Expanded Discussion Paper on Management Measures for the Retention of Area 4A Halibut in Sablefish Pots

North Pacific Fishery Management Council April 2015

T.		Contents RODUCTION	2
2		CKGROUND	
_	2.1	A Coordinated Regulatory Process	
	2.2	Purpose and Need	
	2.3	Alternatives for Consideration.	
	2.4	Description of Action Area	
3		BLEFISH POT FISHERY	
0	3.1	Management of the Sablefish IFQ Fishery	
	3.2	Observer Coverage and Data Collection	
	3.3	Sablefish CDQ	
	3.4	Monitoring and Enforcement	
	3.5	Catch in the Sablefish Fishery	
	3.1	Halibut PSC and DMR	
	3.2	Pot specifications	
4		ERLAP IN THE SABLEFISH AND HALIBUT IFQ FISHERY	
	4.1	Overlap in seasons	
	4.2	Overlap in space and time	
	4.3	Overlap in other fishing practices	
5.		NAGEMENT MEASURES FOR INCIDENTAL CATCH OF HALIBUT	
	5.1	Applying an MRA	
	5.2	Create a maximum retainable weight ratio specific to IFQ	
6.	. ADI	DITIONAL MANAGEMENT MEASURES FOR COUNCIL CONSIDERATION	
7.		A SABLEFISH POTS	
8.	. EXE	EMPTED FISHING PERMIT	27
9.	. COI	NTRIBUTORS	28
	1	IX 1: NPFMC, December 2012. Discussion paper on IFQ Program Proposal to Allow IFQ h to be retained in the IFQ sablefish pots IX 2: Council letter to the IPHC in response to December 2012 discussion paper	alibut in Area 4A

APPENDIX 3: NPFMC, April 2013. Expanded discussion paper on IFQ Program Proposal to Allow IFQ halibut in Area 4A to be retained in the IFQ sablefish pots

APPENDIX 4: Council letter to the IPHC in response to April 2013 discussion paper,

APPENDIX 5: IPHC Press Release report from January meeting, February 2014

APPENDIX 6: Council letter to the IPHC in response to IPHC report, February 2014

1. INTRODUCTION

This document evaluates management measures that the Council could implement in tandem with the International Pacific Halibut Commission (IPHC) to allow retention of incidentally caught halibut in pot gear fishing for sablefish in the area where the Bering Sea and Aleutian Island (BSAI) Federal regulatory areas overlap with IPHC regulatory Area 4A. Currently, the sablefish individual fishing quota (IFQ) fishery in the BSAI is prosecuted using hook-and-line gear and pot gear. However, halibut may be retained only with hook-and-line gear. Therefore, halibut caught in pot gear must be discarded. Participants have testified that discard of halibut caught in pot gear is being depredated by whales. The purpose of retaining incidentally caught halibut in pots fishing for sablefish is to better utilize the halibut resource provided the sablefish IFQ holders onboard the fishing vessel holds sufficient sablefish IFQ or CDQ and halibut IFQ. Before Area 4A halibut could be retained with sablefish pots (either single or longline, as allowed under Federal regulations), National Marine Fisheries Service (NMFS) and IPHC would need to adopt regulatory changes to allow harvest of halibut IFQ in pot gear in Area 4A.

The objective of this document is to aid the Council in the identification of a purpose and need statement and alternative management measures that the Council may establish in conjunction with the IPHC choosing to allow the retention of incidentally caught halibut in pot gear in Area 4A. This discussion paper is expanded in analysis to aid discussion and solicit feedback on additional information needed to establish a Preferred Alternative (PA).

This discussion paper is presented to the Council concurrently with a final action to allow sablefish longline pot gear in some or all areas of the GOA. As with this discussion on Area 4A, final action in the GOA will rely on both the Council and IPHC allowing halibut IFQ retention in pot gear. A section in this discussion paper highlights the precedent-setting impacts of a Council decision in Area 4A and the relationship of these actions moving forward.

2. BACKGROUND

2.1 A Coordinated Regulatory Process

The proposed action to allow retention of incidentally caught halibut with pot gear in Area 4A during the BSAI sablefish IFQ and Community Development Quota (CDQ) fishery would affect management of halibut IFQ and sablefish IFQ/ CDQ fisheries. The Pacific halibut fishery off Alaska is managed by the NMFS under the authority of the Northern Pacific Halibut Act of 1982, and in coordination with annual fishery management measures adopted by the IPHC under the Convention between the United States and Canada for the Preservation of the Halibut Fishery of the Northern Pacific Ocean and Bering Sea. The IPHC promulgates regulations governing the Pacific halibut fishery under the Convention, and regulations that are not in conflict with approved IPHC regulations may be recommended by the Council. Council action must be approved and implemented by the Secretary of Commerce (Secretary).

The groundfish fisheries, including the sablefish fishery, in the exclusive economic zone of the BSAI are managed by NMFS under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). Under the authority of the Magnuson-Stevens Act, the Council developed the Fishery Management Plan for Groundfish of the Bering Sea and Aleutian Islands Management Area (BSAI FMP) and is authorized to prepare and submit to the Secretary for approval any necessary amendments to the BSAI FMP. Regulations implementing the BSAI FMP and general regulations governing groundfish are implemented by NMFS after Council review and Secretarial approval.

Therefore, coordination between the IPHC, the Council, and NMFS has been and will continue to be key in considering complimentary regulatory amendments.¹

The proposal for action was originally submitted to the IPHC for consideration at its January 2009 meeting. The IPHC forwarded the proposal to the Council for initial consideration. The Council produced two discussion papers about the general prospect of allowing the retention of halibut in sablefish pots in Area 4A. The first discussion paper was produced by staff in December 2012 (Appendix 1). This discussion paper included the IFQ Implementation Committee's comments and recommendations about the proposal. It provided background information on the existing BS and AI pot fishery for sablefish (IFQ and CDQ). Based on the December 2012 discussion paper and several points the IPHC made in their 2009 letter accompanying the proposal, the Council identified four additional topics as necessary information to obtain before it would decide whether to recommend the action to the IPHC. The Council informed the IPHC of this progress in a letter sent December, 2012 (Appendix 2).

Consequently, an April 2013 discussion paper (Appendix 3) provided information on the four requests: 1) determine whether there is overlap in the spatial and/or temporal distribution of halibut longline and sablefish pot fishing in the portion of Area 4A to which the proposal would apply; 2) discuss the potential need for several gear retrieval and specification regulations;³ 3) Discuss the physical and market conditions of halibut incidentally caught in sablefish pots; and 4) provide a discussion of the experiences and lessons learned by the industry and managers in Areas 2A and 2B from allowing the retention of halibut incidentally caught in sablefish pots, including retention limits. Additionally, the discussion paper included brief sections on setting a maximum retainable amount (MRA), discard mortality rate (DMR), and the role of observer coverage.

In response to this discussion paper, the Council sent a letter to the IPHC in September 2013 recommending the proposed action. In the letter (included as Appendix 4) the Council noted that they may consider management measures such as the implementation of a DMR and/ or establishing an MRA of halibut IFQ that could be legally retained as a proportion of the retained sablefish IFQ catch.

The IPHC responded to the Council's letter in their presentation to the Council at the February 2014 Council meeting (the corresponding IPHC written report included as Appendix 5). The IPHC supported the concept of halibut retention in principle and directed the IPHC's staff to assist with the Council's continued development of an analysis provided that the Council additionally analyzes methods to 1) limit the directed fishing for halibut using pot gear, 2) consider appropriate methods for the timing of pot removal, and 3) mark buoys with radar reflectors. Their report indicated that a change in IPHC's policy to allow halibut retention in pot gear would be conditional on their agreement with the Council's direction for additional management measures.

Following the February 2014 Council meeting, the Council sent a letter to IPHC recognizing a future analysis would consider methods to limit retention of halibut IFQ with pot gear in Area 4A to incidental catch during the BSAI sablefish IFQ/CDQ fishery and not lead to a directed pot fishery for halibut (this

¹ The State of Alaska, Alaska Department of Fish and Game (ADF&G) has one primary regulation pertaining to commercial take of halibut that essentially states halibut may not be taken or possessed for commercial use in a way that is inconsistent with IPHC regulation. Therefore, depending on other management measures the Council considers, ADF&G regulations might not need to be amended.

² http://www.npfmc.org/wp-content/PDFdocuments/halibut/4AhalibutPots_dp_1212.pdf

³ Including a) require the removal of sablefish pots from the fishing grounds upon completion of the harvest of the vessel's sablefish IFQ, and at the end of the season; b) require radar reflectors or other gear markers at both ends of a longline pot string; c) prohibit pot sharing; d) prohibit the modification of sablefish pot tunnels.

letter is Appendix 6). Therefore, the next step in the regulatory conversation is for the Council to consider what, if any management measures should be analyzed if the IPHC were to allow incidentally caught halibut IFQ to be retained with pot gear in Area 4A during the BSAI sablefish IFQ/CDQ fishery. This discussion paper is not focused on reconsidering the Council's support for allowing this retention, but instead operates under the conditional clause that the management measures considered would be designed to limit retention of halibut IFQ with pot gear to incidental catch in the BSAI sablefish fishery. Based on the complimentary nature of Council and IPHC actions, it is suggested that if this discussion paper moves forward for analysis, the Council makes their intentions clear at Initial Review by establishing a Preferred Alternative (PA). That PA could then be considered by the IPHC in their January annual meeting.⁴ Once IPHC is aware of the Council's intentions, they may choose to allow retention of halibut IFQ in Area 4A during the pot fishery for sablefish conditional on the implementation of the Council's PA of management measures. Should action continue to move forward, the Public Review Draft of the analysis would then incorporate amendments to Federal regulations that would be consistent with any changes implemented by IPHC annual management measure regulations.

2.2 Purpose and Need

The Council has not yet established a purpose and need; however, past discussions have explained the call for action.

Pot fishing in the sablefish IFQ fishery has increased from 2000 through 2007 in the BSAI as a response to depredation of hook-and-line gear catches by killer whales. This shift in gear usage has reduced mortality of sablefish due to whale depredation, but testifiers have spoken to the inefficiencies this has created for the halibut resource caught incidentally in sablefish pots. Regulations prohibit fishing for halibut IFQ in Alaska using any gear other than hook-and-line gear, therefore all halibut caught in Area 4A with pot gear in the BSAI sablefish IFQ or CDQ fisheries are designated as prohibited species catch (PSC) and must be discarded. Industry is concerned that areas prime for sablefish fishing in BS and AI have a higher incidence of killer whales and therefore the mortality rate of discarded halibut PSC could be increasing due to whale depredation of halibut after they are released into the sea. The industry requested allowing BSAI sablefish IFQ holders who also hold halibut IFQ in Area 4A be able to retain incidental amounts of legal-sized halibut with pot gear (single or longline) where Area 4A halibut and BS and AI sablefish regulatory areas overlap (see Figure 1). This would promote efficiency in the utilization of sablefish and halibut fishery resources, as well as potentially minimizing halibut PSC and the mortality associated with current regulatory discards.

In order to permit the retention of halibut IFQ caught incidentally in Area 4A with pot gear in the BSAI sablefish IFQ or CDQ fishery, the IPHC would need to endorse the Council's management measures and develop and approve complimentary regulations. In February 2014, the IPHC stated its desire to only allow the incidental harvest of Area 4A halibut to be retained in the BSAI sablefish pot fishery, and that it was not interested in introducing pot gear for the targeting of halibut in Area 4A. This determination is foremost a policy call. The IPHC has stated that it does not oppose the retention of Area 4A halibut IFQ in pot gear from a biological perspective. However, if the IFQ halibut harvest was significant, IPHC would need to collect length frequency information from halibut caught in pot gear to estimate a selectivity curve for stock assessment purposes. Nevertheless, the primary reason the IPHC supports only the incidental catch of halibut IFQ with pot gear in the overlapping regulatory areas is to preserve the

-

⁴ Therefore, if the action moves forward as expeditiously as possible, the Council would need to indicate a PA by at least the December 2015 Council meeting for IPHC consideration in January 2016.

⁵ This information was conveyed in an IPHC News Release provided to the Council and corresponding presentation from Dr. Bruce Leaman during B reports at the February 2014 Council meeting (Appendix 6).

current characteristics of the IFQ halibut fleet. The IPHC and their advisory bodies anticipated that introducing this new gear type could result in targeting halibut which could have significant impacts to the existing fishing fleet. Gear conflicts could arise from pot gear pre-empting fishing grounds used by the hook-and-line fisheries, and disadvantage smaller vessels that are unable to switch from hook-and-line gear to pot gear.

Therefore, the Council has a need to consider management measures it may adopt in order to ensure that the halibut IFQ retained during the harvest of sablefish IFQ/CDQ with pot gear remain at incidental catch levels. In addition, the IPHC highlighted two other management measures during review of previous discussion papers 1) consider appropriate methods for the timing of pot removal, and 2) require the marking of buoys with radar reflectors. Finally, identification of management measures is also necessary for NMFS to recommend addition and revision of Federal regulations that would be consistent with IPHC regulations.

2.3 Alternatives for Consideration

The Council has not yet established alternatives or options for this action. The past Council discussion papers have centered around whether to support the decision to allow retention of halibut in pot gear. The following alternatives and options suggest a way to organize provisions that have been discussed by the IPHC and Council in past communications.

• *Alternative 1, No Action*

Past discussions from the Council, IPHC and IFQ Implementation Committee have all signaled that taking no action is not the preferred alternative. However, if the Council and the IPHC do not agree on the necessary management measures to allow retention of halibut in pot gear, then the status quo would be maintained.

• Alternative 2, Allow the retention of legal-sized halibut incidentally caught in pot gear fishing for sablefish where Area 4A halibut and BSAI sablefish regulatory areas overlap, provided the participant holds sufficient BSAI sablefish IFO/CDO and Area 4A halibut IFO

(The following elements would not be mutually exclusive)

- o Element 1: Limit the retention of halibut
 - Option 1: Establish a halibut MRA
 - Sub-options: Specify an MRA
 - Option 2: Create a maximum retainable weight ratio specific for IFQ
 - Sub-options: Specify maximum retainable weight ratio
 - Sub-option: Update the maximum retainable weight ratio annually
- o Element 2: Require marking of pot gear buoys with radar reflectors
- o Element 3: Require removal of pot gear

The primary action would consistently define "IFQ halibut" in Federal regulations and IPHC regulations. Element 1 and Options would identify if and at what level an MRA or a new management tool specific to the IFQ fishery would be set to ensure the halibut IFQ fishery in Area 4A is incidental catch only. Option

2 also includes a Sub-option that would allow the maximum retainable weight ratio to be updated annually. Elements 2 and 3 identify two other management measures the IPHC was interested in further investigating should the Council recommend Alternative 2. If agreed upon by the Council and the IPHC, any regulatory and BSAI FMP amendments resulting from the adoption of Alternative 2 would be implemented in concurrence with amendments to IPHC regulations.

2.4 Description of Action Area

The area that would be affected by this proposal is limited to the area where IPHC regulatory Area 4A overlaps with the BSAI groundfish regulatory areas (Figure 1). The IPHC staff has recommended and the IFQ Implementation Committee concurred, that the proposed action not be expanded beyond this area. The action would allow sablefish IFQ and CDQ holders in the BSAI area that overlaps with Area 4Awho also hold sufficient Area 4A halibut IFQ to retain halibut when using pot (single or longline) gear.

Area 4A overlays Area 610, the Western Gulf (WG), Area 541 (AI), and multiple BS areas, as demonstrated in Figure 1. Currently, pot gear is not legal for the area of the WG (most of Area 610) that overlaps Area 4A. Allowing halibut retention in Area 4A would not apply to anyone fishing pot gear in that area.⁶ This action also would overlap with some state waters.

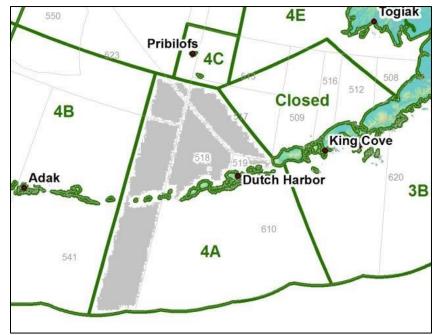


Figure 1 Overlap of the IPHC halibut regulatory areas with BSAI groundfish (including sablefish) regulatory areas

Source: NOAA NMFS

 $^{\rm 6}$ See Section 8 for more discussion about the current sablefish pot proposal for GOA.

3. SABLEFISH POT FISHERY

3.1 Management of the Sablefish IFQ Fishery

Sablefish in the BS, AI, and GOA are considered to be of one stock. The resource is managed by region in order to distribute exploitation throughout its range. Allocation of the Total Allowable Catch (TAC) is set by gear group and varies by management region. Amendment 15 to the BSAI FMP allocated the sablefish quota by gear type:

- 50 percent to fixed gear and 50 percent to trawl in the eastern BS, and
- 75 percent to fixed gear and 25 percent to trawl gear in the AI, effective 1990.

The IFQ management program for hook-and-line vessels began in 1995 and was established by Amendment 15 to the BSAI FMP. The onset of this program provided a dramatic seasonal shift from the 10 day derby season that occurred 1994, to an eight month rationalized season. The IFQ Program is a catch share fishery that issued quota shares to individuals based on sablefish and halibut landings made from 1988-1990. Since the implementation of the IFQ Program, the number of longline vessels with IFQ sablefish harvests has experienced a substantial anticipated decline from 616 in 1995 to 362 in 2011. This decrease was expected as shareholders consolidated their holdings and fished them off fewer vessels to reduce costs. According to the Alaska Sablefish Stock Assessment and Fishery Evaluation (SAFE) report (2014), IFQ management has increased fishery catch rates and decreased the harvest of immature fish. Catching efficiency (the average catch rate per hook for sablefish) increased 1.8 times with the change from an open-access to an IFQ fishery. The change to IFQ also decreased harvest and discard of immature fish which improved the chance that these fish will reproduce at least once. Therefore, the stock can provide a greater yield under IFQ management at the same target fishing rate because of the selection of older fish.

Pot fishing in the IFQ fishery is not allowed in the GOA but has been legal in the BSAI regions for nearly the duration of the IFQ program. Amendment 14 to the GOA Fishery Management Plan banned the use of pots for fishing for sablefish in the GOA, effective 18 November 1985, starting in the Eastern Gulf (EG) in 1986, in the Central Gulf (CG) in 1987, and in the WG in 1989. An earlier regulatory amendment was approved in 1985 for 3 months (27 March - 25 June 1985) until Amendment 14 was effective. A regulatory amendment in 1992 prohibited longline pot gear in the BS (57 FR 37906). Effective September 12, 1996 the prohibition on sablefish longline pot gear use was removed for the BS, except from June 1 to 30 to prevent gear conflicts with trawlers during that month. Sablefish longline pot gear is allowed in the AI. While there is overlap between the WG for IFQ sablefish fishery and an Area 4A halibut fishery, pot gear is not currently legal for IFQ sablefish fishing in the WG. Therefore, this proposed action does not apply to holders of WG sablefish IFQ at this time, regardless of whether they hold Area 4A halibut IFQ.

Legal-sized, incidentally caught halibut are required to be retained in the hook-and-line sablefish fishery if any permit holder on the vessel has unharvested halibut IFQ. Thus, sablefish IFQ hook-and-line fishing is exempt from PSC limits. The procedures NMFS uses to verify that sufficient halibut IFQ are held by a permit holder onboard a hook-and-line vessel fishing sablefish could be used for a pot vessel as well. Since IFQ are specific to regulatory area and vessel size category, the amount of halibut retained and landed is crosschecked against the IFQ permit database to verify the permit holder's IFQ balance is sufficient for that area and vessel size category. In addition, OLE can reference information in NMFS logbooks and IPHC logbooks at the time of landing.

3.2 Observer Coverage and Data Collection

Under the restructured Observer program, all catcher vessel and catcher/processor (CP) vessels in the groundfish and halibut fisheries off Alaska are assigned to one of two observer coverage categories (1) a full coverage category, or (2) a partial coverage category.

The full observer coverage category includes:

- Catcher/processors (with limited exceptions);
- Motherships;
- Catcher vessels while participating in programs that have transferable prohibited species catch (PSC allocations as part of a catch share program;⁷
- Inshore processors when receiving or processing BS pollock.

Partial observer coverage category includes:

- Catcher vessels designated on a Federal Fisheries Permit when directed fishing for groundfish in federally managed or parallel fisheries, except those in the full coverage category;
- Catcher vessels when fishing for halibut IFQ or sablefish IFQ (there are no PSC limits for these fisheries);
- Catcher vessels when fishing for halibut CDQ, fixed gear sablefish CDQ, or groundfish CDQ using pot or jig gear (because any halibut discarded in these CDQ fisheries does not accrue against the CDQ group's transferable halibut PSC allocation);
- Catcher/processors that meet criteria that allows assignment to the partial coverage category;
- Shoreside or stationary floating processors, except those in the full coverage category.

Based on these categories, participants of the IFQ fisheries fall into both the full and partial observer coverage categories. As CPs, the Freezer Longliner (FLL) vessels that prosecute an IFQ fishery are required to be in the full observer coverage category. In addition, as can be seen in Table 1, two pot CPs have operated in the BSAI between 2009 and 2013. The majority of vessels fishing for IFQ species are catcher vessels; therefore, regardless of vessel length, gear type, or statistical area fished they are part of the partial observer coverage category.

⁷ In February 2015, the Council approved an exception to this rule by allowing vessels less than or equal to 46 ft LOA using hook-and-line gear to fish Pacific cod CDQ to be placed in the partial observer coverage category.

