	555	n/a	555	555
Atka mackerel	BSAI	74,492	64,131	32,322	30,946	125,297	106,000	54,500	115,908	98,137	54,817
	EAI/BS	n/a	21,652	21,652	21,184	n/a	38,492	27,000	n/a	35,637	27,317
	CAI	n/a	20,574	9,670	9,520	n/a	33,108	17,000	n/a	30,652	17,000
	WAI	n/a	21,905	1,000	242	n/a	34,400	10,500	n/a	31,848	10,500
Skates	BSAI	41,849	35,383	26,000	25,990	49,575	41,658	25,700	47,035	39,468	25,700
Sculpins	BSAI	56,424	42,318	5,750	4,720	52,365	39,725	4,700	52,365	39,725	4,700
Sharks	BSAI	1,363	1,022	125	130	1,363	1,022	125	1,363	1,022	125
Squids	BSAI	2,624	1,970	310	1,678	2,624	1,970	400	2,624	1,970	400
Octopuses	BSAI	3,450	2,590	225	400	3,452	2,589	400	3,452	2,589	400
<b>Total</b>	BSAI	<b>4,196,553</b>	<b>2,572,819</b>	<b>2,000,000</b>	<b>1,896,627</b>	<b>4,769,174</b>	<b>2,848,454</b>	<b>2,000,000</b>	<b>4,935,285</b>	<b>2,731,897</b>	<b>2,000,000</b>

Final 2014 OFLs, ABCs, and TACs from 2014-2015 final harvest specifications, as revised; total catch updated through November 29, 2014.

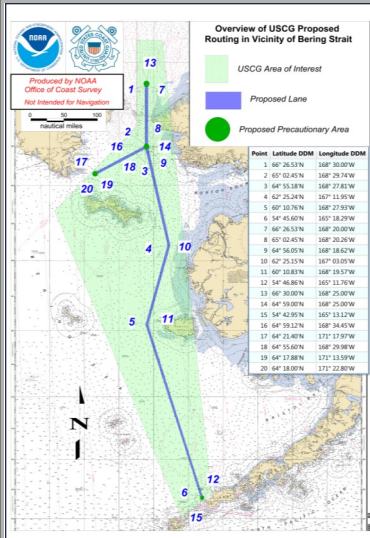
Final 2015 - 2016 OFLs and ABCs from November Plan Team results



# Arctic Port Access Route Study (PARS)

PROPOSED VESSEL ROUTE

## Coast Guard Solicits Comments



(full size on reverse)

On 05 December 2014 the Coast Guard opened a 6 month comment period on a Port Access Route Study (PARS) which originally started in 2010. The Coast Guard is conducting this study, in part, to devise ways to make commercial vessel traffic between the Arctic and Unimak Pass safer anticipating a potential increase in the amount of traffic. Based on comments received in 2010 the Coast Guard has developed a potential vessel routing system for the area. The routing measures consist of a series of 4 nautical mile wide, two-way routes coupled with precautionary areas at junction points.

The proposed routing measures are voluntary for all vessels and fishing is not prohibited within the two-way route. Vessels engaged in fishing that choose to operate within the route would be expected to operate in accordance with the Navigation Rules and not impede the passage of other vessels that are transiting via the shipping lane.

As a major user of the waterway, the Coast Guard is very interested in comments from the commercial fishing industry on this proposed route.

In development of the routing system the Coast Guard has taken into account some of the known high density fishing areas. For example, the proposed route is well to the east of the 100 fathom curve in the Bering Sea and well to the west of the Red King Crab Savings Area in Bristol Bay. Also considered were the Habitat Conservation Areas along this shipping corridor and other environmentally or ecologically important areas.

This proposed route closely mirrors current traffic patterns for traffic between Unimak Pass and the Bering Strait. If the Bering Strait commercial vessel traffic increases, we anticipate this proposed route will minimize disruptions to commercial fishing vessels because we expect commercial cargo vessels will choose to follow published and charted shipping lanes.

### Goals of Arctic PARS

- Reduce Impact on Environment
- Reduce Maritime Accidents
- Reduce Oil Spills
- Reduce Marine Mammal Strikes
- Increase Safety on Waterway.
- Increase Navigation Predictability
- Increase Efficiency of Waterway

### FULL DETAILS

All comments received to date and a chart showing the proposed two-way route can be downloaded from:

<http://www.regulations.gov>

Type "USCG-2014-0941" into search bar, and press "search".

Click "Open Docket Folder".

All comments and associated documents will be displayed.