Table 1 Vessel count in the fixed gear BSAI sablefish IFQ/CDQ fishery by subarea and by sector, 2009 through 2013^a

		BS	SAI	BS		Al	
	Year	CP	CV	CP	CV	CP	CV
	2009	11	42	7	27	8	25
	2010	16	44	11	26	11	26
Hook-and-line	2011	12	52	9	35	7	30
gear	2012	11	43	8	28	6	24
	2013	7	39	4	26	5	23
	Total	23	75	16	52	15	48
	2009		10		9		2
	2010		7		7		1
Dot goor	2011	2	7	1	7	2	2
Pot gear	2012		5		5		2
	2013		4		4		2
3.0	Total	2	13	1	13	2	4

^a Some of the CP also operate as CVs, therefore adding vessel counts across the subareas would not constitute unique vessels Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN through Comprehensive_FT

Under the 2015 Annual Deployment Plan,⁸ the partial coverage category consisted of three trip-selection "pools" with differing requirements. Trip-selection refers to the selection of the fishing trip as the sampling unit: For the purpose of observer deployment, the partial coverage deployment strata are defined as follows:

- 1) No selection: The "no selection" pool is comprised of catcher vessels less than 40 ft length overall (LOA), or vessels fishing with jig gear, which includes handline, jig, troll, and dinglebar, troll gear, or vessels that are conditionally released due to life raft capacity. In addition, vessels selected by NMFS to participate in the EM Cooperative Research will be in the no selection pool while participating in such research.
- 2) Small vessel trip-selection: This pool is comprised of catcher vessels that are fishing hook-and-line or pot gear and are greater than or equal to 40 ft, but less than 57.5 ft in LOA. The vessels in this stratum were in the "vessel-selection" pool in the 2013 and 2014 ADPs.
- 3) Large vessel trip-selection: This pool comprises three classes of vessels: 1) all catcher vessels fishing trawl gear, 2) catcher vessels fishing hook-and-line or pot gear that are also greater than or equal to 57.5 ft LOA, and 3) catcher-processor vessels exempted from full coverage requirements (50 CFR 679.51(a)(2)(iv)). This stratum was termed the "trip-selection" pool in the 2013 and 2014 ADPs.

Vessels that fish for sablefish in the BS and AI are classified in all three of these categories. Table 2 illustrates participating vessel's LOA by area and gear type. Between 2009 and 2013, hook-and-line vessels fishing sablefish IFQ would have fallen into all partial observer coverage pools specified by the 2015 Annual Deployment Plan. As can be seen in Table 2, only two vessels less than 60 ft LOA operated

⁸ For more information on the partial observer coverage category see the 2015 Annual Deployment Plan: http://alaskafisheries.noaa.gov/sustainablefisheries/observers/draft2015adp.pdf

pot gear in the BS or AI sablefish IFQ/CDQ fisheries. This is understandable as pot gear can be large and requires deck space. Including those two vessels, all catcher vessels that use pot gear to fish for sablefish IFQ, would have fallen into the large vessel trip-selection pool.

Table 2 BSAI vessel count in the sablefish IFQ/CDQ fishery by gear type and vessel length, 2009-2013

Hook-and-line gear					
Ft LOA	Al	BS	BSAI		
<40	3	6	8		
41-50	6	9	11		
51- 60	30	28	42		
>60	29	30	43		
	Pot	gear			
Ft LOA	Al	BS	BSAI		
<40					
41-50					
51- 60		2	2		
>60	6	12	13		

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN through Comprehensive_FT

By categorization in the "large vessel trip-selection pool", pot vessels are able (and, given the low participation, likely) to be selected for observer coverage. In 2013, three of the four vessels that used sablefish pot gear in the BSAI carried observers on five of the 32 trips that were reported. This percent of observed trips is down from the previous three years which averaged 33 percent observed.

Table 3 Observer coverage in the BSAI sablefish IFQ pot fishery, 2009-2013

Year	Observed trips	Observed vessels	Total trips	Total vessels	Percent observed
2013	5	3	32	4	16%
2012	14	5	46	5	30%
2011	24	9	64	9	38%
2010	17	7	54	7	31%
2009	17	9	97	10	18%

Source: ADFG/CFEC Fish Tickets and Observer records, data compiled by AKFIN through Comprehensive_FT and Comprehensive_OBS

3.3 Sablefish CDQ

The Western Alaska CDQ Program allocates a percentage of all BSAI quotas for groundfish, prohibited species, halibut, and crab to eligible communities. The purpose of the CDQ Program is to (i) to provide eligible western Alaska villages with the opportunity to participate and invest in fisheries in the BS and AI Management Area; (ii) to support economic development in western Alaska; (iii) to alleviate poverty and provide economic and social benefits for residents of western Alaska; and (iv) to achieve sustainable and diversified local economies in western Alaska.

Amendment 15 to the BSAI FMP allocated 20 percent of the fixed gear allocation of sablefish to a CDQ reserve for the BS and AI. Table 4 illustrates the allocation of BS and AI sablefish CDQ by group as a percentage of the whole CDQ allocation and in terms of the 2014 sablefish TAC.

Table 4 CDQ group allocations of sablefish in the BS and Al for the 2014 season

		2014 TAC	Program Allocation	APICDA	BBEDC	CBSFA	CVRF	NSEDC	YDFDA
Established	BS Sablefish		20.00%	15.00%	20.00%	16.00%	0.00%	18.00%	31.00%
allocations	AI Sablefish		20.00%	14.00%	19.00%	3.00%	27.00%	23.00%	14.00%
2014 season	BS Sablefish	670	134	20.1	26.8	21.4	0	24.1	41.5
(mt)	AI Sablefish	1,358	272	38	51.6	8.1	73.3	62.5	38

^a The CDQ groups include: Aleutian Pribilof Island Community Development Association (APICDA), Bristol Bay Economic Development Corporation (BBEDC), Central Bering Sea Fisherman's Association (CBSFA), Coastal Villages Region Fund (CVRF), Norton Sound Economic Development Corporation (NSEDC), and Yukon Delta Fisheries Development Association (YDFDA).

Source: NOAA NMFS, prepared 1/2/2014, Available at: http://alaskafisheries.noaa.gov/cdq/allocations/annualmatrix2014.pdf

Consistent with the IFQ fishery, pot gear is permitted for the directed sablefish CDQ fishery in the BS and AI. At this point, there does not appear to be management concerns for extending any potential provisions established in this action to the sablefish CDQ fishery in the overlapping Areas of the BS and AI. There is no halibut CDQ established in Area 4A, therefore this inclusion would be limited to retention of Area 4A halibut IFQ in sablefish CDQ pot gear, if a permit holder had an available amount of Area 4A halibut IFQ, and including all other management provision that may be established in this package (e.g. within an MRA).

The sablefish CDQ pot fishery is not a large sector. As can be seen in Table 5, there have been three to four vessels landing sablefish CDQ with pot gear and generally these are the same vessels that are prosecuting the sablefish IFQ fishery with pot gear.

Table 5 Vessel count in the BSAI IFQ and CDQ sablefish fishery by gear type, 2009-2013

	ı				
	IFQ		CDQ ^a		
Year	Subarea	Hook-and-line	Pot	Hook-and-line	Pot
2009	Al	31	2	6	
	BS	32	9	5	3
2009 BSA	/	49	10	11	3
2010	Al	37	1	5	
	BS	36	6	1	4
2010 BSA	N .	60	7	5	4
2011	Al	34	4	8	
	BS	77	8	2	3
2011 BSA	N .	59	9	10	3
2012	Al	27	2	5	
	BS	35	5	1	3
2012 BSAI		50	5	6	3
2013	Al	27	2	5	1
	BS	29	4	1	3
2013 BSA	NI .	43	4	6	4

^a Many of the vessels that fish sablefish CDQ, also fish sablefish IFQ, therefore adding IFQ and CDQ vessels would not constitute unique vessels

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN through Comprehensive_FT

3.4 Monitoring and Enforcement

According to §679.42(k)(1) any vessel operator who fishes for sablefish in the BS or AI IFQ regulatory areas must possess a transmitting vessel monitoring unit (VMS) while fishing for sablefish. This regulation would not change.

IPHC regulations also require any vessel greater than 26 ft LOA that is retaining commercially harvested halibut to keep an IPHC approved logbook and to log their halibut harvests. Federal logbooks are required on vessels greater than 60 ft LOA in the hook-and-line sablefish fishery and require the weight and disposition of incidentally caught halibut and the permit number of a person onboard who holds the IFQ.

3.5 Catch in the Sablefish Fishery

Harvest rates of sablefish TAC have been historically high in the GOA; however, TAC of sablefish IFQ has generally been left in the water in the BS and AI areas. For example, in 2014, only 48 percent of the AI TAC was landed and only 36 percent of the BS TAC was landed for sablefish IFQ. Many factors contribute to the harvest levels being below the TAC for these fisheries. In general, the BS and AI areas can be extremely costly areas to prosecute a fishery; both in terms of accounting costs and the opportunity costs associated with the prosecution of other fisheries. For economic and safety reasons, sablefish IFQ vessels fishing in the BS or AI tend to be large (as demonstrated in Table 2). Variable costs like fuel will be greater in this case and require the potential of significant revenue to justify the expense of the trip.

In addition, stakeholders have identified several other factors that they understand to be contributing to the less than-full prosecution of the sablefish IFQ TAC in the BS and AI. This includes the vessel IFQ cap; a regulation which establishes an annual limit to the amount of sablefish IFQ a vessel can prosecute based as a percent on that year's TAC. The purpose of the vessel IFQ cap is to prevent over-consolidation and help maintain some of the characteristics of the sablefish fishery before rationalization. Some vessel operators have testified that vessel IFQ caps have been a constraining factor in additional prosecution of the sablefish IFQ fishery.

Some stakeholders have also stated that the full observer coverage requirement for vessel operating as a CP for any part of the year and regardless of LOA, constrains their ability to harvest IFQ. The vertical integration of on-board processing is an important part of the business plan for some vessels fishing sablefish IFQ in the BSAI, particularly those using hook-and-line gear. A vessel may operate as a CP for the prosecution of the sablefish IFQ fishery in order to make a trip economical. However, even if they operate as a CV for the remainder of the year, under current regulations that vessel is still required to have full observer coverage. Carrying an observer is an additional expense for the vessel, both in terms of physical space, as well as accounting costs for food and on-board accommodations. Not wanting to absorb the additional expense of full observer coverage for the remainder of the year, some IFQ holders may leave BS or AI sablefish quota share unharvested for this reason.

Table 6 Fixed gear sablefish IFQ allocation and harvest by area for 2014

Sablefish Area	Vessel Landings	Area IFQ TAC (pounds) ^a	Total Harvest (pounds)	Percent Harvested
Al	77	2,394,196	1,148,967	48
BS	100	1,181,666	426,211	36
CG	605	8,256,227	8,226,952	100
SE	538	5,941,397	5,919,469	100
WG	171	2,610,246	2,441,310	94
WY	207	3,295,877	3,252,008	99
Total	1,698	2,264,692	23,679,609	90

^a Halibut weights are in net (headed and gutted) pounds

Source: NOAA NMFS/ RAM allocation and landing report, prepared 1/2/2014, Available at: http://alaskafisheries.noaa.gov/ram/ifq/14ifqland.pdf

The use of pot gear in the BS and AI for the sablefish fishery has significantly changed since it was established as a legal gear type for these areas in 1996. The BS has seen a drastic and consistent increase in the percent of the total harvest prosecuted by pots (Figure 2) in response to killer whale depredation. In contrast, the AI saw a large spike between 2004- 2007, but pot use in the sablefish IFQ/CDQ fisheries has dropped backed to historical rates in recent years. Given that an average of two vessels prosecuted the AI sablefish IFQ/CDQ fishery with pot gear from 2009 to 2013 (see Table 1), AI "trends" could be the result of one or two vessels leaving the pot fishery or a small increase in hook-and-line vessel activity during that period.

Table 7 Sablefish IFQ/CDQ catch (mt) in the Aleutian Islands and the Bering Sea by gear type from 1991-2013

BSAI ^b						
Year	Pot	Trawl	Longline	Total		
1991-1999 ^a	11	262	1,749	2,022		
2000	143	316	1,331	1,790		
2001	217	375	1,330	1,921		
2002	487	307	1,442	2,236		
2003	679	225	1,177	2,082		
2004	819	308	852	1,979		
2005	1283	377	881	2,540		
2006	1082	136	1,002	2,221		
2007	1511	120	707	2,338		
2008	933	257	850	2,040		
2009	635	166	1,213	2,014		
2010	511	104	1,235	1,849		
2011	546	91	1,092	1,729		
2012	509	241	1,197	1,948		
2013	439	191	1,066	1,696		

^a Catches in 1991-1999 are averages.

b Combined to protect years with confidential harvest information Source: NPFMC AK Sablefish SAFE, Catch as of October 24, 2014

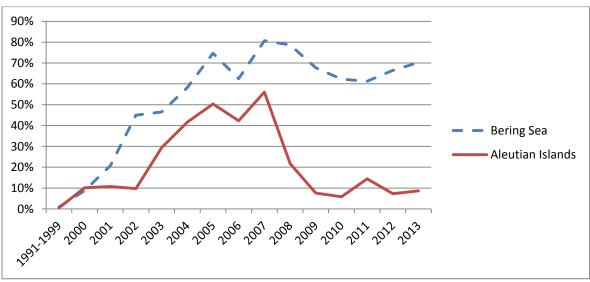


Figure 2 The percent of sablefish IFQ/CDQ caught in pot gear and all fixed gear in the BS and AI, 1991 through 2013

Source: NPFMC AK Sablefish SAFE, Catch as of October 24, 2014

3.1 Halibut PSC and DMR

Although halibut catch with pot gear is currently considered to be halibut PSC and required to be discarded, the Council and NMFS exempt pot and jig gear from halibut PSC limits. In other trawl and non-trawl sectors, halibut PSC is monitored by NMFS management to ensure PSC limits are not exceeded. A discard mortality rate (DMR) is applied to this halibut PSC estimated for each trip.

Halibut DMRs in the Alaskan groundfish fisheries are estimated from viability (injury and condition) data collected by fishery observers. These data are analyzed each year by IPHC staff. The results form the basis for recommended DMRs to be used for in-season estimation and management of halibut bycatch mortality and by groundfish Plan Teams, SSC, AP, and ultimately established in annual groundfish Harvest Specifications recommendations each December by the Council.

As can be seen in Table 8, the IPHC recommended a DMR for the BSAI sablefish CDQ pot fishery, but not for the BSAI sablefish non-CDQ pot fishery.

⁹ Although pot and jig gear are exempt from halibut PSC limits, the IHPC Report of Assessment and Research Activities (RARA), does account for this take of halibut in the stock assessment. The RARA has applied an Area 4 groundfish pot estimate (Pacific cod and sablefish) of halibut bycatch mortality of 2 to 17 thousand pounds (net weight) between 2005 and 2014.

Table 8 Recommended Pacific halibut discard mortality rates for 2013-2015 CDQ and non-CDQ groundfish fisheries off Alaska

Bering Sea/Aleutians			Gulf of Alaska			
	Used in	2013-2015		Used in	2013-2015	
Gear/Target	2010-2012	Recommendation	Gear/Target	2010-2012	Recommendation	
Trawl			Trawl			
Atka mack	76	77	Bottom pol1	59	60	
Bottom poll	73	77	Pacific cod	62	62	
Pacific cod	71	71	Dpwtr flats	48	43	
Other Flats	72	71	Shallwtr flats	71	67	
Rockfish	81	79	Rockfish	67	66	
Flathead sole	74	73	Flathead sole	65	65	
Midwtr poll	89	88	Midwtr poll	76	71	
Rock sole	82	85	Sablefish	65	71	
Sablefish	75	75	Arr. fldr	72	73	
Turbot	67	64	Rex sole	64	69	
Arr. fldr	76	76				
YF sole	81	83				
Pot			Pot			
Pacific cod	8	8	Pacific cod	17	17	
Longline	· · · · · · · · · · · · · · · · · · ·		Longline			
Pacific cod	10	9	Pacific cod	12	11	
Rockfish	9	4	Rockfish	9	9	
Turbot	11	13				

II. Bering Sea/Aleutians CDQ

	Used in	2013-2015
Gear/Target	2010-2012	Recommendation
Trawl		
Atka mackerel	85	86
Bottom pollock	85	83
Pacific cod	90	90
Rockfish	84	80
Flathead sole	84	79
Midwtr pollock	90	90
Rock sole	87	88
Turbot	88	89
Yellowfin sole	85	86
Pot		
Sablefish	32	34
Longline		
Pacific cod	10	10
Turbot	4	4

There are a number of reasons a DMR is not produced by the IPHC for BSAI sablefish non-CDQ pots. The amount of halibut available for observers to calculate a DMR in the BSAI sablefish non-CDQ pot fishery has been limited compared to other fisheries. The number of vessels in this fishery each year is 13 or fewer vessels and the total catch averages around 700 mt (between 2009-2013). For the current DMR calculations, observer data prior to 2012 was used. The vessels participating in the sablefish non-CDQ pot fishery mostly had 30 percent observer coverage compared to the sablefish CDQ pot fishery that required

100 percent observer coverage due to their transferable Prohibited Species Quota (PSQ). Also, there has not been a requirement for this calculation. Because pot fisheries are exempted from a halibut PSC limit, a DMR for the sablefish non-CDQ pot fishery is not necessary for NMFS management to calculate whether vessels have exceeded any limit. Currently, when there is an informational need for NMFS management to estimate halibut mortality for this fishery, they use the rate applied to the BSAI Pacific cod non-CDQ pot fishery (eight percent in recent years) as recommended by Gregg Williams in the IPHC's recommended DMR for 2013-2015. Table 9 demonstrates estimated catch of sablefish IFQ/CDQ in the sablefish target fishery with hook-and-line gear and in pots, and the estimated halibut mortality from the Catch Accounting System (CAS) associated with that sablefish catch.

Table 9 Halibut PSC and mortality in the fixed gear sablefish IFQ and CDQ target fishery, 2009 through 2014

			DMR A	pplied		Percent of
Year	Gear type	Sablefish weight (mt)	IFQ	CDQ	Halibut mortality (mt)	halibut mortality in sablefish target
2009	Hook-and-line	1,237	11%	11%	30.77	2.49%
	Pot	639	7%	34%	0.79	0.12%
2009 Total		1,877			31.56	1.68%
2010	Hook-and-line	736	10%	10%	20.72	2.82%
	Pot	416	8%	32%	1.47	0.35%
2010 Total		1,152			22.20	1.93%
2011	Hook-and-line	595	10%	10%	8.94	1.50%
	Pot	452	8%	32%	0.94	0.21%
2011 Total		1,046			9.88	0.94%
2012	Hook-and-line	741	10%	10%	8.23	1.11%
	Pot	408	8%	32%	0.78	0.19%
2012 Total		1,149			9.01	0.78%
2013	Hook-and-line	744	11%	9%	5.26	0.71%
	Pot	338	8%	34%	1.26	0.37%
2013 Total		1,082			6.52	0.60%
2014	Hook-and-line	404	11%	9%	2.42	0.60%
	Pot	228	8%	34%	0.41	0.18%
2014 Total		632		·	2.83	0.45%
Grand Total		6,939			81.99	1.18%

Source: Comprehensive_PSC, complied by AKFIN

Past discussion on allowing the retention of halibut IFQ with pot gear in the sablefish IFQ/CDQ fishery has highlighted a possible desire to have an established DMR for sablefish non-CDQ pots. This would provide more accurate information for the tracking of halibut PSC mortality in this pot fishery, regardless of whether action was taken on this proposal or not. Generally, it is understood that the condition of halibut caught in pots is affected by the length of soak time and the presence of other animals in the pot, especially crabs.

¹⁰ Willams, G. 2012. Recommendations for Pacific halibut discard mortality rates in the 2013-2015 groundfish fisheries off Alaska. IPHC. Page 4 states, "For the 'other species' and any other target not explicitly noted here in the non-CDQ fisheries, the DMR for the cod fishery in that region/gear stratum is recommended."

A discussion of DMRs was included in the IPHC and Council joint meeting during the February 2015 Council meeting. A need to review and update DMRs for all fisheries was identified. This included development of a table which summarizes current DMRs, how the rates were derived for each fishery, and the level of 'certainty' (if possible) associated with each DMR. Because efforts are already underway to address a whole set of DMRs, the Council may prefer to allow this element to progress on a different track than the current proposed action, noting at that time the utility in a more specific rate for BSAI sablefish non-CDQ pot gear.

3.2 Pot specifications

At this point, the Council has not suggested specification of BSAI pot gear for this action; however, IPHC has recommended a requirement for radar reflectors on buoys. Under the status quota, pot gear used to fish for sablefish are intentionally constructed to avoid catching halibut. Current regulations (§679.20) state the tunnels to the pot must be no greater than 9 in by 9 in order to discourage adult halibut from entering the pot.

Sablefish can be caught in rectangular, conical, and trapezoidal pots; common sizes range between 36 in. and 72 in. in diameter, and 28 inches to 32 inches in height. Sablefish pot fisheries in Alaska typically rely on pots that are a conical shape with a netted entrance and a purse string bottom for unloading and stacking of the gear. Minimizing the specifications required of pots benefits participants by allowing them the flexibility to choose a model that performs best in their area and fits their platform's deck, hydraulic capabilities, and safety requirements. It will additionally enable participates to more readily adapt innovations in the gear market that may aid in financial and/or biological benefits.

Both single and longlined pots are permitted to fish sablefish in the BSAI. However they are more often deployed in a longline format, which reduces the likelihood of lost gear. It has also been stated that this can reduce the amount of fishing grounds preempted. Longlined pots include approximately 40- 135 pots per set. Figure 3 presents a diagram of a longline pot configuration using a common ground line.

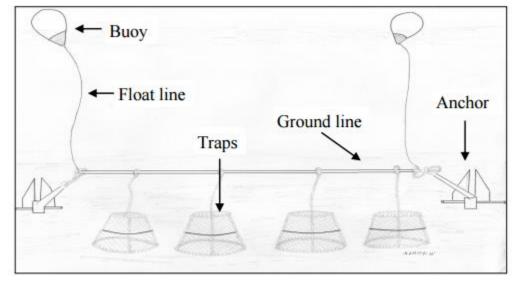


Figure 3 An example of longlined conical-shaped traps (pots) using a common ground line

Source: NOAA NMFS, Fixed Gear Guide: California, Oregon, and Washington Commerical Fisheries Trap/pot, gillnet, and longline/ set line

4. OVERLAP IN THE SABLEFISH AND HALIBUT IFQ FISHERY

The Council is seeking to understand how likely an IFQ participant is to attempt to target halibut IFQ with pot gear if halibut retention (at any level) is legal. This change in behavior is impossible to know with certainty, and even after regulations have changed, unless there are drastic changes in fishing behavior, its identification would be challenging. However, it may be useful to consider the seasonal, spatial, gear, and user overlap that presently exists in the IFQ fishery.

According to the 2014 Sablefish SAFE, in recent years, approximately 30% of vessels eligible to fish in the IFQ fishery participate in both the halibut and sablefish fisheries and approximately 40% of vessels fish in more than one management area. Of 208 persons holding Area 4A halibut IFQ in 2012, 80 persons also hold BS, AI, or WG sablefish IFQ. Of 176 vessels that are owned by holders of Area 4A halibut IFQ, 97 vessel owners also hold BS, AI, or WG sablefish quota shares.

Given the limited number of vessels participating in the BSAI sablefish fishery using pot gear, there are an even smaller number of vessels also participating in a halibut hook-and-line fishery. Table 10 demonstrates this overlap. It appears that between zero to three vessels have participated in both the BSAI sablefish pot fishery and the 4A halibut fishery on an annual basis (between 2009 through 2013). Due to the small number of vessels, displaying pounds or value of halibut would breach confidentially. However, the amount of hook-and-line 4A halibut constitutes a very small percent of the total gross revenue for these vessels. The 4A halibut hook-and-line fishery was clearly not the prime target fishery of these vessels during these years.

Table 10 Count of vessels that fish sablefish IFQ/CDQ with pot gear that also fish halibut IFQ

Year	Count of vessels using pot gear for sablefish in BSAI	Count of vessels also fishing 4A halibut with hook-and-line	Count of vessel also fishing halibut outside of 4A with hook-and-line
2009	10	2	2
2010	7	1	1
2011	9	3	3
2012	5	2	2
2013	4	0	0

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN through Comprehensive FT

4.1 Overlap in seasons

The IPHC establishes halibut fishing season dates under authority of the Halibut Act. The Regional Administrator, NMFS establishes IFQ sablefish season dates by publishing a notice annually, in the Federal Register. Sablefish IFQ seasons have been set to coincide with the halibut IFQ fishing season to reduce waste and discards. The fishery dates can change every year, but they typically run from mid-March to mid-November.

Table 11 Season dates for fishing halibut IFQ or sablefish IFQ and the CDQ Program for halibut

Year	Season Begin Date	Season End Date ^a
1995	March 15	November 15
1996	March 15	November 15
1997	March 15	November 15
1998	March 15	November 15
1999	March 15	November 15
2000	March 15	November 15
2001	March 15	November 15
2002	March 18	November 18
2003	March 1	November 15
2004	February 29	November 15
2005	February 27	November 15
2006	March 5	November 15
2007	March 10	November 15
2008	March 8	November 15
2009	March 21	November 15
2010	March 6	November 15
2011	March 12	November 18
2012	March 17	November 7
2013	March 23	November 7
2014	March 8	November 7
2015	March 14	November 7

^a After the season closing date: (a) halibut IFQ and CDQ may not be retained, and (b) sablefish IFQ fishing is closed for directed fishing. However, a person fishing under IFQ permits with unused sablefish IFQ must retain sablefish, up to the maximum amount allowable in the area and using the gear type under which the person is fishing.

Source: NOAA NMFS/ RAM season dates, updated 1/30/2015, Available at:

http://alaskafisheries.noaa.gov/ram/reports/ifq_cdq_seasons.pdf

While the fishing seasons for sablefish and halibut IFQ are *authorized* to take place at the same time of year, this does not necessarily mean that they *do* take place at the same time of the year. Table 12 demonstrates monthly landings of sablefish IFQ and the monthly landings of halibut IFQ. This table illustrates that the hook-and-line halibut IFQ fishery in Area 4A has traditionally peaked in August; however, this trend has become less pronounced as the TAC for halibut has declined. In contrast, the sablefish fishery that is prosecuted in the overlapping regulatory areas of BSAI and Area 4A has traditionally been more dispersed over the full length of the fishing season with some large deliveries made in early summer.

Table 13 examines ADF&G fish ticket information from vessels that used pot gear to prosecute the sablefish IFQ fishery in the overlapping regulatory areas of the BSAI and Area 4A over the years 2009 to 2013 (numbers are aggregated from those years). Based on self-reported halibut discards in this fishery, a distinctive peak can be identified in May. Observer data (not displayed here), demonstrated more of an April/May peak for the catch of halibut PSC in the sablefish pot fishery.

 $^{^{\}rm 11}$ Weekly landings were not shown in an effort to protect confidentiality.

1400000 1200000 Whole pounds 1000000 800000 600000 400000 200000 Nov April Sept Nov Sept March April May June July Aug Sept March Мау July Aug Oct Nov Dec March April Мау June July Aug Oct Sept April Мау July Aug June July Aug Oct June June Oct Sept 2009 2010 2011 2012 2013 ■ Sum of Sablefish weight ■ Sum of Halibut weight

Table 12 Monthly landings of Area 4A Halibut IFQ and Area 4A/BSAI sablefish IFQ in whole pounds between 2009 through 2013

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN though Comprehensive_FT

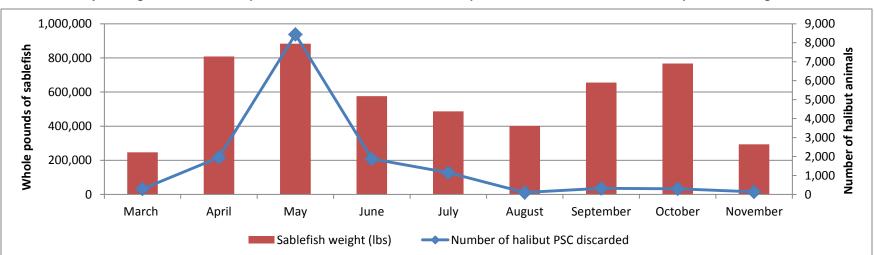


Table 13 Monthly landings of Area 4A/BSAI pot sablefish IFQ and the number of reported halibut discards from these trips, 2009 through 2013

Source: ADFG/CFEC Fish Tickets, data compiled by AKFIN though Comprehensive_FT

4.2 Overlap in space and time

As displayed in previous discussion papers, there appears to be overlap in space and in time that pot gear is used to fish for sablefish and hook-and-line gear is used to fish for halibut in the BS and AI. The greatest percentages of sablefish in the sablefish pot fishery are harvested in ADF&G statistical areas directly outside of Unalaska. As would be expected, these statistical areas report the greatest halibut PSC from pot gear fishing for sablefish. As can be seen in Figure 4, fishing for halibut with hook-and-line gear also occurs in these statistical areas.

Figure 4 ADF&G statistical areas where IFQ sablefish pots and IFQ halibut longlines have been deployed in the same week in Area 4A during 2009 through 2011

Y means that both fisheries were prosecuted in that statistical area during that week Source: NPFMC. April 2013. Discussion paper on IFQ Program proposal to allow IFQ halibut in Area 4A to be retained in IFQ sablefish pots, Anchorage, AK. April 2013.

4.3 Overlap in other fishing practices

One of the primary characteristics that minimizes the amount of halibut caught while sablefish fishing is the difference in the depth of these species. Adult sablefish depth distributions range from approximately 200 m to 1000 m; the majority of the IFQ fishery effort is between 300-600 m. Sablefish pot gear is set at similar depths to hook-and-line gear in the BS and AI. Adult halibut are caught primarily from 25 m to 275 m but have been caught as deep as 550 m. Juveniles of both species are generally found in the near-shore areas and are rarely encountered by the pot fishery for sablefish. From 2002-2008, the average catch of halibut in the pot fishery for sablefish in the BS and AI was 0.24 lbs/pot. It is likely the majority of pot gear effort for sablefish occurs in deeper depths than those inhabited by both adult and juvenile halibut.

5. MANAGEMENT MEASURES FOR INCIDENTAL CATCH OF HALIBUT

Just allowing for the retention of halibut IFQ in pot gear fishing for sablefish, without a management measure to enforce this harvest remains incidental only, could result in some level of increased halibut catch as fleet behavior adjusts to a new regulatory regime. Participants in the pot fishery for sablefish would not have a disincentive to move off of fishing grounds with a high rate of halibut catch. The level of behavior change in an unenforced, open retention scenario is very difficult to predict; it could be anywhere from insignificant, to a shift in the way the halibut fishery is prosecuted in Area 4A.

In a scenario where halibut can be retained with pot gear in Area 4A in the BSAI sablefish fishery and no management measure is adopted to limit the retention of halibut, fishery participants with available halibut IFQ would be required to retain all legally-sized halibut (§679.7(f)(11)). Establishing some type of management measure to limit the retention of halibut IFQ once an individual has begun IFQ fishing, would be an exception to this requirement.

The decision to use a management measure to discourage increased catch of halibut in the pot fishery for sablefish and limit halibut retention in the overlapping regulatory areas of the BSAI and Area 4A is a policy judgment that balances a desire to efficiently use the halibut and sablefish resources with the desire to establish proper incentives for fishing behavior. Establishing some type of retention limit implicitly means there could still be required discards of halibut, even when permit holders onboard hold sufficient halibut IFQ. However, it also means that participants of the sablefish IFQ/CDQ fishery will be discouraged from targeting halibut with pot gear in Area 4A, as their legal retention limit will always be a small portion of their sablefish harvest.

The IPHC has made clear their desire to support the use of pot gear for only the incidental catch of halibut in the pot fishery for sablefish in the overlapping regulatory areas of the BSAI and Area 4A. The Council has a number of management measures it can consider to restrict the catch of halibut so it does not increase due to the added opportunity to retain halibut IFQ for commercial sale. Two options are suggested here and both work towards the same objective. The primary difference between the options is how they are integrated within existing regulations.

5.1 Applying an MRA

The existing management tool that the Council uses to discourage the directed fishing of a non-target species is an MRA. An MRA is the maximum amount of a species closed to directed fishing that may be retained on board a vessel (§679.20(e)). An MRA is calculated as a percentage of the retained amount of a species closed to directed fishing (incidental species) relative to the retained amount of groundfish species or halibut open for directed fishing (basis species). Setting an MRA allows the retention of a non-target species up to a percentage of the basis species. MRAs are enforceable on an instantaneous basis during a fishing trip (with some exceptions). A vessel must not retain incidental catch species in amounts that exceed the MRA.

MRAs for the BSAI are established in Table 11 to §679. These MRAs range anywhere from 1 to 35 percent of the basis species.

In this action, the basis species is IFQ or CDQ sablefish with an incidental catch species of retained IFQ halibut; not including sub-legal sized halibut. Table 11 to §679 demonstrates that for BSAI, IFQ halibut (included as "aggregated amount of non-groundfish species") constitutes a basis species for which an MRA is established for other incidental catch species (e.g. a participant may retain Pacific cod up to 20 percent the weight of their IFQ halibut on board). Nevertheless, there is no fishery in

Alaska which currently has a prescribed MRA for which IFQ halibut is specified as the incidental catch species.

Establishing an MRA for halibut in a sablefish fishery would extend the current MRA regulations beyond their traditional application. Currently, an MRA, as applied to both catcher vessels and catcher processors, affect catch of incidental species closed to the directed fishing in the *area* being fished. While the halibut IFQ fishery is not closed in Area 4A, halibut IFQ cannot be retained with pot gear. Therefore, in order to use an MRA as a tool to enforce that halibut retention remains incidental only would require a regulatory amendment.

Application of an MRA to halibut IFQ in Area 4A would also introduce a specific reference to area where IPHC regulatory Area 4A overlaps with the BSAI because the current MRA Table specifies the entire BSAI. It is assumed this action would create provisions for only the area where IPHC regulatory area, Area 4A, overlaps the Federal BSAI regulatory area, unless otherwise specified by the Council. This distinction could be specified as an exception in the MRA regulation. ¹²

The Enforcement Committee provided feedback on the use of an MRA in December 2012 when the proposal to allow retention of IFQ halibut was first brought in front of the Council. The December 2012 discussion paper on this issue detailed their comments, including the fact that the Committee did not anticipate undue enforcement or compliance challenges associated with implementing an MRA should the Council wish to reduce the potential for targeting halibut.

If the Council choses to use an MRA as a tool to limit the level of Area 4A IFQ halibut caught in pot gear, setting the level that the MRA would be another decision point for the Council. Based on Federal regulations at §679.20(e)(2)(ii), individual retainable amounts are calculated by multiplying the appropriate retainable percentage for the incidental catch species/basis species combination (set forth in Table 11 to §679 for BSAI), by the amount of that basis species, in round-weight equivalents. The MRA is the sum of the individual retainable amounts.

Since pot gear has been used in the BS and AI sablefish fisheries for almost the duration of the IFQ program, there is some available information on the halibut catch in sablefish pots for these areas. Permit holders record the number of halibut that were discarded on a sablefish trip on fish tickets. Additionally some of the vessels carried observers that sampled length and weight of halibut PSC before it was discarded. Given the small number of vessels that have been a part of this fishery, and that only a percentage of those vessels have carried observers, it is necessary for the CAS to apply some general methods of estimation and extrapolation in order to arrive at the best available information for understanding previous halibut catch in the BSAI sablefish pot fishery. Table 14 demonstrates the frequency of Area 4A halibut that was sampled by observers between 2008 and 2014. This table also demonstrates that 58 percent of the halibut that were caught and sampled from pots fishing sablefish IFQ were below the legal size limit of halibut able to be retained for commercial sale (i.e. 32 inches).

¹² If the Council chooses to take action in April 2015 allowing the use of sablefish pot gear in WG (along with possibly other sub-areas of GOA), we assume that the Council would need to specify separate management measures for the portion of WG (Area 610) not covered in this discussion paper.

Table 14 Number of Area 4A halibut sampled from pot gear by observers between 2008 through 2014, by halibut length

Inches	Al	BS	Grand Total
<32	7	744	751
32-42	26	477	503
42-52	3	38	41
62-72		1	1
Grand Total	36	1260	1296

Source: Comprehensive_Norpac, complied by AKFIN

Halibut PSC estimates in the CAS are based on total groundfish weight and take into account sub-area, target species, and vessel category. Table 15 demonstrates the estimated weight of the halibut PSC discarded in the BSAI sablefish fixed gear fishery. If we were to assume that 58 percent of the halibut catch was of legal size and retained (a rough estimate based on Table 14), Table 15 indicates that the pot fishery for sablefish as a whole would have retained halibut weighing from 1 to 6.1 percent of the weight of the sablefish harvested between 2009 and 2013.

Table 15 Halibut PSC as estimated by the CAS in the fixed gear BSAI sablefish IFQ and CDQ fishery, 2009 through 2013^a

Year	Gear	Round weight sablefish (lbs)	Round weight of halibut PSC estimate (lbs)	If only 58% of halibut were legal-sized (lbs) ^b	Percent of legal- sized PSC to sablefish weight
2009	Hook-and-line	1,840,380	616,592	357,624	19.4%
	Pot	1,189,166	24,950	14,471	1.2%
2009 Total		3,029,546	641,543	372,095	12.3%
2010	Hook-and-line	1,862,959	456,869	264,984	14.2%
	Pot	704,789	40,589	23,541	3.3%
2010 Total		2,567,748	497,458	288,525	11.2%
2011	Hook-and-line	851,627	25,956	15,055	1.8%
	Pot	1,883,457	197,148	114,346	6.1%
2011 Total		2,735,084	223,105	129,401	4.7%
2012	Hook-and-line	2,049,222	181,424	105,226	5.1%
	Pot	814,746	21,464	12,449	1.5%
2012 Total		2,863,968	202,888	117,675	4.1%
2013	Hook-and-line	1,749,121	128,830	74,721	4.3%
	Pot	652,720	34,615	20,077	3.1%
2013 Total		2,401,841	163,445	94,798	3.9%
Grand Total		13,598,187	1,728,438	1,002,494	7.4%

^a Halibut PSC is calculated by sub-area and is not broken out by stat area. Therefore this table is not restricted to the over-lapping region of Area 4A and the BSAI, but includes all BSAI sablefish fixed gear activity. ¹³

¹³ ADF&G/CFEC fish ticket information could be broken out by stat area, to illustrate only the over-lapping region of the BSAI and Area 4A. (This was done in the April 2013 expanded discussion paper in the corrected Table 1: http://www.npfmc.org/wp-content/PDFdocuments/halibut/4AhalibutPots_Table1.pdf.) However, the weight of halibut would be a rough estimate based on the number of halibut reported and an average weight calculated

Source: Comprehensive_PSC and Comprehensive_FT, complied by AKFIN

The percentages in Table 15 are meant to illustrate past harvest behavior of the fleet and provide a starting point for the discussion of MRA levels. There are several reasons why the Council may find it desirable to add a significant buffer to these percentages in establishing an MRA.

First, the function of setting an MRA in this action, is to discourage increased catch of halibut in the pot fishery for sablefish above an incidental rate. Ideally, the participants would retain all legally-sized halibut they have IFO for to avoid wastage of the species. In some fisheries, concerns have circulated around the effects of topping-off on commercially valuable incidental catch species when a vessel's catch rate of that incidental species falls short of the MRA. Because sablefish pots are not an efficient way of targeting halibut exclusively (due to their design), and harvest would be generally operating within IFQ already held, 14 it is not expected that participants would be attempting to top-off on IFQ halibut if they did not achieve the set MRA. Therefore implementing a conservative buffer would not pose this risk; rather it would prevent wastage if the truly incidental catch rate of halibut happened to be high on a given haul.

Additionally, historical halibut catch presented in Table 15 represents sector wide percentages. Even though a sector-wide average represents a low percentage of PSC, an individual vessel may have prosecuted the pot fishery for sablefish and experienced a higher halibut catch rate during a given set or trip. The highest rate of estimated incidental halibut PSC in pot gear fishing for sablefish was 45 percent between 2009 and 2013. The next highest PSC rate was down to 32 percent, with a few more trips clustered around 30 percent.

Finally, establishing a significant buffer would minimize future non-compliance. The tighter the MRA is set around the historical levels of catch, the more likely there will be enforcement issues that will need to be addressed.

5.2 Create a maximum retainable weight ratio specific to IFQ

Creating a new tool could circumvent the need to make exceptions to how an MRA applies to incidental catch species. It could or define area boundaries specific to the over-lapping IFQ-groundfish management area, rather than just the BSAI. It could also establish that the incidental species is defined by having its directed fishery closed to a particular gear type (rather than just closed to directed fishing by area). This new tool would function essentially like an MRA: it would be a weight ratio of retained halibut IFO to sablefish IFQ/CDQ basis species. Adding this tool would likely amend regulations at §679.42 Limitations on use of QS and IFQ.

The consideration of where to set a maximum retainable weight ratio could be assessed in the same way as the proposed MRA. The data presented in Section 5.1 can guide the Council on the incidental levels of halibut PSC, and the Council may choose to add a buffer to those levels.

The Council might also consider the utility of updating this weight ratio on an annual basis. The percentages which define the MRAs are established in regulations and therefore not easily updated. If the Council finds a need to update the maximum weight ratio established for halibut IFQ in pot gear fishing

elsewhere. Generally CAS estimates are found to be more robust and therefore despite the incongruent areas we present this table as the best available information.

14 Unless a sablefish IFQ/ CDQ holder attempt to procure more Area 4A halibut IFQ as a result of this action.

^b The 58 percent rate of legal retention is based on Table 14 and halibut sampled by observers between 2008 through 2014. There is a slight disconnect in area as the halibut were sampled in Area 4A, while the halibut PSC estimates were calculated for the

for sablefish, this could be done under a new IFQ maximum weight ratio tool. This annually-established ratio could be set either in the NMFS Harvest Specifications or the IPHC Annual Management Measures. Either way, the ratio would be approved by the IPHC (either at the BSAI groundfish plan team meeting in September, or the IPHC meeting in January) as well as the Council in December.

One disadvantage of a Sub-option to establish a flexibility weight ratio is that we do not currently have a precise abundance-based formula for setting this ratio. So every year we would be relying on limited data, estimation, and a buffer. Additionally, the Harvest Specification process is already complex and compressed; NMFS generally does not suggest adding to it. Finally, it would be a precedent-setting approach, because no MRAs are set annually.

6. ADDITIONAL MANAGEMENT MEASURES FOR COUNCIL CONSIDERATION

Public testimony in December 2012, raised two issues for the Council to consider if they chose to move forward with action in the BSAI sablefish pot fishery. These issues included: 1) a requirement to mark buoys with radar reflectors, and 2) a requirement to remove pots when participants were done fishing for the season. In the expanded discussion paper from April 2013, Council staff highlighted these as well as a number of additional regulatory considerations based on previous Council discussion. In their report to the Council in February 2014 (Appendix 5), the IPHC requested the Council's continued consideration of these two particular management measures. The following sections provide relevant information from the April 2013 expanded discussion paper.

Public testimony in December 2012 noted that gear conflicts between pot vessels have occurred in the past due to lack of a flag pole with a reflector device as is commonly used in the longline fisheries.

Current gear limitations listed at §679.24 do not require reflective marker buoys in hook-and-line, longline pot or pot-and-line gear. However, fishing gear is expensive to purchase and replace, so participants have an implicit incentive to incur small additional costs in order to reduce the likelihood of gear conflicts, or increased chances of gear retrieval in the case of gear entanglement. Moreover, fishermen often operate in proximity to one another over many fishing days and seasons, so avoidance of conflict between individuals has both a private and a social benefit. If the additional marking of pot gear is necessary, then requirements to specify flag poles with radar reflectors can be evaluated.