### CONTACT INFORMATION

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Mr. David Seris

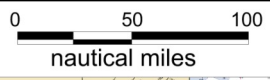
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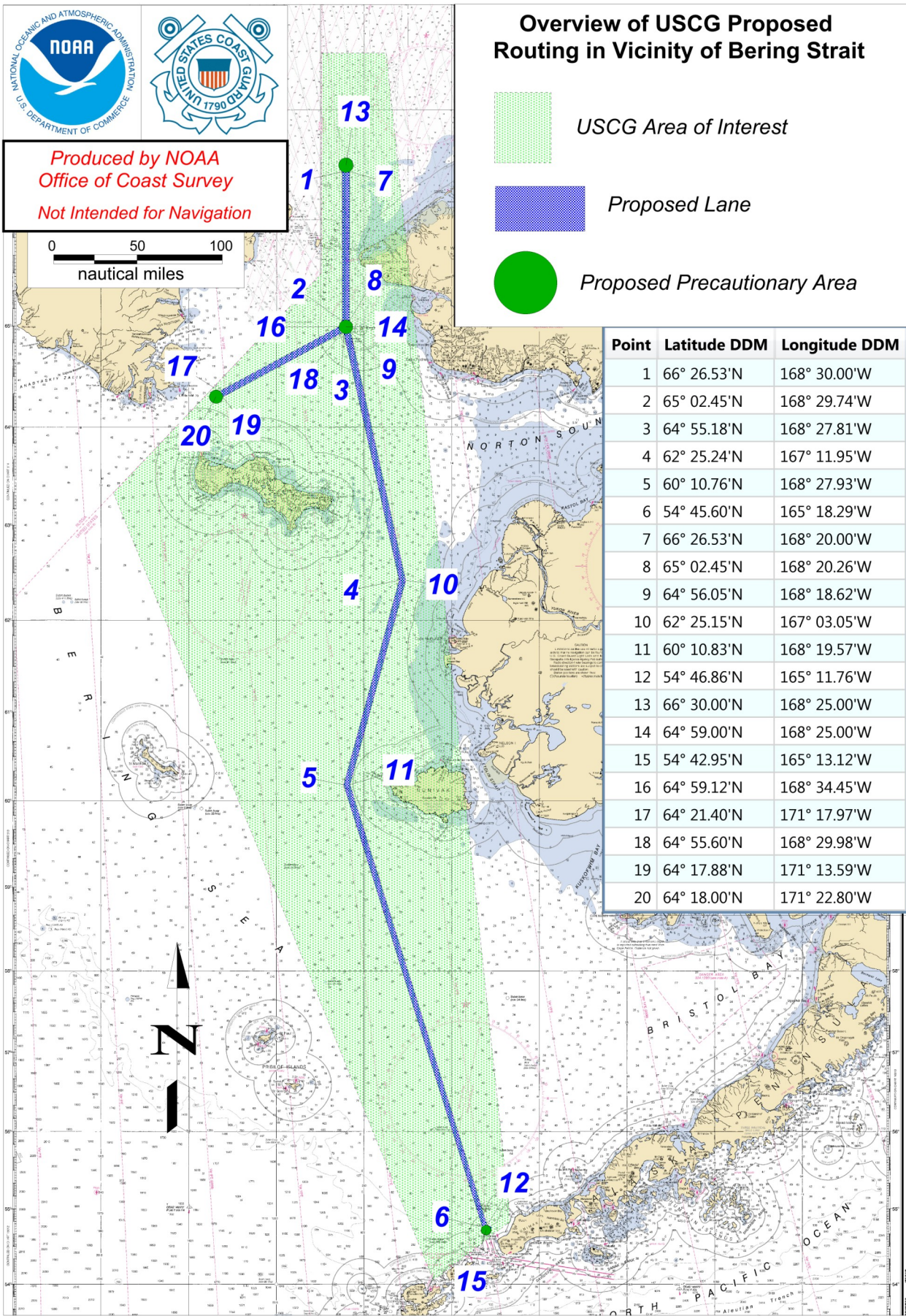


Produced by NOAA  
Office of Coast Survey  
Not Intended for Navigation



### Overview of USCG Proposed Routing in Vicinity of Bering Strait

-  USCG Area of Interest
-  Proposed Lane
-  Proposed Precautionary Area



Point	Latitude DDM	Longitude DDM
1	66° 26.53'N	168° 30.00'W
2	65° 02.45'N	168° 29.74'W
3	64° 55.18'N	168° 27.81'W
4	62° 25.24'N	167° 11.95'W
5	60° 10.76'N	168° 27.93'W
6	54° 45.60'N	165° 18.29'W
7	66° 26.53'N	168° 20.00'W
8	65° 02.45'N	168° 20.26'W
9	64° 56.05'N	168° 18.62'W
10	62° 25.15'N	167° 03.05'W
11	60° 10.83'N	168° 19.57'W
12	54° 46.86'N	165° 11.76'W
13	66° 30.00'N	168° 25.00'W
14	64° 59.00'N	168° 25.00'W
15	54° 42.95'N	165° 13.12'W
16	64° 59.12'N	168° 34.45'W
17	64° 21.40'N	171° 17.97'W
18	64° 55.60'N	168° 29.98'W
19	64° 17.88'N	171° 13.59'W
20	64° 18.00'N	171° 22.80'W