The State of Alaska does not require flag pole radar reflectors. All commercial longline or skate gear buoys, or kegs and buoys for groundfish pots, must be marked with the permanent ADF&G vessel license plate number of the vessel operating the gear (5 AAC 28.050(b)). The State only allows the use of longlined sablefish pots in the Aleutian Islands District and not in the Western District of the South Alaska Peninsula (5 AAC 28.640(c)). If the State of Alaska considered radar reflectors in the areas in which longlined pots are authorized for groundfish in State waters (i.e., the portion of the AI District that is within Area 4A), then a State regulations could be changed through the Alaska Board of Fisheries process.

Public testimony also raised an issue relating to the potential that pot gear use could preempt fishing grounds, and monopolize an area so that trawl vessels or other gear types cannot effectively fish in an area. Removal of pot gear from the fishing grounds upon completion of harvest of sablefish IFQ and at the end of the fishing season could help alleviate this concern. An alternative is to allow pot storage. Federal regulations do not allow "wet storage" of pot gear in federal waters. NMFS staff identified significant limitations on enforceability of pot storage in Federal waters, as the Office of Law Enforcement does not have the capability of pulling pots (or any gear) at sea.

The State of Alaska allows wet storage of groundfish pots in state waters of the BSAI and South Alaska Peninsula areas, so long as pots are unbaited, bait containers removed, doors secured open, and stored in water less than 25 fathoms (5 AAC 28.632 and 5 AAC 28.571). If the State of Alaska considered a similar provision for State waters, State regulations could be changed through the Alaska Board of Fisheries process.

7. GOA SABLEFISH POTS

In April 2015, the Council is considering an analysis to allow the use of longline pot gear in the sablefish IFQ fishery in all or parts of the GOA. The action alternative in this GOA issue includes a similar decision point of whether and how to allow retention of halibut IFQ in longline pot gear used for targeting sablefish. The chief difference between the GOA action and this action is that since longline pot gear has not been legal for sablefish in the GOA in the recent past, there is no precedent with which to estimate an incidental rate of halibut bycatch. The GOA sablefish longline pot action also considers specific gear retrieval and marking requirements. If the GOA sablefish longline pot action moves forward for action and the Council recommends to the IPHC to allow sablefish longline pots as a legal gear type for halibut in the GOA, the Council should be clear of whether and what additional management measures they would implement (e.g. an MRA). At this point, the IPHC has not weighed in on whether it would need specific management measures from the Council in order to approve retention of halibut in longline pot gear in the GOA. However, it would be prudent for the Council to consider the IPHC's response as it has the unilateral authority to authorize gear for halibut IFQ fishing.

8. EXEMPTED FISHING PERMIT

This action describes a fishery for which there is limited PSC data and it may be particularly difficult to predict changes in fishing behavior that may occur. There has been previous Council discussion about the utility of establishing a pilot program to test the impacts from establishing measures like an MRA and establishing a set ratio based on the limited available data. At that time staff mentioned that a establishing a pilot program may constitute approximately the same amount of agency resources as actually establishing the program and modifying the regulations down the line. However a pilot program would also priorities itself as an item needing to be addressed as the sunset date approached.

An exempted fishing permit (EFP) may be another way to obtain more data and track fleet behavior, before regulations were changed and an MRA was set. An EFP is a permit issued by the Alaska Region of NMFS to allow groundfish fishing activities that would otherwise be prohibited under regulations for groundfish fishing. These permits are issued for limited experimental purposes to support projects that could benefit the groundfish fisheries and the environment. They are issued without charge and will expire at the end of a calendar year. Examples of past projects include the development of new gear types for an underutilized fishery and development of devices that reduces PSC.

If an EFP was issued, it would likely be able to be obtained before a regulatory packaged moved through the rule-making process. An EFP generally takes about six to twelve months from the date of application submission to potential approval.

In addition to obtaining an EFP, in order to allow what would otherwise be prohibited under Federal Regulations, industry would also need to be eligible under IPHC and ADF&G regulations. With an EFP in parallel State waters, there should be no addition eligibility requirements for ADF&G. The may be a few ways to go about IPHC approval. The most straightforward method, for enforcement purposes, could be to be granted formal permission through a change of annual regulations, in which the IPHC would stipulate that provision only apply to vessels participating in the agreed upon EFP. Another method could be to receive an exemption letter from the Director of the IHPC in which eligible vessels would be

required to carry onboard. This method has been relied on in other states, but may require an enforcement briefing to help BSAI officers recognize this new form of authorization.

This package has been given a low priority compared to some other IFQ issues in the recent past. If industry took the initiative to apply for an EFP it could demonstrate to the Council that there is still industry support to move this package forward.

9. CONTRIBUTORS

Sarah Marrinan, NPFMC Peggy Murphy, NMFS Heather Gilroy, IPHC Michael Fey, AKFIN Mary Furuness, NMFS Rachel Baker, NMFS Josh Keaton, NMFS

Individual Fishing Quota Program Proposal to Allow IFQ halibut in Area 4A to be retained in IFQ sablefish pots Discussion Paper

Develop a discussion paper to allow the retention of Area 4A halibut incidentally caught while targeting sablefish in the Bering Sea and Aleutian Island regulatory areas. Included in the discussion paper is the premise that sablefish pot tunnel regulations will not change in the BS/AI regulatory area and that this action has the objective of not increasing halibut bycatch levels.

Summary A proposal to change fishery regulations that define legal gear for retaining commercial Individual Fishing Quota (IFQ) halibut originally was submitted to the International Pacific Halibut Commission (IPHC) for its consideration at its January 2009 Annual Meeting. While the proposed action to define legal gear for halibut is under the management authority of the IPHC, it chose to consult with the North Pacific Council before it considered the proposed action.

The Council included this proposal under its 2009 call for IFQ/CDQ proposals after the IPHC forwarded the proposal, along with its own comments, for consideration by the Council. During its September 30, 2009 meeting, the IFQ Implementation Committee reviewed and recommended that the Council consider the proposal. In February 2010 the Council recommended that staff prepare a discussion paper, but ranked it lower than several other proposals for which the Council has since taken action. Council staff prepared a briefing on the status of the remaining four IFQ proposals under consideration by the Council in October 2011. The timing in scheduling Council review of this paper has been due to higher priorities that the Council has placed on other actions to manage halibut and groundfish fisheries, including Gulf of Alaska halibut prohibited species catch (PSC) limit reductions and the Pacific Halibut Catch Sharing Plan.

At its March 26, 2012 meeting, the committee reviewed the staff briefing paper on the status of the remaining proposals and recommended that that all proposals proceed for Council consideration. The Council ranked this discussion paper as its highest priority of the four remaining papers, in order to provide the requested guidance, if any, to the IPHC in time for its January 2013 Annual Meeting. At its December 2012 meeting the Council may provide guidance to the IPHC on its own consideration of this proposal. Should the IPHC choose to amend its definition of legal gear for halibut, a likely result would be the need for regulatory action initiated through the Council for amending regulations to require retention of IFQ halibut when caught in IFQ sablefish pots in a defined area that overlaps the two sets of regulatory areas (i.e., Area 4A for halibut and the Bering Sea and Aleutian Islands regulatory areas for sablefish). The Council may not intend for an expansion of the use of pot gear in the sablefish fishery to occur as a result of allowing the retention of IFQ halibut, but it could result in that unintended consequence. However, the increased use of pot gear may result in a decrease of unaccounted mortality by whale depredation on the gear¹.

At its December meeting the Council will consider whether to provide comments to the IPHC on the latter's consideration of the proposed action that is under its management authority. IPHC adoption of the proposal may require additional action by the Council and rulemaking by NMFS for complementary changes to Federal regulations.

Proposal Mr. Jay Hebert submitted a proposal on October 22, 2008 to the IPHC (Attachment 1). The proposer requests an experimental fishery to determine the results of allowing the retention of halibut caught as bycatch in pots in the sablefish fishery by IFQ holders of both halibut and sablefish in the sablefish regulatory area(s) that overlap with IPHC Regulatory Area 4A. The proposer intended to allow similar action as had been recently allowed in Area 2B (British Columbia), which allows coincident harvest and retention of halibut and sablefish in pot gear. Three primary objectives of the proposal are:

_

¹ Halibut discards in the sablefish pot fishery are counted as removals.

- 1) Increase the area of harvest of halibut in Area 4A. The proposer reports that there is a large portion of Area 4A that is not fished due to whale predation using longline gear. Pots can be used to more successfully harvest halibut.
- 2) Reduce halibut mortality from killer whale predation and handling by eliminating mortality due to handling released halibut.
- 3) Reduce concentrated halibut harvest in traditional "whale-free" areas as a result of increased presence (time and space) of whales. The proposed action would reduce pressure on the halibut resource and competition between vessels in the current limited area of successful halibut fishing.

Fishery affected

The proposal intends that the use of pots for retaining halibut be restricted to the sablefish IFQ fishery in the sablefish regulatory areas that overlap with IPHC Regulatory Area 4A. The Council clarified its intent, should it recommend to move this proposal forward, would be to allow halibut to be retained that are caught incidentally in this fishery only, and not to expand the use of pots to retain IFQ halibut in the Pacific cod (or other) pot fisheries.

Potentially affected participation

Of 208 persons holding Area 4A halibut IFQ in 2012, 80 persons also hold BS, AI, or WG sablefish IFQ. Of 176 vessels that are owned by holders of Area 4A halibut IFQ, 97 vessel owners also hold Bering Sea, Aleutian Islands, or Western Gulf of Alaska sablefish quota shares (this is the vessel ownership relationship and not what vessel fished the IFQs). There is no halibut allocation to the Community Development Quota (CDQ) Program in Area 4A, so the proposal only would apply to the IFQ fishery in that area. The RAM Report to the Fleet² provides the following information on vessel landings, TAC, harvest and percent of TAC harvested for the halibut and sablefish IFQ fisheries.

Table 2.1 2011 IFQ halibut allocations and fixed-gear IFQ landings

Species/Area	Vessel Landings ^a	Area IFQ TAC ^b	Total Harvest	Percent Harvested ^{c,d}
Halibut 2C	1,292	2,330,000	2,292,926	98
3A	1,898	14,360,000	14,265,007	99
3B	758	7,510,000	7,336,170	98
4A	296	2,410,000	2,286,068	95
4B	120	1,744,000	1,595,524	91
4C	21	845,000	104,808	12
4D	68	1,183,000	1,742,965	147
Total	4,453	30,382,000	29,623,468	98

^a Vessel landings include the number of reported landings by participating vessels reported by IFQ regulatory area; each such landing may include harvests from multiple IFQ permitholders.

^b Halibut weights are in net (headed and gutted) pounds.

^cDue to over- or underharvest of TAC and rounding, percentages may not total 100 percent.

^d Permitholders may fish IFQ designated for Area 4C in either Areas 4C or 4D. This resulted in an apparent, but allowable, "excessive harvest" in Area 4D.

² http://www.fakr.noaa.gov/ram/ifg/rtf11.pdf

Table 2.2 2011 IFQ sablefish allocations and IFQ landings

Species/Area	Vessel Landings ^a	Area IFQ TAC ^b	Total Harvest	Percent Harvested ^c
Sablefish Al	124	2,738,113	1,684,207	62
BS	204	2,513,244	1,055,427	42
CG	575	8,359,843	8,274,128	99
SE	540	6,481,524	6,452,159	100
WG	179	2,857,162	2,748,249	96
WY	216	3,844,822	3,827,053	100
Total	1,838	26,794,708	24,041,223	90

^aVessel landings include the number of reported landings by participating vessels reported by IFQ regulatory area. Each such landing may include harvests from multiple IFQ permitholders.

Area affected

The area that would be affected by the proposal is limited to Area 4A; the IPHC staff recommended, and the committee concurred, that the proposed action not be expanded beyond this area. This would allow sablefish IFQ holders in either the Bering Sea area, Aleutian Islands area, or Western Gulf of Alaska area who also hold [sufficient] Area 4A halibut IFQ to retain halibut when using pot (single or longline) gear.

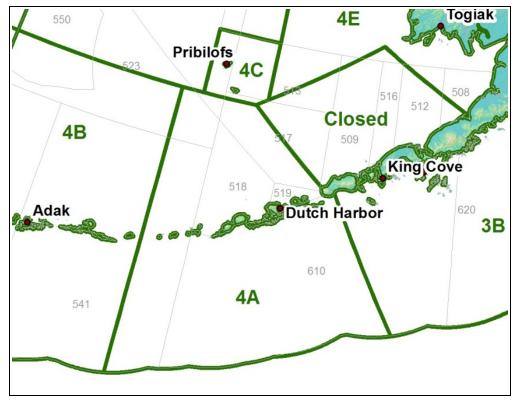


Figure 1 Overlap of IPHC halibut regulatory areas with BSAI groundfish (sablefish) regulatory areas (Source: NMFS). Area 4A overlays 630 (WG), 541 (AI) and multiple BS areas

^b Sablefish weights are in round pounds.

^c Due to over-or underharvest of TAC and rounding, percentages may not total 100 percent.

Spatial distribution of halibut and sablefish harvest in affected area Figure 2 (percent) and Figure 3 (number) (in Attachment 2) show the distribution of IFQ sablefish pot landings (blocks) with halibut bycatch (vertical bars). The highest amounts in percent and numbers of both sabelfish and halibut catch appears closest to the port of Dutch Harbor. Additional figures under Attachment 2 show the relationship between sabelfish pot landings, and halibutbycatch, by month in the IFQ season.

IPHC staff comments The IPHC staff provided the following comments to the Council in a letter dated September 24, 2009 (Attachment 3), which accompanied transmittal of the proposal to the Council. The potential management issues identified in the comments still apply.

The IPHC staff is not opposed to allowing pot gear in Area 4A from a biological point of view. However, if the pot catch of halibut is sufficiently large enough, we would need to determine a pot gear selectivity curve for halibut for our stock assessment in order to account for that removal. Additionally, NMFS/RAM regulations would need to require full retention of halibut if the vessel has halibut IFQ and is using pot gear, similar to the regulation for longline gear. Also, IPHC regulations define legal gear by IPHC regulatory area but IPHC regulatory areas and NMFS sablefish areas are not concurrent. NOAA Enforcement would also need to provide feedback on location restrictions and may require that the vessel be transmitting with a Vessel Monitoring System transmitter.

The IPHC staff could not agree to allow pot gear coast-wide or an expansion to this proposal, without an understanding of the magnitude and impacts of catch in the pot fishery. The issues that the Council and Commission should consider include gear conflicts, creation of a new halibut fishery, redistribution of catch by gear, fish quality, and potential for future requests for expansion to winter cod fisheries.

Committee recommendations The IFQ Implementation Committee determined that this issue had a higher priority than most others, during its September 2009 review of IFQ/CDQ proposals³. It identified conservation and utilization issues in placing its priority. The committee noted that whale depredation has increased in the area due to discarded halibut bycatch in IFQ sablefish pot gear and expressed its concern that the bycatch mortality rate of halibut may be increasing due to whale depredation. Recognizing the potential for this provision to be misused (i.e., an increase of incidence of halibut bycatch in IFQ sablefish pots by strategic placement of pots or use of bait), the committee recommended that the paper explore mechanisms that would ensure that the halibut effects of the proposed action, without allowing for an increase in resultant halibut mortality. From the March 2012 IFQ Committee minutes⁴:

"The committee discussed the area for which the proposed action should be considered. While the proposal was specific to Area 4A because that is where the halibut predation occurred then, the committee noted that the same whale depredation problem also occurs in Area 4B. Heather Gilroy noted that the IPHC supported considering the proposed action in Area 4A, but not expanding the geographic range further. IPHC would need to collect new selectivity data if the area for the action was expanded. Heather reminded the committee that the proposed action is under IPHC authority to define legal gear for the retention of Pacific halibut, but that the IPHC wished to consult with the Council, as the proposed action would affect management of the sablefish IFQ fishery. Jane DiCosimo noted that the staff analysis would not be in the form of an RIR/IRFA because no regulatory action would be needed, so that minimized the distinction between a discussion paper and an analysis. Depending on other Council tasking priorities, she could bring back an analysis for the Council to consider recommending the proposed action in either October or December, so that the IPHC could take action at its next annual meeting in January 2013.

_

³ <u>http://www.alaskafisheries.noaa.gov/npfmc/PDFdocuments/halibut/Minutes30Sep09.pdf</u> and http://www.alaskafisheries.noaa.gov/npfmc/PDFdocuments/halibut/Motions9 30 09.pdf

⁴ http://www.alaskafisheries.noaa.gov/npfmc/PDFdocuments/halibut/Implementation/IFQImpCmte312 Minutes.pdf

The committee recommended moving forward with an analysis of the proposed action, but requested that staff identify the latitude and longitude for the geographic boundaries for which: 1) Area 4A only, and 2) Area 4A and 4B overlap the Bering Sea management area and the Aleutian Island management area for sablefish. [A committee member] noted similar concerns about pot configurations, pot storage, deadloss, etc. that are also identified under Proposal 2."

The Advisory Panel took no action on this proposal.

Previous Council actions affecting the use of pots in IFQ sablefish fisheries⁵

Amendment 14 to the GOA Fishery Management Plan banned the use of pots for fishing for sablefish in the GOA, effective 18 November 1985, starting in the Eastern area in 1986, in the Central area in 1987, and in the Western area in 1989. An earlier regulatory amendment was approved in 1985 for 3 months (27 March - 25 June 1985) until Amendment 14 was effective. A later regulatory amendment in 1992 prohibited longline pot gear in the BS (57 FR 37906). The prohibition on sablefish longline pot gear use was removed for the BS effective 12 September 1996, except from 1 to 30 June to prevent gear conflicts with trawlers during that month. Sablefish longline pot gear is allowed in the AI.

Regulatory process/timing

The IPHC may redefine legal gear to include pot gear (single and longline since there is a single gear code for both configurations) for halibut in Area 4A at its January 2013 Annual Meeting, as part of its action to adopt annual measures for 2013. Current IPHC gear regulations are excerpted below. The language suggests that additional action by NMFS to amend Federal regulations may be necessary; staff plans to provide additional clarification on whether rulemaking would be required during consideration of this proposal. It is unlikely that the Council and NMFS could complete an analysis and rulemaking in time even for the 2014 fishing season, unless the Council explicitly made this action a higher priority than other rulemakings already in development. The Council may choose to direct staff to develop the required analyses and rulemakings independent of the Council process in order to expedite implementation (but it still would be unlikely to be implemented for 2014), if it feels it had sufficient information to recommend a preferred alternative. The Council has given this direction on other IFQ amendments.

19. Fishing Gear

(1) No person shall fish for halibut using any gear other than hook and line gear, except that vessels licensed to catch sablefish in Area 2B using sablefish trap gear as defined in the Condition of Sablefish Licence can retain halibut caught as bycatch under regulations promulgated by the Canadian Department of Fisheries and Oceans.

Current fishery information⁵

Bycatch and discards in all gear types

Prohibited species catches (PSC) in the targeted sablefish fisheries are dominated by halibut (1,060 t/year) and golden king crab (134,000 individuals/year) for both the BSAI and GOA; more detailed analysis in the affected area of the proposed action follows later in the paper. Overall, halibut catches seem to be decreasing, while catches of golden king crab are highly variable from year to year, probably as a result of low sampling effort in BSAI sablefish pot fisheries (Table 3.6 in the 2012 Groundfish SAFE Reports).

Prepared by North Pacific Council Staff

⁵ <u>http://www.afsc.noaa.gov/refm/stocks/plan_team/BSAIsablefish.pdf</u>; the original table numbers are retained to provide reference to the source document

Table 3.6. Prohibited Species Catch (PSC) estimates reported in tons for halibut and herring, thousands of animals for crab and salmon, by year, and fisheries management plan (BSAI or GOA) area for the sablefish fishery.

Source: NMFS AKRO Blend/Catch Accounting System PSCNQ via AKFIN, October 12, 2012.

						_		`					
	2008			2009			2010			2011			Average
	BSAI	GOA	Total	BSAI	GOA	Total	BSAI	GOA	Total	BSAI	GOA	Total	
Hook and Line													
Bairdi Crab	0.00	0.01	0.01	0.03	0.24	0.28	0.00	0.07	0.07	0.00	0.00	0.00	0.09
Golden K. Crab	0.17	0.08	0.25	0.32	0.03	0.35	0.97	0.00	0.97	0.50	0.13	0.63	0.55
Halibut	151	953	1,104	186	1,023	1,209	220	760	980	135	813	948	1,060
Other Salmon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Opilio Crab	0.01	0.23	0.24	0.01	0.21	0.22	0.00	0.16	0.16	0.00	0.29	0.29	0.23
Red K. Crab	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.05	0.02	0.00	0.02	0.02
Other													
Bairdi Crab	0.14	0.18	0.32	1.65	0.08	1.74	0.00	0.06	0.06	0.94	0.00	0.00	0.53
Golden K. Crab	182	0	182	139	0	139	26	0	26	191	0	191	134
Halibut	28	7	35	17	3	20	39	4	43	17	6	23	30
Herring	0.00	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
Other Salmon	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	0.02	0.00	0.00	0.00	0.00
Opilio Crab	0.25	0.00	0.25	0.01	0.10	0.11	2.15	0.03	2.18	0.33	0.00	0.33	0.72
Red K. Crab	0.42	0.00	0.42	0.00	0.00	0.00	0.00	0.00	0.00	0.41	0.00	0.41	0.21

The following is provided to place the halibut PSC data in context with other bycatch amounts. Table 3.4 in the 2012 Groundfish SAFE Reports shows groundfish bycatch in the sablefish target fishery. The largest bycatch is arrowtooth flounder (534 t/year, 456 t discarded). Arrowtooth is the only species that has substantial catch from non-longline gear. Shortspine thornyhead and shortraker rockfish are the 2nd and 3rd most caught species at 366 t/year and 207 t/year. The next three groups are "Other Species", GOA "Other Skate", and GOA longnose skate which total 415 t/year. Giant grenadiers, a non-target species that is not in either FMP, make up the bulk of the nontarget species bycatch, peaking at 9,315 t in 2007, but decreasing since with a 2011 catch of 6,652 t (Table 3.5 in the 2012 Groundfish SAFE Reports). Other nontarget catches that have totals over a ton per year are corals, snails, sponges, sea stars, and miscellaneous fishes and crabs.

Table 3.4. Bycatch (t) of FMP Groundfish species in the targeted sablefish fishery averaged from 2007-2011. Other = Pot and trawl combined because of confidentiality. Other Species is 2007-2010, and Sharks is only 2011. Source: NMFS AKRO Blend/Catch Accounting System via AKFIN, October 12, 2012.

	Hook and Line			Other	Other Gear			All Gear		
Species	Discard	Retained	Total	Discard	Retained	Total	Discard	Retained	Total	
Arrowtooth Flounder	320	66	385	137	12	148	456	78	534	
Thornyhead rockfish	49	292	341	3	21	25	53	313	366	
Shortraker Rockfish	81	93	173	7	26	34	89	119	207	
Other Species	180	2	181	3	1	4	183	3	185	
GOA Other Skate	135	4	139	1	0	1	137	4	141	
GOA Longnose Skate	119	4	122	2	1	3	121	5	126	
Other Rockfish	41	77	118	2	1	4	43	78	121	
Greenland Turbot	37	54	91	16	2	18	53	56	109	
Rougheye Rockfish	38	57	99	16	4	20	54	60	119	
Pacific Cod	25	58	83	1	7	8	26	65	91	
Shark	234	0	234	1	0	1	235	0	235	
GOA Deep Water Flatfish	8	0	8	15	4	19	24	4	28	
Pacific ocean perch	7	0	7	2	16	18	9	16	25	
BSAI Skate	18	0	18	0	-	0	18	0	18	
BSAI Shortraker Rockfish	8	8	15	0	0	0	8	8	16	
GOA Demersal Shelf Rockfish	0	11	11	-	-	-	0	11	11	
BSAI Other Flatfish	7	2	9	1	0	1	8	2	10	
Pollock	0	0	1	5	3	9	5	4	9	
GOA Shallow Water Flatfish	7	1	8	1	0	1	8	1	9	
GOA Rex Sole	0	0	0	5	3	8	5	3	8	
Total	1,315	728	2,046	220	102	322	1,535	830	2,369	

Table 3.5. Bycatch of nontarget species and HAPC biota in the targeted sablefish fishery. Source: NMFS AKRO Blend/Catch Accounting System via AKFIN, October 12, 2012. Conf. = confidential.

Estimated Catch (t)											
Group Name	<u>2006</u>	<u>2007</u>	2008	<u>2009</u>	<u>2010</u>	<u>2011</u>					
Benthic urochordata	0.08	0.00	-	0.01	0.12	0.13					
Birds	0.91	1.59	0.55	0.40	0.35	1.43					
Bivalves	0	Conf.	-	0	0.00	0.06					
Brittle star unidentified	0.05	0.10	0.06	0.33	0.10	0.38					
Corals Bryozoans	1.57	0.16	1.56	1.62	2.45	4.90					
Dark Rockfish	-	-	Conf.	0	Conf.	-					
Eelpouts	1.30	2.26	9.04	1.76	1.34	0.54					
Eulachon	-	0	Conf.	0	Conf.	-					
Giant Grenadier	4,030	9,315	8,897	5,369	4,402	6,652					
Greenlings	-	76	0.02	0.02	-	0					
Grenadier	4,907	109	128	961	749	810					
Hermit crab unidentified	0.05	0.05	0.07	0.09	0.19	0.21					
Invertebrate unidentified	0.07	0.02	0.01	0.42	0.76	1.88					
Misc crabs	0.47	1.12	0.94	3.20	1.90	1.16					
Misc crustaceans	-	-	-	2	0.00	0.00					
Misc deep fish	0	0.00	-	0	-	0					
Misc fish	18.34	17.10	21.19	4.72	4.01	7.96					
Misc inverts (worms etc)	0	Conf.	0	0.01	0.00	0.00					
Other osmerids	-	-	Conf.	-	-	-					
Pandalid shrimp	0	0.00	0.00	0.01	0.00	0.00					
Polychaete unidentified	-	-	0	0.00	0.00	0.00					
Scypho jellies	0.10	0.00	Conf.	0	0	1					
Sea anemone unidentified	0.29	3.34	0.69	1.99	1.32	3.06					
Sea pens whips	0.19	0.08	0.32	0.49	0.03	1.52					
Sea star	5.23	35.29	1.56	2.45	2.53	3.24					
Snails	9.41	8.09	6.43	11.22	11.56	19.70					
Sponge unidentified	0.71	0.16	14.65	1.92	0.76	1.99					
Urchins, dollars, cucumbers	0.15	0.14	0.48	1.03	0.55	0.24					

Discard mortality rates A discard mortality rate (DMR) for the CDQ sablefish pot fishery has been specified, but not for the open access fishery (Table 8). The lack of a DMR suggests a lack of data. An examination of all 2011 observed pot hauls (n=768) were coded with a Pacific cod target. There were only 8 hauls made over 200 f in depth, and none had sablefish reported in them.

Table~8.~Recommended~Pacific~halibut~discard~mortality~rates~(DMRs)~for~2013-2015~CDQ~and~non-CDQ~ground fisheries~off~Alaska.

I. Non-CDQ

Ве	ering Sea/Ale	utians		Gulf of Alas	ka
	Used in	2013-2015		Used in	2013-2015
Gear/Target	2010-2012	Recommendation	Gear/Target	2010-2012	Recommendation
Trawl	· -	-	Trawl	-	-
Atka mack	76	77	Bottom poll	59	60
Bottom poll	73	77	Pacific cod	62	62
Pacific cod	71	71	Dpwtr flats	48	43
Other Flats	72	71	Shallwtr flats	71	67
Rockfish	81	79	Rockfish	67	66
Flathead sole	74	73	Flathead sole	65	65
Midwtr poll	89	88	Midwtr poll	76	71
Rock sole	82	85	Sablefish	65	71
Sablefish	75	75	Arr. fldr	72	73
Turbot	67	64	Rex sole	64	69
Arr. fldr	76	76			
YF sole	81	83			
Pot			Pot		_
Pacific cod	8	8	Pacific cod	17	17
Longline			Longline		_
Pacific cod	10	9	Pacific cod	12	11
Rockfish	9	4	Rockfish	9	9
Turbot	11	13			

II. Bering Sea/Aleutians CDQ

	Used in	2013-2015
Gear/Target	2010-2012	Recommendation
Trawl		
Atka mackerel	85	86
Bottom pollock	85	83
Pacific cod	90	90
Rockfish	84	80
Flathead sole	84	79
Midwtr pollock	90	90
Rock sole	87	88
Turbot	88	89
Yellowfin sole	85	86
Pot		
Sablefish	32	34
Longline		
Pacific cod	10	10
Turbot	4	4

Whale depredation on sablefish Killer whale depredation of the NMFS longline survey's sablefish catches has been a problem in the BS since the beginning of the survey. Killer whale depredation primarily occurs in the eastern BS, AI, and Western GOA and to a lesser extent in recent years in the Central GOA. Depredation is easily identified by reduced sablefish catch and the presence of lips or jaws and bent, straightened, or broken hooks. Since 1990, portions of the gear at stations affected by killer whale depredation during the domestic longline survey have been excluded from the analysis of catch rates, RPNs, and RPWs. Killer whale depredation has been fairly consistent since 1996, which corresponds to when the AI and the BS were added to the survey (Table 3.11 in the 2012 Groundfish SAFE Reports). A high of ten BS stations were depredated in 2009, which significantly impacted catch and biased the abundance index leading to using the 2007 BS RPN estimate to interpolate the 2009 and 2010 BS RPNs (Hanselman et al. 2009). In 2011, depredation levels in the BS were similar to previous years with catches at 7 of 16 stations affected. There was higher depredation in the AI in 2012 than most years (5 of 14 stations).

Table 3.11. Count of stations where sperm (S) or killer whale (K) depredation occurred in the six sablefish management areas. The number of stations sampled that are used for RPN calculations are in parentheses. Areas not surveyed in a given year are left blank. If there were no whale depredation data taken, it is denoted with an "n/a". Killer whale depredation did not always occur on all skates of gear, and only those skates with depredation were cut from calculations of RPNs and RPWs.

	BS ((16)	AI (14)	WG	(10)	CG ((16)	WY	(8)	EY/SI	E (17)
Year	S	K	S	K	S	K	S	K	S	K	S	K
1996			n/a	1	n/a	0	n/a	0	n/a	0	n/a	0
1997	n/a	2			n/a	0	n/a	0	n/a	0	n/a	0
1998			0	1	0	0	0	0	4	0		0
1999	0	7			0	0	3	0	6	0	4	0
2000			0	1	0	1	0	0	4	0	2	0
2001	0	5			0	0	3	0	2	0	2	0
2002			0	1	0	4	3	0	4	0	2	0
2003	0	7			0	3	2	0	1	0	2	0
2004			0	0	0	4	3	0	4	0	6	0
2005	0	2			0	4	0	0	2	0	8	0
2006			0	1	0	3	2	1	4	0	2	0
2007	0	7			0	5	1	1	5	0	6	0
2008			0	3	0	2	2	0	8	0	9	0
2009	0	10			0	2	5	1	3	0	2	0
2010			0	3	0	1	2	1	2	0	6	0
2011	0	7			0	5	1	1	4	0	9	0
2012			1	5	1	5	2	0	4	0	3	0

Sperm whale depredation affects longline catches in the GOA, but evidence of depredation is not accompanied by obvious decreases in sablefish catch or common occurrence of lips and jaws or bent and broken hooks. Data on sperm whale depredation have been collected since the 1998 longline survey (Table 3.11). Sperm whales are often observed from the survey vessel during haulback but do not appear to be depredating on the catch. Sperm whale depredation during the longline survey is recorded at the station level and is defined as sperm whales being present during haulback with the occurrence of damaged sablefish in the catch. Sperm whales are most commonly observed in the Central and Eastern GOA, with the majority of depredation occurring in the West Yakutat and East Yakutat/Southeast areas. Depredation has been variable since 1998.

Multiple studies have attempted to quantify sperm whale depredation rates. An early study using data collected by fisheries observers in Alaskan waters found no significant effect on the commercial fishery catch. Another study using data collected from commercial vessels in southeast Alaska, found a small, significant effect comparing longline fishery catches between sets with sperm whales present and sets with sperm whales absent.

Previous investigations on the use of pots in the sablefish IFQ fishery In December 2005, the Council requested that the AFSC Auke Bay Laboratory scientists investigate a number of issues related to management of the sablefish pot fishery in the Bering Sea and Aleutian Islands that had been raised as part of a previous call for IFQ/CDQ proposals. These findings were first reported in the 2008 sablefish stock assessment⁶ and are incorporated into this paper as additional background information regarding the use of sablefish pot gear and its deployment.

Description of the sablefish IFQ pot fishery

Pot fishing in the IFQ fishery is not allowed in the GOA but is legal in the BSAI regions. In 2000, the pot fishery accounted for less than ten percent of the fixed gear sablefish catch in these areas but effort has increased substantially since, in response to killer whale depredation. Since 2004, pot gear has accounted for over 50% of the BS fixed gear IFQ catch and up to 34% of the catch in the AI. Pot fishing for sablefish has increased in the BS and AI as a response to depredation of longline catches by killer whales (Table 3.2). Pots are longlined with approximately 40-135 pots per set.

Table 3.2. Catch (t) in the Aleutian Islands and the Bering Sea by gear type. Both CDQ and non-CDQ catches are included. Catches in 1991-1999 are averages. 2012 catch as of September 29, 2012 (www.akfin.org).

		Aleutian Islan	ds	
<u>Year</u>	<u>Pot</u>	<u>Trawl</u>	<u>Longline</u>	<u>Total</u>
1991-1999	6	73	1,210	1,289
2000	103	33	913	1,049
2001	111	39	925	1,074
2002	105	39	975	1,119
2003	316	42	761	1,120
2004	384	32	539	955
2005	688	115	679	1,481
2006	458	60	614	1,132
2007	632	40	476	1,149
2008	177	76	647	900
2009	78	75	943	1,096
2010	59	74	943	1,076
2011	141	47	831	1019
2012	36	140	708	884
		Bering Sea		
1991-1999	5	189	539	733
2000	40	284	418	742
2001	106	353	405	864
2002	382	295	467	1,144
2003	355	231	413	999
2004	432	293	312	1,038
2005	590	273	202	1,064
2006	584	84	368	1,037
2007	878	92	203	1,173
2008	754	183	199	1,135
2009	557	93	240	891
2010	452	30	272	754
2011	405	44	246	695
2012	295	87	177	559

⁶ http://www.afsc.noaa.gov/refm/docs/2008/BSAIsablefish.pdf

Pot catch rates: There is more uncertainty in catch rates from 1999-2004 because there were few observed vessels during this period. From 2005-2007 the average catch rate was 23.8 lbs/pot in the Aleutian Islands and the Bering Sea. However, because there were still relatively few vessels observed in 2005-2007 there was high variability in the average catch rates. Because of the high variability, catch rates within areas were not significantly different between any years in both the observer and logbook data. For both the Bering Sea and Aleutian Islands, no trend in catch rates is discernible. The composition of species caught in pots in the Bering Sea and the Aleutian Islands was similar in 2005. Sablefish comprised most of the catch by weight (Bering Sea = 60%, Aleutian Islands = 69%) and the next most abundant fish by weight was arrowtooth flounder (Bering Sea = 13%, Aleutian Islands = 10%). Other species of fish and invertebrates contributed no more than 6% each to the total catch weight.

Pot spatial and temporal patterns: Seasonal changes in effort were examined in the 2007 SAFE Report, but no distinct trends were found.

Pot length frequencies: The authors compared the length frequencies recorded by observers from the 2006-2008 longline and pot fisheries. The average length of sablefish in the Aleutian Islands and in the Bering Sea was smaller for sablefish caught by pot gear (63.8 cm) than longline gear (66.0 cm), but the distributions indicate that both fisheries focus primarily on adults. Pot and longline gear is set at similar depths in the Aleutians and Bering Sea and sex ratio of the catch is 1:1 in both gears. The authors do not believe that the difference in lengths is significant enough to affect population recruitment and did not see any indication that undersized fish were being selected by pots.

Sablefish diets in pots: One concern was the possibility of cannibalism by larger sablefish while in pots. Because few small sablefish are found in pots, there was concern that small sablefish were entering the pots and being cannibalized by larger sablefish.

A total of 257 sablefish stomachs were examined during 2006 and 2007 at sea and in plants in Dutch Harbor, AK. Of these sablefish, 80% were females (attributed to selecting fish greater than 65 cm). A total of 72% of the stomachs sampled were empty. The prey item that occurred most commonly was squid (13%), followed by miscellaneous small prey <15 cm (10%), vertebrae and unidentified digested fish (3%), forage fish (2%), and crab (1%). Some of the squid in the stomachs were noted to be bait from the pots. Miscellaneous small prey included brittle stars and unidentified small prey. The frequency of prey occurrence (out of 257 stomachs) is detailed in the figure below.

No sablefish were found in the stomachs of large pot-caught sablefish. Several caveats exist to these results. The authors were not provided with the soak time of these pots, so it is possible some of the vertebrae were from digested sablefish. However, sablefish in a benthic environment would likely be at least 35 cm (age 2+) and would take some time to digest to the point of becoming unidentifiable vertebrae. In addition, some stomach contents may have been regurgitated when the pots were retrieved. However, because no sablefish were present in the stomach samples, cannibalism in pots either does not occur or is a rare event.

Pot soak times: In 2006, some questions were raised about storing pots at sea, escape rings and biodegradable panels. While the authors have not analyzed the consequences of these potential regulatory issues, in 2006 the authors examined the soak times of the observed pot sets. These plots are shown in the SAFE Report.

In an experiment examining escape mechanisms for Canadian sablefish, control traps had only 5% mortality up to 10 days; in the current fishing environment, 90% of the pot sets were soaked for 7 days or fewer.

Pot sample sizes: Sablefish pot fishing has increased dramatically in the Aleutian Islands and the Bering Sea since 1999. In 2007, pot gear accounted for 81% of the Bering Sea fixed gear IFQ catch and 56% of the catch in the Aleutians. Fishery catch and effort data for pot gear are available from observer data since 1999; however, due to confidentiality agreements, the authors cannot present these data due to low

sample sizes. Pot fishery data are also available from logbooks since 2004; however, these data are also sparse. The number of observed sets and the number of pots fished increased dramatically in 2005 and remained high through 2007. The number of logbook pot sets has continued to increase in the Bering Sea and has stayed consistent in the Aleutian Islands. Over all years, the average number of pots used per set was 78.

Contributors

Jane DiCosimo	NPFMC
Steve Lewis	NMFS AKRO
Jessie Gharrett	NMFS RAM
Tamara Bledsoe	NMFS RAM
Chris Lunsford	NMFS AFSC
Cara Rodgveller	NMFS AFSC
Dana Hanselman	NMFS AFSC
Michael Fey	AKFIN
Gregg Williams	IPHC
Heather Gilroy	IPHC

Attachment 1 Proposal

IPHC

Proposal: Allowing the retention of coincidentally harvested Halibut during the Bering Sea Sablefish Pot Fishery

Year(s): Effective spring 2009, for a three year trial/evaluation period

Definition and Objective:

This proposal is to allow the retention of incidental by catch Halibut, specifically caught in the Bering Sea Sablefish fishery, by pot, by qualified barvesters that have 4A Halibut quota. This proposal is very much the same as the recently passed regulatory change in area 2B. There are 3 primary objectives to this proposal. 1) Increase the area of harvest in 4A, 2) reduce mortality from Killer whale predation and handling, and 3) Reduce concentrated harvest in traditional "whale-free" areas.

- Currently there is a very large portion of 4A that is not reasonable to attempt harvesting Halibut from because of Killer whale predation. Pots have been successful in safely capturing these fish, with no mortality from predation.
- 2) Under the current regulations, all Halibut caught by Sablefish pots must be discarded. Because of where the majority of the Bering Sea Sablefish Pot fishery is conducted, there is a constant presence of Killer whales near harvesting vessels. There is no mechanism by which halibut can be safely returned, without extremely high mortality. Mortality from handling would be completely eliminated.
- 3) Because of the increased presence of Killer whales in 4A, harvesters have been forced into ever increasingly small areas of harvest, with limited windows of opportunity to harvest. Allowing these specified pot vessels to retain their by-catch reduces both pressure on the resource and direct competition between vessels, lessening focused impact on the resource, and significantly increasing the area of harvest.

Impacts:

All vessels fishing with hooks will see some small measure of relief from this proposal, simply because: a) some of the fish would, with this proposal, be harvested from regions that are not being currently exploited, b) Halibut caught by pot, landed and recorded, would directly increase the availability, by reducing competitive pressure, and direct and indirect mortality issues

Opinion:

We have had 7 years of Sablefish fishing, by pot, in the Bering Sea to witness changing events. The Killer whale predation problem is increasing. Cows are teaching their calves the "technique" of stripping fish and following in to snatch by eatch as quickly as it is discarded. When we discard Halibut, we are destroying the fish. We can't change the whales feeding habits, but we can change their access to Halibut in particular. I believe all vessels engaged in Sablefish fishing in the Bering Sea should be required to have some Halibut quota for 4A, specifically to cover the inevitable by catch of Halibut.

For a significant portion of the year, Halibut and Sablefish share intermingled climes on the ocean bottom. Traditional halibut surveys do not get to these regions. To pursue Sablefish will forever take us through regions of Halibut as the two species compete for food. Recognizing this interrelationship, I am proposing that we retain both.

Attachment 2. Plots of halibut in sablefish pots,

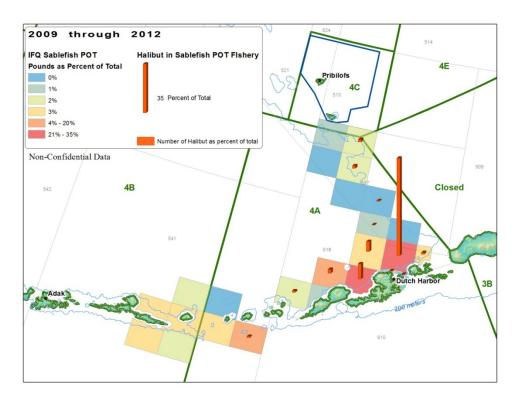


Figure 2 Number of halibut as a percent of total (summed over 2009-2012) halibut caught incidentally in IFQ sablefish fishery in pot gear.

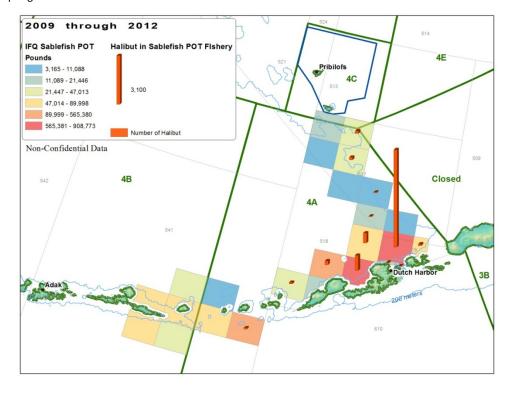


Figure 3 Number of total halibut (summed over 2009-2012) caught incidentally in IFQ sablefish fishery in pot gear.

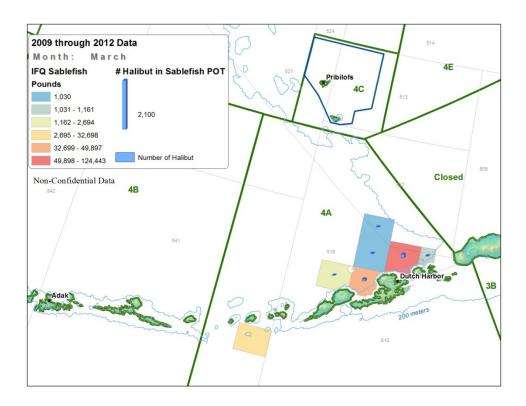


Figure 4 Number of total halibut (summed over 2009-2012) caught incidentally in IFQ sablefish fishery in pot gear by month.

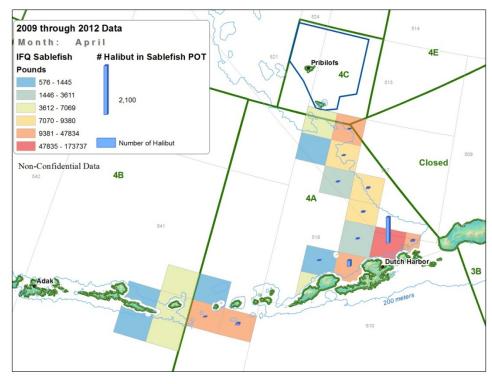


Figure 5 Number of total halibut (summed over 2009-2012) caught incidentally in IFQ sablefish fishery in pot gear by month.

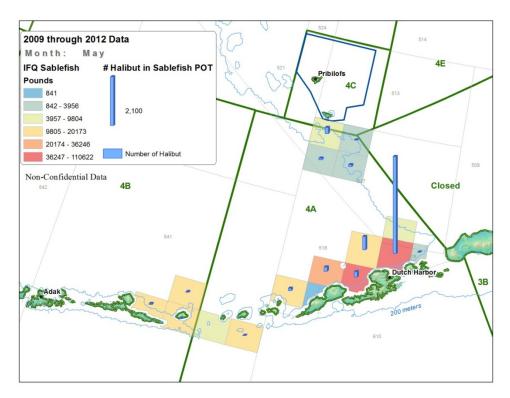


Figure 6 Number of total halibut (summed over 2009-2012) caught incidentally in IFQ sablefish fishery in pot gear by month.

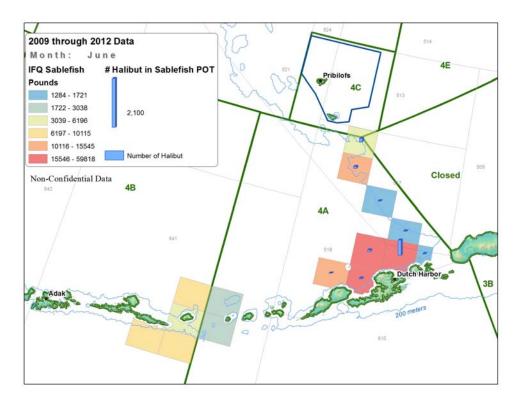


Figure 7 Number of total halibut (summed over 2009-2012) caught incidentally in IFQ sablefish fishery in pot gear by month.

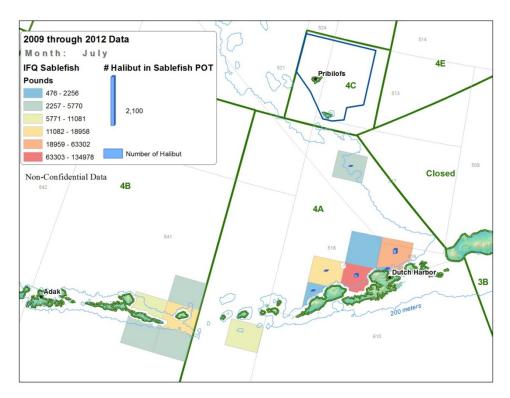


Figure 8 Number of total halibut (summed over 2009-2012) caught incidentally in IFQ sablefish fishery in pot gear by month.

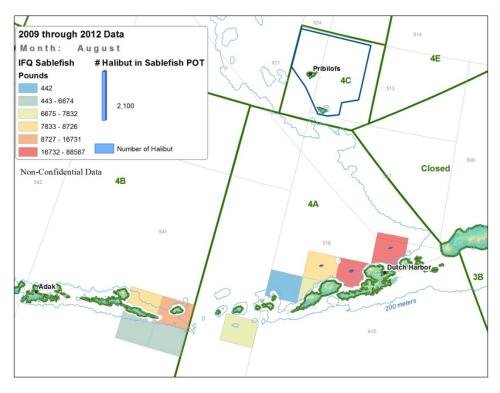


Figure 9 Number of total halibut (summed over 2009-2012) caught incidentally in IFQ sablefish fishery in pot gear by month.

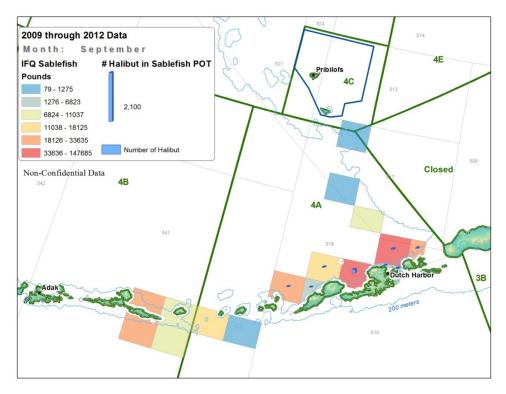


Figure 10 Number of total halibut (summed over 2009-2012) caught incidentally in IFQ sablefish fishery in pot gear by month.

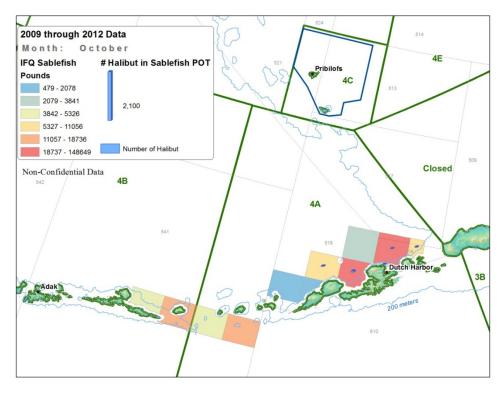


Figure 11 Number of total halibut (summed over 2009-2012) caught incidentally in IFQ sablefish fishery in pot gear by month.

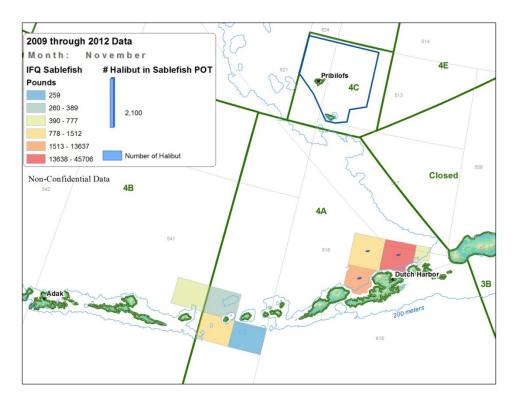


Figure 12 Number of total halibut (summed over 2009-2012) caught incidentally in IFQ sablefish fishery in pot gear by month.

Attachment 3 2009 IPHC letter to the Council

COMMISSIONERS:

JAMES BALSIGER
JUNEAU, AK
RALPH G. HOARD
SEATTLE, WA
LARRY JOHNSON
PARKSVILLE, B.C.
PHILLIP LESTENKOF
ST. PAUL, AK
LAURA RICHARDS
NANAIMO, B.C.
GARY ROBINSON

VANCOUVER, B.C.

INTERNAL IONAL PACIFIC HALIBUT (APTIMITISSION

C7 Retention 4A Halibut in Sablefish PUSECTOR BRUCE M. LEAMAN

P.O. BOX 95009 SEATTLE, WA 98145-2009

> TELEPHONE (206) 634-1838

FAX: (206) 632-2983

ESTABLISHED BY A CONVENTION BETWEEN CANADA

AND THE UNITED STATES OF AMERICA

September 24, 2009



Mr. Eric Olsen, Executive Director North Pacific Fishery Management Council 605 W 4th Avenue, Suite 306 Anchorage, AK 99501-2252

Dear Mr. Olsen, Enic

The North Pacific Fishery Management Council's IFQ Implementation Team is reviewing IFQ proposals at the October Council meeting. The Council has been asked by the IPHC to comment on the proposal to allow retention of IFQ halibut in pot gear during the Bering Sea sablefish fishery. Authority for definition of legal gear for the halibut fishery rests with the Commission; however, the Council's input for the next IPHC Annual Meeting in January 2010 would be beneficial.

The IPHC staff is not opposed to allowing pot gear in Area 4A from a biological point of view. However, if the pot catch of halibut is sufficiently large enough, we would need to determine a pot gear selectivity curve for halibut for our stock assessment in order to account for that removal. Additionally, NMFS/RAM regulations would need to require full retention of halibut if the vessel has halibut IFQ and is using pot gear, similar to the regulation for longline gear. Also, IPHC regulations define legal gear by IPHC regulatory area but IPHC regulatory areas and NMFS sablefish areas are not concurrent. NOAA Enforcement would also need to provide feedback on location restrictions and may require that the vessel be transmitting with a Vessel Monitoring System transmitter.

The IPHC staff could not agree to allow pot gear coast-wide or an expansion to this proposal, without an understanding of the magnitude and impacts of catch in the pot fishery. The issues that the Council and Commission should consider include gear conflicts, creation of a new halibut fishery, redistribution of catch by gear, fish quality, and potential for future requests for expansion to winter cod fisheries.

Ms. Heather Gilroy of our staff will be attending the IFQ Implementation Team meeting by teleconference.

Sincerely,

Bruce M. Leaman Executive Director

cc: Commissioners

Jeff Stephan, Chair, IFQ Implementation Team

Ron Antaya, NMFS

North Pacific Fishery Management Council

Eric A. Olson, Chairman Chris Oliver, Executive Director

Telephone (907) 271-2809



605 W. 4th Avenue, Suite 306 Anchorage, AK 99501-2252

Fax (907) 271-2817

Visit our website: http://www.fakr.noaa.gov/npfmc

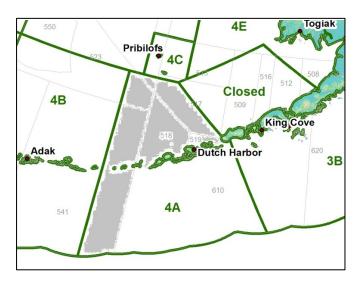
December 14, 2012

Dr. Bruce Leaman, Executive Director International Pacific Halibut Commission 2320 West Commodore Way, Suite 300 Seattle, Washington 98199-1287

RE: Area 4A halibut retention in sablefish pots

Dear Bruce:

At its December 2012 meeting the North Pacific Council reviewed your letter of September 24, 2009, in which you forwarded a proposal that originally was submitted to the Commission. The proposal recommends that the IPHC consider an action to amend its regulations to allow the retention of Area 4A halibut that are incidentally caught while targeting sablefish in the areas of overlap with the Bering Sea and Aleutian Island regulatory areas using pot gear, if the harvester holds both halibut and sablefish Individual Fishing Quotas to cover both harvests. The Council acknowledged several points in your letter, specifically about potential spatial redistribution of catch that could lead to gear conflicts, deployment of pot gear to increase targeting of halibut, and fish quality.



The Council also noted the need to coordinate the timing of implementation of complementary IPHC and Federal regulations, if the Commission adopts the proposed action. At a minimum, the Council likely would need to recommend that NMFS revise Federal regulations to require mandatory retention of halibut in sablefish (single or longline) pots if the IPHC approves the proposal. The result only would allow this exemption in those areas of the Bering Sea and Aleutian Islands sablefish management areas that overlap with IPHC Regulatory Area 4A, as shown in the figure. The Council requested an expanded discussion paper to address four additional concerns that are listed below, and intends to review this discussion paper prior to making any recommendation to the IPHC on this issue, assuming the IPHC still has interest in pursuing this proposal.

1. Determine whether there is overlap in the spatial and/or temporal distribution of halibut longlining and sablefish pot fishing in the portion of Area 4A to which this proposal would apply.

IPHC Area 4A Ltr December 14, 2012 Page 2

- 2. Discuss the potential need for the following regulations:
 - a. Requiring the removal of sablefish pots from the fishing grounds upon completion of the harvest of the vessel's sablefish IFQ, and at the end of the season.
 - b. Requiring radar reflectors or other gear markers at both ends of a longline pot string.
 - c. Prohibiting "pot sharing" while pots are in the water.
 - d. Prohibiting the modification of sablefish pot tunnels.
- 3. Discuss the physical and market condition of halibut incidentally caught in sablefish pots.
- 4. Provide a discussion of the experiences and lessons learned by the industry and managers in Areas 2A and 2B from allowing the retention of halibut incidentally caught in sablefish pots, including retention caps.

The December 2012 discussion paper is posted at http://www.fakr.noaa.gov/npfmc/PDFdocuments/halibut/4AhalibutPots_dp_1212.pdf. After its review of additional information to be included in the revised paper in 2013, the Council will provide a recommendation to the IPHC prior to its 2014 annual meeting. Jane DiCosimo will represent the Council at the 2013 IPHC Annual Meeting to provide additional details, as requested, on the status of this and other Council actions.

Sincerely,

Chris Oliver

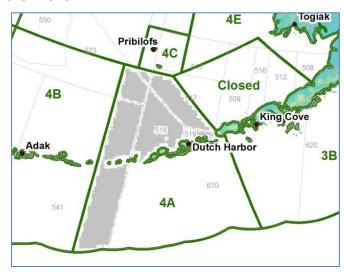
Executive Director

Individual Fishing Quota Program Proposal to Allow IFQ halibut in Area 4A to be retained in IFQ sablefish pots

North Pacific Fishery Management Council Expanded Discussion Paper March 2013

Background

In December 2012 the Council considered a proposal submitted to the International Pacific Halibut Commission (IPHC) in 2008. The IPHC had requested a Council recommendation before it considered the proposal for adoption during its annual meeting. If adopted the IPHC would redefine legal gear for harvesting commercial halibut to include groundfish pots (single or longline, as allowed under Federal regulations) as legal gear in Area 4A (only). The result would allow the use of sablefish pots fished in the Bering Sea and Aleutian Islands management areas to retain only Area



4A halibut IFQs. If adopted by the IPHC, the proposal also would require Federal rulemaking¹.

During its review of a December 2012 discussion paper the Council requested information to address four additional topics (listed below) that it identified after its review of a discussion paper (Appendix 1). The Council identified this information as necessary before it would decide whether to recommend the action to the IPHC for the latter's adoption. The Council also noted that the issues addressed under this proposal would be informative on another IFQ proposal under Council consideration, i.e., to consider allowing the use of pot gear for sablefish in the Gulf of Alaska. The Council identified its interest in forming a gear committee to develop information to be included in a future discussion paper.

The four topics covered in this paper follow. Some additional management clarifications are provided.

- Determine whether there is overlap in the spatial and/or temporal distribution of halibut longlining and sablefish pot fishing in the portion of Area 4A to which this proposal would apply.
- 2. Discuss the potential need for the following regulations:
 - a. Requiring the removal of sablefish pots from the fishing grounds upon completion of the harvest of the vessel's sablefish IFQ, and at the end of the season.
 - b. Requiring radar reflectors or other gear markers at both ends of a longline pot string.
 - c. Prohibiting "pot sharing" while pots are in the water.
 - d. Prohibiting the modification of sablefish pot tunnels.
- 3. Discuss the physical and market condition of halibut incidentally caught in sablefish pots.
- 4. Provide a discussion of the experiences and lessons learned by the industry and managers in Areas 2A and 2B from allowing the retention of halibut incidentally caught in sablefish pots, including retention caps.

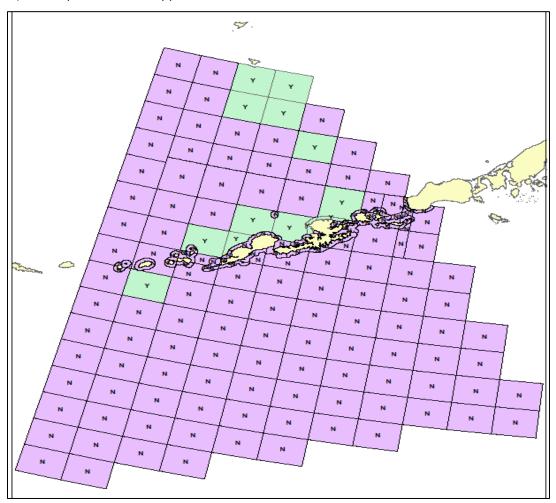
¹ The Council may decide that a complementary regulatory amendment would not need to return through the Council process, but could proceed with Council staff working directly with the NMFS Regional Office.

In summary, the action before the Council is whether to send a letter to the IPHC to recommend the proposed action. As proposed, direct action by the Council likely would be required to amend Federal regulations to allow sablefish (i.e., groundfish) pots as legal gear for the retention of halibut, however the Council may wish to wait to initiate the required analyses until after the IPHC indicates an interest in this proposal. Action also may be required by the Alaska Board of Fisheries. The IPHC has taken no position on the proposal; to date it only has forwarded the proposal to the Council to gauge the latter's support for moving the proposal forward in the IPHC process. If adopted by the IPHC, the proposed action could be implemented in IPHC regulations to coincide with NMFS rulemaking at a later time, ". . . pursuant to regulations promulgated by NMFS and published in 50 CFR Part 300."

1. Determine whether there is overlap in the spatial and/or temporal distribution of halibut longlining and sablefish pot fishing in the portion of Area 4A to which this proposal would apply.

There are two management issues of interest related to the proposal to allow halibut to be retained in sablefish IFQ pots in a limited subarea of Area 4A: 1) the spatial and temporal overlap between the halibut IFQ longline fishery in Area 4A and the sablefish IFQ pot fishery and 2) the amount of halibut currently caught in sablefish IFQ pots and currently required to be discarded.

The following graph depicts the statistical areas where IFQ sablefish pots and IFQ halibut longlines were fished in the same week in Area 4A during 2009-2011. More detailed information (monthly plots) will be provided in a supplement.



Observer data for 2005-2011 showed that between 5 and 9 vessels were observed in the Area 4A fishing pots for sablefish. Between 1 and 7 halibut vessels in the Area 4 IFQ fishery were observed during the same period. Further examination of this data set was not pursued to demonstrate spatial/temporal overlap of the two fisheries.

The second issue of halibut discards in IFQ sablefish pots was addressed in maps presented in December 2012 (Appendix 1). There appear to be halibut discards throughout the IFQ season, with the highest occurrence in numbers of halibut in May (see table below). The spike in halibut corresponds to the map of sablefish pot and halibut longline fishery interactions in May (as shown in the December 2012 appendix; there is no corresponding spike in sablefish in May.

Table 1 Frequency and timing of Area 4A halibut IFQ incidental catch in the BS and AI sablefish pot IFQ fishery in 2012. * Source: AKFIN data

Landing Date	Number of halibut	Pounds of sablefish	Number of sablefish landings
Mar	322	281,844	53
Apr	1,626	517,396	194
May	8,609	568,199	269
Jun	1,135	348,169	161
Jul	1,110	388,681	165
Aug	74	292,879	116
Sep	527	861,411	335
Oct	196	540,956	274
Nov	71	174,151	64
Grand Total	13,670	3,973,686	1,631

2. Discuss the potential need for the following regulations:

- a. Requiring the removal of sablefish pots from the fishing grounds upon completion of the harvest of the vessel's sablefish IFQ, and at the end of the season.
- b. Requiring radar reflectors or other gear markers at both ends of a longline pot string.
- c. Prohibiting "pot sharing" while pots are in the water.
- d. Prohibiting the modification of sablefish pot tunnels.

General comments on regulatory compatibility

The above four potential enforcement actions raise a general issue related to the development of new or revised text that would be compatible (or require changes) among regulations of the IPHC, NMFS and State of Alaska (5 AAC 28.092 <u>Limitations for halibut</u> and 5 AAC 28.070 <u>Groundfish possession and landing requirements</u>). IPHC regulatory text could be adopted that implements that regulation contingent upon implementation of revised Federal regulations.

Note also that regulatory text that would affect pot fisheries (in State and Federal waters) are not specific to sablefish fisheries, but would apply to all groundfish fisheries. Sufficient rationale for amending regulations for all groundfish pot fisheries would need to be identified.

Specific comments on regulatory requirements under consideration

The following comments are provided in the context of whether the actions identified above (a - d) can be implemented and/or enforced by State and Federal agencies. Formal responses from the agencies can best be determined once the specific policy, as well as regulatory language, is identified.

During its December 2012 review of the previous discussion paper, the Enforcement Committee provided the following comments to the Council (emphasis added).

"Jane DiCosimo presented an overview of a proposal to allow fishermen with commercial IFQs for both halibut and sablefish to retain halibut in IPHC Regulatory Area 4A that were caught in sablefish pots. The Committee spent some time discussing the importance of this proposal in relation to halibut resource in area 4A. It was generally viewed by the Committee, that the continued high halibut usage and the potential to reduce halibut discards makes this proposal relevant.

From the Committee's perspective, the intent of this proposal is not to permit increased directed fishing of halibut with pot gear, but rather better use of the halibut resource. The Committee noted that if the Council felt the need to reduce potential for increased directed effort toward halibut bycatch, a management tool such as a "MRA" could be considered. This would not present undue enforcement or compliance challenges. It was noted that area 4A is subject to both halibut clearance requirements and a sablefish directed fishing requirement to operate VMS, so there are monitoring and enforcement tools already in use in the fishery.

In summary, the Committee felt that proposal does not present any obvious compliance or enforcement issues. The Committee noted that the action could potentially be a vehicle to rectify conflicting "check-in" procedures required under halibut and sablefish requirements. The proposal indicates the need to redefine the area by latitude and longitude, but the Committee does not believe this is necessary, since the proposal would apply to those sablefish areas of the BSAI overlapped by area 4A. (Pot groundfish gear is not authorized in the portion of 4A contained within the WGOA). The Committee noted that authorizing retention of halibut IFQ in the sablefish fishery in IPHC Regulatory Area 4A necessitates the need for independent real-time positional reporting using VMS."

Specific regulatory approaches were suggested by the Council for further discussion on their need. A panel² of Federal fishery experts was convened to provide the following comments on legal, enforcement, and implementation aspects. Staff of the ADF&G also provided comments, as changes to State regulations may be necessary to implement some of the potential requirements under consideration in this discussion paper.

a. Requiring the removal of sablefish pots from the fishing grounds upon completion of the harvest of the vessel's sablefish IFQ, and at the end of the season.

Public testimony in December 2012 raised an issue relating to potential pre-emption of fishing grounds, and monopolizing an area so that trawl vessels or other gears cannot effectively fish in an area. Federal regulations do not allow "wet storage" of pot gear in federal waters. NMFS staff identified significant limitations on enforceability of pot storage in Federal waters, as NMFS does not have the capability of pulling pots (or any gear) at sea.

The State of Alaska allows wet storage of groundfish pots in state waters of the BSAI and South Alaska Peninsula areas, so long as pots are unbaited, bait containers removed, doors secured open, and stored in water less than 25 fathoms (5 AAC 28.632 and 5 AAC 28.571). Implementation in State waters of the

-

² Ron Antaya (OLE), Susan Auer (GCAK), Jane DICosimo (NPFMC), Heather Gilroy (IPHC), LT Tony Kenne (USCG), Michael Killary (OLE), Peggy Murphy (AKRO). Nicole Kimball and other ADF&G staff also contributed comments.

potential action to remove sablefish pots after fishing is completed would require changes to State regulations through the Alaska Board of Fisheries process.

b. Requiring radar reflectors or other gear markers at both ends of a longline pot string.

Public testimony in December 2012 raised consideration of a requirement to mark longline pot gear to assist in tracking of where the fishery was occurring and to determine whether vessels were fishing in more shallow waters than typical for targeting sablefish, although the IPHC plans to expand its Alaska's halibut survey stations by 30% as catches increase in deeper areas, particularly in Area 4, the Unalaska region, out through the Aleutians and on into the Bering Sea³.

NMFS and USCG staffs identified that such a requirement can be enforced if gear marking specifications are explicitly provided in Federal regulatory text. Specifications could include permit ID numbers and name of permit holder. "Radar Reflectors" would likely need to be defined in the regulations so that there is a clear standard for enforcement.

The State of Alaska does not require radar reflectors. All commercial longline or skate gear buoys, or kegs and buoys for groundfish pots, must be marked with the permanent ADF&G vessel license plate number of the vessel operating the gear (5 AAC 28.050(b). The State only allows the use of longlined sablefish pots in the Aleutian Islands District (consistent with the Federal fishery) and not in the Western District of the South Alaska Peninsula (5 AAC 28.640(c)). Implementation in State waters of requiring radar reflectors in the areas in which longlined pots are authorized for groundfish in State waters (i.e., the portion of the AI District that is within Area 4A) would necessitate changes to State regulations through the Alaska Board of Fisheries process.

c. Prohibiting "pot sharing" while pots are in the water.

Pot sharing addresses whether one boat may bring out pots for another vessel, or multiple vessels may share pots to be able to stake a claim and control a fishing area. This practice is legal in Federal waters as there is no prohibition on the practice in Federal regulations, however, any prohibition could not be enforced because NMFS cannot pull any gear at sea.

• The Magnuson-Stevens Fishery Conservation and Management Act prohibits actions:

"(K) to to [sic] steal or attempt to steal or to negligently and without authorization remove, damage, or tamper with—

- (i) fishing gear owned by another person, which is located in the exclusive economic zone [or special areas]*, or
- (ii) fish contained in such fishing gear;
- Federal regulations at Section 679.24 Gear limitations, state the following.
 - (1) All hook-and-line, longline pot, and pot-and-line marker buoys carried on board or used by any vessel regulated under this part shall be marked with the following:
 - (i) The vessel's name; and
 - (ii) The vessel's Federal fisheries permit number; or
 - (iii) The vessel's ADF&G vessel registration number.
 - (2) Markings shall be in characters at least 4 inches (10.16 cm) in height and 0.5 inch (1.27 cm) in width in a contrasting color visible above the water line and shall be maintained so the markings are clearly visible.

³ http://www.iphc.int/publications/rara/2010/2010.201.DiscussionpaperonIPHCsetlinesurveyexpansion.pdf

The State of Alaska prohibits pot sharing in State water groundfish fisheries, as State regulations specify that buoys for groundfish pots must be marked with the permanent ADF&G vessel license plate number of the vessel operating the gear (5 AAC 28.050(b).

d. Prohibiting the modification of sablefish pot tunnels.

A prohibition to modify sablefish pot tunnels is status quo, as groundfish pot dimensions are set in Federal regulation. The intention behind such a prohibition would be to allow sablefish IFQ fishermen to retain incidentally caught halibut in a limited area, with no changes to the gear presently allowed.

Public testimony in December 2012 suggested that any modifications to Federal regulations that define legal gear for directed sablefish IFQ fishing could become a *de facto* directed halibut pot fishery by potentially allowing pot configurations more favorable for harvesting halibut. The public expressed concern that defining pot gear as legal gear for directed halibut fishing could destabilize the status quo in the affected management areas; whereas if the intent is only to permit joint sablefish and halibut IFQ holders to retain incidentally caught halibut if the permit holder also held halibut IFQ for the area fished, the fishermen may realize economic benefits in not having to discard the fish, and the resource may realize conservation benefits due to reduced mortality associated with regulatory discards, as those fish would be counted towards the halibut catch limit.

State regulations define groundfish pots by the size of the pot tunnel eye perimeter at 5 AAC 28.050(e). Section 679.2 (15)

- (15) Pot gear means a portable structure designed and constructed to capture and retain fish alive in the water. This gear type includes longline pot and pot-and-line gear. Each groundfish pot must comply with the following:
 - (i) Biodegradable panel. Each pot used to fish for groundfish must be equipped with a biodegradable panel at least 18 inches (45.72 cm) in length that is parallel to, and within 6 inches (15.24 cm) of, the bottom of the pot, and that is sewn up with untreated cotton thread of no larger size than No. 30.
 - (ii) Tunnel opening. Each pot used to fish for groundfish must be equipped with rigid tunnel openings that are no wider than 9 inches (22.86 cm) and no higher than 9 inches (22.86 cm), or soft tunnel openings with dimensions that are no wider than 9 inches (22.86 cm).
- (16) Pot-and-line gear means a stationary, buoyed line with a single pot attached, or the taking of fish by means of such a device.
- (10) Longline pot means a stationary, buoyed, and anchored line with two or more pots attached, or the taking of fish by means of such a device.
 - 3. Discuss the physical and market condition of halibut incidentally caught in sablefish pots.

Marketability

Pacific halibut retained in Canadian sablefish pots are reported to be in generally good condition unless the soak time of pots was extended (see more detailed comments under "Condition"). No specific length of days after which halibut meat condition is considered to be less than "good" was identified. An examination of Figure 1 (below) confirmed that the length of pot soak times in BSAI and British Columbia, Canada pot fisheries were similar.

Condition

Public testimony in December 2012 suggested that there are negative impacts on the quality and marketability of halibut which undergo physical interactions with the pot gear. Williams and Wilderbuer (1995) reported that, at that time, there was no information on the mortality (i.e., survival) of potcaptured halibut following release, of the type which had been studied and reported by Hoag (1975) for trawls. Williams and Wilderbuer (1995) reported the following qualitative descriptive information regarding halibut caught in pots. Groundfish pots, primarily for Pacific cod, demonstrated the best condition factors and lowest discard mortality rates (DMR) among all gear types. Groundfish pots were typically fished individually, although recently more are fished on longline pot strings to avoid marine mammal depredation on longline gear. Pots are retrieved at least once every 24 hours in an attempt to maintain high quality of catch. Unless a halibut injures itself in the pot, the halibut should be in excellent condition upon release. Injuries can occur however from abrasion when the halibut comes in contact with certain crab species which are also taken incidentally, and from friction against the mesh of the pot. Also pot soak times greater than 24 hours can worsen condition thereby increasing the DMR.

The triennial IPHC halibut discard mortality rate (DMR) report provides a more recent summary of the condition of halibut caught by the three primary gear types. The most recent report was prepared in 2012 on data through 2011 and attached to the Groundfish SAFE Reports; the report contains IPHC staff recommendations for DMRs for the 2013-2015 groundfish fisheries. The following information is summarized from that report and Williams and Wilderbuer (1995).

A number of factors contribute to condition at capture and subsequent release viability of halibut, which vary by gear type. With trawl-caught halibut, condition upon capture is related to the size of the catch, tow duration, and halibut size. For longline halibut bycatch, injuries are most frequently caused by improper release methods used by vessel crews. Another significant factor is the length of the soak time, which can exacerbate the mortality caused by hooking injuries and also increase the potential for amphipod predation. The condition of halibut caught in pots is affected by soak time and the presence of other animals in the pot, especially crabs, whose spiny carapace has been observed to scratch and abrade the skin of the captive halibut.

The mortality rate "m" varies among gear types and represents the aggregate effects of external and internal injuries to the fish and the presence of predation by amphipods or marine mammals. Estimated halibut mortality rates by gear and condition/injury from the 2012 DMR report follow.

Gear (<i>g</i>)	m_{exc}	$oldsymbol{m}_{poor}$	$oldsymbol{m}_{dead}$	
Trawl	0.20	0.55	0.90	
Pot	0.00	1.00	1.00	
	$m{m}_{minor}$	$m{m}_{moderate}$	$m{m}_{severe}$	$m{m}_{dead}$
Longline	0.035	0.363	0.662	1.00

Mean fishery DMRs and associated standard errors were estimated by assuming that each vessel acts as a separate sampling unit, so that a DMR was calculated for each individual vessel in a target fishery. The DMR for a target fishery was then estimated as the mean of vessel DMRs, where the vessel's proportion of the total number of bycaught halibut was used as a weighting factor.

The analyses on halibut DMRs conducted by IPHC have generally excluded IFQ fisheries, which would also include the sablefish pot fishery, so data from this fishery have not been reported nor analyzed. In contrast, the pot fishery for Pacific cod is not an IFQ fishery, so it has been part of the triennial analysis, as have all CDQ fisheries. As described in the most recent report, the number of observed vessels which participated in the CDQ sablefish fishery during 2009-2011 was quite low, i.e., either two or three

vessels observed annually. Very few halibut were examined by observers, but not many halibut were caught. The fishery DMR (0.50) was unchanged during 2009-2010, but dropped quite a bit (0.31) in 2011, more in line with the long term mean. As noted earlier, halibut mortality is positively correlated with longer pot soak time; long soaks increase the potential for amphipod predation of captured fish in the pot.

Use of sablefish pots in the sablefish fishery As described in the sablefish chapter in the GOA and BSAI Groundfish Stock Assessment and Fishery Evaluation (SAFE) reports, depredation by killer whales and sperm whales is common in the Alaska sablefish IFQ fishery. Killer whale depredation commonly occurs in the Bering Sea, Aleutian Islands, and Western Gulf of Alaska. Sperm whale depredation is common in the Central and Eastern Gulf of Alaska. Pot fishing for sablefish has increased in the Bering Sea and Aleutian Islands as a response to depredation of longline catches by killer whales. In 2000 the pot fishery accounted for less than ten percent of the fixed gear sablefish catch in the Bering Sea and Aleutian Islands. Since 2004, pot gear has accounted for over half of the Bering Sea fixed gear IFQ catch and up to 34% of the catch in the Aleutian Islands. Only a small amount of pot fishery data is available from observer and logbook data.

Sablefish pot fishing has increased dramatically in the Aleutian Islands and the Bering Sea since 1999. In 2007, pot gear accounted for 81% of the Bering Sea fixed gear IFQ catch and 56% of the catch in the Aleutians. Fishery catch and effort data for pot gear are available from observer data since 1999; however, these data cannot be presented due to low sample sizes (confidentiality). Pot fishery data are also available from logbooks since 2004; however, these data are also sparse. The number of observed sets and the number of pots fished increased dramatically in 2005 and remained high through 2007. The number of logbook pot sets has continued to increase in the Bering Sea and has stayed consistent in the Aleutian Islands. Over all years, the average number of pots used per set was 78.

The sablefish chapter also describes a pot fishery catch rate analysis. The authors reported few observed vessels during 1999-2004. From 2005-2007 the average catch of sablefish was 24 lbs/pot in the Aleutian Islands and the Bering Sea. Sablefish comprised most of the catch by weight (Bering Sea = 60%, Aleutian Islands = 69%) and the next most abundant fish by weight was arrowtooth flounder (Bering Sea = 13%, Aleutian Islands = 10%). Other species of fish (including halibut) and invertebrates contributed no more than 6% each to the total catch weight.

The following information reported by the SAFE Report authors for sablefish may be informative for application to halibut. Since depths are generally deep and mostly adults are caught there is less concerned that pots will catch juveniles in nursery areas. The average length of sablefish in the Aleutian Islands and in the Bering Sea was smaller for sablefish caught by pot gear (63.8 cm) than longline gear (66.0 cm), but the distributions indicate that both fisheries focus primarily on adults. Pot and longline gear is set at similar depths in the Aleutians and Bering Sea and sex ratio of the catch is 1:1 in both gears. We do not believe that the difference in lengths is significant enough to affect population recruitment and did not see any indication that undersized fish were being selected by pots.

A Canadian study (Scarsbrook et al. 1988) showed that control traps had only 5% sablefish mortality up to 10 days. In 2006 the authors examined the soak times of the observed pot sets and found that 90% of the pot sets were soaked for 7 days or fewer. The soak times for Alaska sablefish are plotted below (Figure 1).

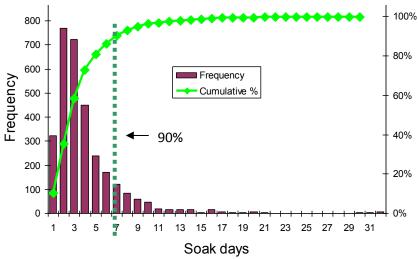


Figure 1. Number of soak days for 1999-2005 BSAI pot fishery (Source: SAFE Report)

Sources

Hoag, S. H. 1975. Survival of halibut released after capture by trawls. IPHC, Sci. Rep. No. 57, 18 p. Scarsbrook, J. R., G. A. MacFarlane, and W. Shaw.1988. Effectiveness of experimental escape mechanisms in sablefish traps. N. Am. J. Fish. Manag. 8:158–161.

Williams, G, and T. Wilderbuer. 1995. Discard mortality rates of Pacific halibut bycatch: fishery differences and trends during 1990-1993. Proc. Int. Symp. N. Pac. Flatfish, AK Sea Grant, 95-04: 611-622.

4. Provide a discussion of the experiences and lessons learned by the industry and managers in Areas 2A and 2B from allowing the retention of halibut incidentally caught in sablefish pots, including retention caps.⁴

Area 2A Retention of halibut incidentally caught in sablefish pots is not legal in Area 2A, nor has it been proposed for those waters.

Area 2B Fisheries and Oceans Canada (DFO) uses Integrated Fisheries Management Plans (IFMP s) to guide the conservation and sustainable use of marine resources. An IFMP was developed to manage the fishery of a particular species in a given region. IFMP s combine the best available science on a species with industry data on capacity and methods for harvesting that species. The IFMP identifies the main objectives and requirements for the groundfish fishery in waters off British Coumbia, as well as the management measures that will be used to achieve these objectives. It provides a common understanding of the basic "rules" for the sustainable management of the fisheries resource. It is not a legally binding instrument which can form the basis of a legal challenge. It can be modified at any time and does not limit the Minister's discretionary powers set out under statutes. The Minister can, for reasons of conservation or for any other valid reasons, modify any provision of the IFMP in accordance with the powers granted him/her. The groundfish IFMP is a living document that will be subjected to a review every two years for updates, with input from interested parties. Any changes required within a given fishing season will continue to be made as needed.

In 2006, the Commercial Groundfish Integration Program was introduced and a single IFMP for groundfish was produced rather than a separate IFMP for each groundfish fishery. The impetus for the

_

⁴ Related information from the Canadian Individual Vessel Quota Programs is incorporated under Issue 3.

move to the integration of the commercial groundfish fisheries was primarily to account for all rockfish mortalities (retained and released at sea), as not much information on at-sea releases was available, as only partial at-sea monitoring was in place so there was unobserved fishing activity.. The move to integrated fisheries management was to account for all catches, retained and released and minimize regulatory discards by providing opportunities to retain most of what is caught.

To retain halibut in sablefish; need sablefish license to fish for sablefish using certain gear types and allows other species of groundfish to be retained provided individual quota is acquired to cover non-directed catch, retained and released.

The total amount of halibut retained in traps may have increased, but poor information prior to integration leaves that unknown. Because the groundfish integration program was designed to address incidental harvest mortalities but did not want to increase directed fishing pressure on each species, , the industry developed a sector cap on the amount of halibut quota that could be harvested by other groundfish fleets (this is trues for all species; caps exist for sablefish caught by the other groundfish fleets, lingcod caught by the other groundfish fleets, dogfish caught by other groudfish fleets, ectc.,). The fleet wide cap on the amount of halibut quota that can enter the sablefish fishery is 192,726 lbs. There are also caps on the amount of halibut quota that a sablefish licence holder can hold. Since sablefish licences are vessel-based, this cap is per vessel. No vessel may hold quota holdings in excess of the annual ITQ cap (65,466 lbs of halibut). There are also trip limits for non-directed groundfish species that are caught while fishing sablefish (halibut landings may not exceed 15% of sablefish landed per trip).

There has not been a lot of halibut retained in traps, therefore no information is available on condition of trap caught halibut. A regulatory limit on thelength of time that trap gear can soak (4 days) likely limits the degradation of halibut flesh. Athough maintaining fleet autonomy was a goal of the groundfish integration program and secotr caps are in place, temporary adjustments to either cap can be agreed upon by the indstry to keepfleet fishing. While DFO can stop a fleet or vessel from fishing once the cap is exceeded, usually the industry meets to discuss the issue and responds with a temptoary adjustment to avoid a closure.

Seven fisheries are involved in the IFMP. The following vessel counts are not unique to each fishery (i.e., some vessels that fish in more than one fishery) and may vary from year to year.

Fishery	Number of vessels
Lingcod	35-45
Dogfish	15-20
Sablefish	32 - 40
Rockfish (inside waters)	10-15
Rockfish (outside waters)	45-50
Halibut	135-160
Groundfish Trawl	60-65

Lessons Learned The general philosophy for the integrated management program in Canada was described by industry as, "you break it, you buy it." This philosophy describes the practice of landing (nearly) all fish caught through informal transferring of quota shares among fishing sectors in-season to

cover incidental harvests (retained or released) in target fisheries. A flexible management structure under DFO allows the industry to control the flow of QS, within a regulatory framework of catch limits.

Lessons learned include the following.

- Resource conservation is paramount reason for creating a co-management system to allow retention of (nearly) all incidentally caught fish;
- Harvests of almost all regulated fish are accounted for using quota shares (other, less commonly caught / targeted species are managed through other tools such as trip limits etc.);
- All released halibut are accounted for using DMRs (regulatory discards of undersized halibut and voluntary releases of halibut), except for closed seasons;
- Marginal vessel operating costs of retaining halibut already caught in pot gear are associated with acquisition of quota shares;
- Fleet will change fishing behavior to maximize economic benefits to trips;
- Use of pot gear for targeting sablefish is lower than in the past as whale depredation is not as prevalent in British Columbia compared with the North Pacific;
- Slightly more halibut are being landed (in fewer) pots but are not being targeted;
- 100% at-sea and dockside monitoring is critical for total catch accounting and conservation benefits;
- Trial programs may lead to improvements in management; the Canadian integrated management system was a pilot program for 4 years; it was evaluated after year 2 and then made permanent.
- Industry involvement and agency flexibility together manage the Canadian integrated fisheries.
 Representatives meet monthly and amend the rules for retention each season. This prevents targeting of bycatch species while allowing all sectors to fish responsibly without being shut down.

5. Other

Maximum retainable allowances The Council is aware that incidental catch of halibut in sablefish pots likely would result in increased halibut retention, as fleet behavior adjusts to a new regulatory regime. Sablefish fishermen would no longer have a disincentive to move off of fishing grounds with higher halibut bycatch. The Council could create a regulatory disincentive such as a maximum retainable allowance (MRA) for this fishery in this area; however the MRA itself results in halibut regulatory discards (although fewer discards than without it) and then the complicated question of the level at which to set the MRA is created when so little information exists on the background level of incidental halibut bycatch in the sablefish pot fishery. Recall that some regulatory discards of undersized halibut would continue. Enforcement staff identified that MRAs are an enforceable management tool.

<u>Discard mortality rates</u> could be determined by the IPHC, recommended by the Council, and implemented by NMFS during the annual harvest specifications for IFQ and CDQ sablefish pot fisheries, under the status quo or proposed action.

Gear regulation	U32 halibut	O32 halibut
Status quo	Bycatch (0.32 DMR)	Bycatch (0.32 DMR)
Proposed Action	Bycatch (0.32 DMR)	Retained (1.00 DMR)

Observer Program The North Pacific Groundfish and Halibut Observer Program (Observer Program) has had a vital role in the management of North Pacific groundfish fisheries since the program started over 20 years ago. The information collected by observers provides scientific information for managing the

groundfish fisheries and minimizing bycatch. High caliber observer information is the cornerstone of Alaska groundfish fisheries management, however the quality and utility of the information was deficient because some boats were not being observed and the structure for deploying observers was flawed. Therefore, beginning in January 2013, the new Observer Program went into effect and makes important changes to how observers are deployed, how observer coverage is funded, and the vessels and processors that must have some or all of their operations observed. These changes will increase the statistical reliability of data collected by the program, address cost inequality among fishery participants, and expand observer coverage to previously unobserved fisheries.

All sectors of the groundfish fishery, including vessels less than 60 feet length overall (LOA) and the commercial halibut sector, will be included in the new Observer Program. Coverage levels will no longer be based on vessel length and processing volume; rather, NMFS will have the flexibility to decide when and where to deploy observers based on a scientifically defensible deployment plan. The new Observer Program places all vessels and processors in the groundfish and halibut fisheries off Alaska into one of two observer coverage categories: (1) a full coverage category, and (2) a partial coverage category. The partial observer coverage category includes:

- catcher vessel when fishing for halibut IFQ or CDQ
- catcher vessel when fishing for sablefish IFQ or fixed gear sablefish CDQ

Gear regulation	Status quo (pot gear allowed for Area 4A halibut)	Proposed Action (pot gear allowed for Area 4A halibut)
Past Observer plan (< 2013)	Fishery monitored under standard coverage requirements of the plan	If halibut were retained, then the boat is 'halibut fishing.' Since halibut fishery was not part of plan, no monitoring of that trip would have been required.
Current Observer plan (2013+)	Fishery monitored under standard coverage requirements of the plan	Fishery monitored under standard coverage requirements of the plan, since halibut is now part of plan.

Contributors

Jane DiCosimo, NPFMC

Peggy Murphy, NMFS

Gregg Williams, IPHC

Neil Davis, DFO

Chris Sporer, Pacific Halibut Management Association

ATTACHMENT. REGULATIONS

Department of Fisheries and Oceans

Gear:

Hook and line and trap gear.

By regulation, no person shall fish for Sablefish with a trap, unless the trap has in a side wall a section that has been laced, sewn or otherwise secured by a single length of untreated natural fibre not larger than two mm in diameter and that, on deterioration or parting, produces in the side wall an opening with four sides, each of which is at least 20 cm in length.

No person shall fish for Sablefish with a trap unless the trap has in the side walls at least two escape openings each having an inside diameter of not less than 8.89 cm (3.5 inches) which creates an unrestricted exit out of the trap.

No person shall set a trap and leave the trap in the water for more than four consecutive days without lifting the trap from the water and removing all of the catch.

International Pacific Halibut Commission

- 19. Fishing Gear
- (1) No person shall fish for halibut using any gear other than hook and line gear, except that vessels licensed to catch sablefish in Area 2B using sablefish trap gear as defined in the Condition of Sablefish Licence can retain halibut caught as bycatch under regulations promulgated by the Canadian Department of Fisheries and Oceans.
- (2) No person shall possess halibut taken with any gear other than hook and line gear, except that vessels licensed to catch sablefish in Area 2B using sablefish trap gear as defined by the Condition of Sablefish Licence can retain halibut caught as bycatch under regulations promulgated by the Canadian Department of Fisheries and Oceans.
- (3) No person shall possess halibut while on board a vessel carrying any trawl nets or fishing pots capable of catching halibut, except that in Areas 2C, 3A, 3B, 4A, 4B, 4C, 4D, or 4E, halibut heads, skin, entrails, bones or fins for use as bait may be possessed on board a vessel carrying pots capable of catching halibut, provided that a receipt documenting purchase or transfer of these halibut parts is on board the vessel.
- (4) All setline or skate marker buoys carried on board or used by any United States vessel used for halibut fishing shall be marked with one of the following:
 - (a) the vessel's State license number; or
 - (b) the vessel's registration number.
- (5) The markings specified in paragraph (4) shall be in characters at least four inches in height and one-half inch in width in a contrasting color visible above the water and shall be maintained in legible condition.
- (6) All setline or skate marker buoys carried on board or used by a Canadian vessel used for halibut fishing shall be:
 - (a) floating and visible on the surface of the water; and

- (b) legibly marked with the identification plate number of the vessel engaged in commercial fishing from which that setline is being operated.
- (7) No person on board a vessel used to fish for any species of fish anywhere in Area 2A during the 72-hour period immediately before the fishing period for the directed commercial fishery shall catch or possess halibut anywhere in those waters during that halibut fishing period unless, prior to the start of the halibut fishing period, the vessel has removed its gear from the water and has either:
 - (a) made a landing and completely offloaded its catch of other fish; or
 - (b) submitted to a hold inspection by an authorized officer.
- (8) No vessel used to fish for any species of fish anywhere in Area 2A during the 72-hour period immediately before the fishing period for the directed commercial fishery may be used to catch or possess halibut anywhere in those waters during that halibut fishing period unless, prior to the start of the halibut fishing period, the vessel has removed its gear from the water and has either:
 - (a) made a landing and completely offloaded its catch of other fish; or
 - (b) submitted to a hold inspection by an authorized officer.
- (9) No person on board a vessel from which setline gear was used to fish for any species of fish anywhere in Areas 2B, 2C, 3A, 3B, 4A, 4B, 4C, 4D, or 4E during the 72-hour period immediately before the opening of the halibut fishing season shall catch or possess halibut anywhere in those areas until the vessel has removed all of its setline gear from the water and has either:
 - (a) made a landing and completely offloaded its entire catch of other fish; or
 - (b) submitted to a hold inspection by an authorized officer.
- (10) No vessel from which setline gear was used to fish for any species of fish anywhere in Areas 2B, 2C, 3A, 3B, 4A, 4B, 4C, 4D, or 4E during the 72-hour period immediately before the opening of the halibut fishing season may be used to catch or possess halibut anywhere in those areas until the vessel has removed all of its setline gear from the water and has either:
 - (a) made a landing and completely offloaded its entire catch of other fish; or
 - (b) submitted to a hold inspection by an authorized officer.
- (11) Notwithstanding any other provision in these Regulations, a person may retain, possess and dispose of halibut taken with trawl gear only as authorized by Prohibited Species Donation regulations of NMFS.

National Marine Fisheries Service5

Section 679.2 Definitions

Authorized fishing gear (see also § 679.24 for gear limitations and Table 15 to this part for gear codes) means trawl gear, fixed gear, longline gear, pot gear, and nontrawl gear as follows:

(1) Bottom contact gear means nonpelagic trawl, dredge, dinglebar, pot, or hook-and-line gear.

⁵ These are the definitions in regulation that will likely need to be amended to allow the retention of Area 4A halibut in sablefish pots, if recommended by the NPFMC, IPHC and implemented by the Secretary of Commerce.

- (2) *Dinglebar gear* means one or more lines retrieved and set with a troll gurdy or hand troll gurdy, with a terminally attached weight from which one or more leaders with one or more lures or baited hooks are pulled through the water while a vessel is making way.
- (3) *Dredge* means a dredge-like device designed specifically for and capable of taking scallops by being towed along the ocean floor.
- (4) Fixed gear means:
- (i) For sablefish harvested from any GOA reporting area, all longline gear and, for purposes of determining initial IFQ allocation, all pot gear used to make a legal landing.
- (ii) For sablefish harvested from any BSAI reporting area, all hook-and-line gear and all pot gear.
- (iii) For halibut harvested from any IFQ regulatory area, all fishing gear comprised of lines with hooks attached, including one or more stationary, buoyed, and anchored lines with hooks attached.

IFQ halibut means any halibut that is harvested with setline or other hook and line gear while commercial fishing in any IFQ regulatory area defined in this section.

APPENDIX 1.

ATTACH DECEMBER 2012 DISCUSSION PAPER AS APPENDIX

North Pacific Fishery Management Council

Eric A. Olson, Chairman Chris Oliver, Executive Director

Telephone (907) 271-2809



605 W. 4th Avenue, Suite 306 Anchorage, AK 99501-2252

Fax (907) 271-2817

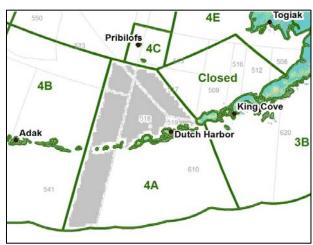
Visit our website: http://www.fakr.noaa.gov/npfmc

September 24, 2013

Dr. Bruce Leaman, Executive Director International Pacific Halibut Commission 2320 West Commodore Way, Suite 300 Seattle, Washington 98199-1287

Dear Bruce:

At its April 2013 meeting the North Pacific Council reviewed an expanded discussion paper, in addition to your letter of September 24, 2009, in which you forwarded a proposal that originally was submitted to the Commission. The proposal recommends that the IPHC amend its regulations to allow the retention of Area 4A halibut that are incidentally caught while targeting sablefish using pot gear in the areas of overlap with the Bering Sea and Aleutian Island regulatory areas, if the harvester holds both halibut and sablefish Individual Fishing Quotas to cover both harvests in the subsection of Area 4A that overlaps with sablefish management areas. The Council unanimously recommended that during its



January 2014 meeting the Commission adopt the proposed action.

The Council also noted the need to coordinate the timing of implementation of complementary Federal regulations, if the Commission adopts the proposed action. At a minimum, Federal regulations would need to be amended to identify pots as legal gear for halibut. The Council also may consider implementation of a discard mortality rate and/or maximum retainable allowance for this fishery and welcomes Commission comment on these issues. Your 2009 letter recommended mandatory retention of halibut in sablefish (single or longline) pots if the IPHC approves the proposal.

The Council based its recommendations on a March 2013 discussion paper and a revised table on the amount of halibut caught in sablefish IFQ pots in the affected area. These are posted at, respectively: https://alaskafisheries.noaa.gov/npfmc/PDFdocuments/halibut/4AhalibutPots_Table1.pdf.

I would like to thank the staffs of the Commission, Fisheries and Oceans Canada, and Pacific Halibut Management Association for their contributions to the paper.

Sincerely,

Chris Oliver Executive Director

in Oliver

INTERNATIONAL PACIFIC HALIB C7 Retention 4A Halibut in Sablefish Pots ION

News Release



2320 W. COMMODORE WAY, SUITE 300, SEATTLE, WASHINGTON, 98199-1287

January 24, 2014

HALIBUT COMMISSION COMPLETES 2014 ANNUAL MEETING

The International Pacific Halibut Commission (IPHC) completed its 90th Annual Meeting in Seattle, WA on January 17, with Dr. James Balsiger of Juneau, Alaska, presiding as Chair. More than 250 halibut industry stakeholders attended the meeting, with over 60 more participating via the web. All of the Commission's public and administrative sessions during the meeting were open to the public and broadcast on the web.

The Commission is recommending to the governments of Canada and the United States catch limits for 2014 totaling 27,515,000 pounds. The Commission is responding to stock challenges with a risk-based precautionary approach and review of the current harvest policy to ensure the best possible advice. Accordingly, it has set catch limits that should achieve a lower coastwide harvest rate than the 2013 catch limits of 31,028,000 pounds. The Commission also addressed other regulatory issues and took actions regarding assessment survey expansion, bycatch management, and follow-up from the 2012 IPHC performance review.

A news release issued January 17, 2014, announced the catch limits and fishing seasons for 2014, and that information is repeated in this news release. Documents and presentations from the Annual Meeting can be found on the Annual Meeting page of the IPHC website: http://www.iphc.int/meetings-and-events/annual-meeting.html.

Stock Assessment and Harvest Rates

During 2013, a thorough exploration of all available data sources was completed. This analysis provided several new avenues for stock assessment modeling. The IPHC's scientific peer review process also continued with a Scientific Review Board (SRB, http://www.iphc.info/srb) evaluation of the stock assessment data and modeling conducted since the 2012 assessment. This evaluation improved the 2013 assessment, and SRB recommendations will be used to help structure the 2014 assessment.

For the 2013 stock assessment, an ensemble of three alternative models was developed to produce the stock biomass estimates and harvest decision table results. This resulted in estimates of stock size and management reference points that are substantially more robust to current or future technical changes to the underlying models. The 2013 stock assessment indicates that the Pacific halibut stock has been declining continuously over the last decade, with recruitment strengths that are much smaller than those observed through the 1980s and 1990s, and more typical of those seen during the last century, as well as decreasing size at age, being contributing factors. In recent years, the estimated female spawning biomass appears to have stabilized near 200 million pounds. An executive summary of the 2013 stock assessment is posted on the IPHC website at http://iphc.int/meetings-and-events/interim-meeting.html, and the complete report of the 2013 stock assessment is available at

http://iphc.int/publications/rara/2013/rara2013_12_2013assessment.pdf.

As in 2013, the IPHC staff harvest advice was presented in the form of a decision table that estimates the consequences to stock and fishery status and trends from different levels of harvest. The final version of the decision table for 2014, incorporating the adopted catch limits, is posted on the IPHC website at http://www.iphc.int/meetings-and-events/annual-meeting.html.

Catch Limits and Seasons

Catch Limits

The Commission received harvest advice for 2014 from the scientific staff, Canadian and United States harvesters and processors, and other fishery agencies, and recommends to the two governments the following catch limits for 2014:

Regulatory Area	Catch Limit (pounds)
Area 2A (California, Oregon, and Washington)	960,000
Non-treaty directed commercial (south of Pt. Chehalis)	168,137
Non-treaty incidental catch in salmon troll fishery	29,671
Non-treaty incidental catch in sablefish fishery (north of Pt. Chehalis)	14,274
Treaty Indian commercial	307,500
Treaty Indian ceremonial and subsistence (year-round)	28,500
Sport – North of Columbia River	214,110
Sport – South of Columbia River	197,808
Area 2B (British Columbia) (includes sport catch allocation)	6,850,000
Area 2C (southeastern Alaska) (combined commercial/guided sport) ¹ Commercial fishery Guided sport fishery	4,160,000 3,318,720 761,280
Area 3A (central Gulf of Alaska) (combined commercial/guided sport) ¹ Commercial fishery Guided sport fishery	9,430,000 7,317,730 1,782,270
Area 3B (western Gulf of Alaska)	2,840,000
Area 4A (eastern Aleutians)	850,000
Area 4B (central/western Aleutians)	1,140,000
Areas 4CDE	1,285,000
Area 4C (Pribilof Islands)	596,600
Area 4D (northwestern Bering Sea)	596,600
Area 4E (Bering Sea flats)	91,800
Total	27,515,000

¹The combined total includes estimated mortality from regulatory discards of sublegal halibut and lost gear in the commercial fishery, plus discard mortality in the guided sport fishery, as mandated in the U.S. Catch Sharing Plan.

Notes Regarding the Catch Limits for Specific Regulatory Areas

Area 2A

The Pacific Fishery Management Council's (PFMC) Catch Sharing Plan (CSP) for Area 2A was accepted by the Commission and is reflected in the catch limits adopted for the Area 2A fisheries. The overall catch limit for Area 2A in 2014 is sufficient to permit non-treaty incidental harvest of halibut during the limited-entry sablefish longline fishery, under the provisions of the CSP.

Area 2B

The Department of Fisheries and Oceans, Canada (DFO) will allocate the Area 2B catch limit between commercial and sport fisheries.

Areas 2C and 3A

The North Pacific Fishery Management Council's (NPFMC) CSP for Areas 2C and 3A was accepted by the Commission and is reflected in the catch limits adopted for Areas 2C and 3A. That CSP sets the allocation between the commercial and charter sport sectors in those two Regulatory Areas. Note that unlike previous years, the IPHC catch limits for Areas 2C and 3A now include both sectors (commercial and recreational charter) , plus discard and lost gear mortality estimates, as noted above in the table footnote.

Area 4CDE

The IPHC sets a combined catch limit for Area 4CDE. The individual catch limits for Areas 4C, 4D, and 4E reflect the 4CDE CSP adopted by the NPFMC. The CSP also allows Area 4D Community Development Quota (CDQ) harvest to be taken in Area 4E, and Area 4C Individual Fishing Quota (IFQ) and CDQ to be fished in Areas 4D and 4C.

Fishing Season Dates

The Commission approved a season of March 8 – November 7, 2014, for the U.S. and Canadian Individual Quota fisheries. Seasons will commence at noon local time on March 8 and terminate at noon local time on November 7, 2014 for the following fisheries and areas: the Canadian Individual Vessel Quota (IVQ) fishery in Area 2B, and the United States IFQ and CDQ fisheries in Areas 2C, 3A, 3B, 4A, 4B, 4C, 4D, and 4E. All Area 2A commercial fishing, including the treaty Indian commercial fishery, will take place between March 8 and November 7, 2014. The Saturday opening date was chosen to facilitate marketing.

In Area 2A, seven 10-hour fishing periods for the non-treaty directed commercial fishery, south of Point Chehalis, Washington are recommended: June 25, July 9, July 23, August 6, August 20, September 3, and September 17, 2014. All fishing periods will begin at 8 a.m. and end at 6 p.m. local time, and will be further restricted by fishing period limits announced at a later date.

Area 2A fishing dates for an incidental commercial halibut fishery concurrent with the limitedentry sablefish fishery north of Point Chehalis and the salmon troll fishing seasons will be established under U.S. domestic regulations by the National Marine Fisheries Service (NMFS). The remainder of the Area 2A CSP, including sport fishing seasons and depth restrictions, will be determined under regulations promulgated by NMFS. Further information regarding the depth restrictions in the commercial directed halibut fishery, and details for the sport fisheries, is available at the NMFS hotline (1-800-662-9825).

Regulatory Changes and Issues

Charter Halibut Sector Management Measures for Areas 2C and 3A

The Commission received a request from the NPFMC to adopt charter halibut sector management measures in accordance with the CSP implemented by NMFS for 2014. This proposal is designed to keep removals by the charter fishery within the limits of the CSP. After consideration of the advice of the Council, Commission staff, Canadian and United States harvesters and processors, and other fisheries agencies, the Commission approved the following measures:

In Area 2C, 1) a one-fish daily bag limit, and 2) a reverse slot size limit restriction (≤ 44 inches or ≥ 76 inches).

In Area 3A, 1) a two-fish daily bag limit, 2) a maximum size limit for the second fish of 29 inches, and 3) a vessel limit of one trip per calendar day.

In both Areas 2C and 3A charter fisheries, if a halibut is filleted, the entire carcass, with head and tail connected as a single piece, must be retained on board the vessel until all fillets are offloaded.

Area 2A Licenses

To support the possibility of an earlier season opening for the incidental commercial fisheries the Commission approved Staff-proposed regulatory changes to the Area 2A licensing procedures. The Commission will issue individual licenses for each of the three Area 2A commercial fisheries: the directed commercial fishery; the incidental halibut fishery during the primary limited-entry sablefish fishery north of Point Chehalis, Washington; and the incidental halibut fishery during the salmon troll fishery. Previously, one vessel license was issued for the direct fishery and the incidental halibut fishery during the sablefish season. The Commission also approved an earlier deadline date of March 15, or the first weekday if it falls on a weekend, for license applications for the two incidental halibut commercial fisheries. In 2014, the deadline date will be March 17. The deadline for license applications for the directed halibut fishery remains April 30. There are no changes to the IPHC sport charter licenses.

Halibut Retention in Sablefish Pots in Area 4A

The Commission reviewed documentation from the NPFMC to allow retention of Area 4A halibut caught incidentally in the sablefish pot fishery in the areas of overlap with the NMFS Bering Sea and Aleutian Island regulatory areas. The initial proposal for a legal gear change for the area had been directed to IPHC and the Commission referred the matter to the NPFMC. The Commission supported the proposal and agreed that the NPFMC should continue to explore the issue and begin to develop the appropriate regulations. The Commission noted that this may be a good way to address bycatch, but also stressed its desire that removals be limited to incidental catch and not lead to a directed halibut pot fishery. The Commission asked the NPFMC to include in its analysis methods to limit the directed fishing for halibut using pot gear, and to consider appropriate methods for the timing of pot removal and the marking of buoys (such as with radar reflectors).

Abundance-Based Management of all Halibut Removals

The Commission noted that a management proposal for managing all halibut removals – under the 32-inch commercial fishery size limit (U32) as well as above the limit (O32) – had been submitted but subsequently withdrawn during the meeting. Noting the questions raised by the original recommendation, the Commission directed the Staff to prepare a discussion paper on the biological and management issues surrounding such a concept, in order to inform future discussions of the feasibility of managing U32 removals.

Other Actions

Survey Expansion

The Commission approved the expansion of the IPHC's annual setline survey to include previously unsurveyed areas between 10 and 400 fathoms' depth. The setline survey currently samples at depths from 20 to 275 fathoms in most areas, and there are some gaps within that range. The expansion is designed to provide better data for the stock assessment through more complete coverage of all halibut habitat. The expansion is proposed to occur over a period of five years, until the whole range has been surveyed, and will be initiated with Areas 2A and 4A in 2014. Further analysis of the proposed expansion will occur this year, and will be used to guide implementation in future years. Additional details of the survey expansion plan are available in this year's Bluebook:

(http://www.iphc.int/publications/bluebooks/IPHC_bluebook_2014.pdf).

Management Strategy Advisory Board

At the 2013 Annual Meeting, the Commission approved the formation of a Management Strategy Advisory Board (MSAB) to advise it on the development and evaluation of candidate objectives and strategies for managing the halibut resource. The Commission received two reports from the MSAB on progress made in 2013, which are available here: http://www.iphc.info/msab

Halibut Bycatch

The Commission received a presentation from its Bycatch Project Team (HBWG II), which outlined progress made during the past year on its four objectives: quantifying bycatch, documenting impacts to the fishery and resource, exploring options to mitigate impacts, and identifying options to reduce bycatch. The Project Team's draft report and comments are posted on the IPHC website at http://www.iphc.int/research/245-bycatch.html.

The Project Team identified next steps for the immediate term and for the coming year. Actions for the coming months included 1) completing revisions to the bycatch report in response to Project Team and public feedback; and 2) organizing an initial meeting between IPHC Commissioners and the NPFMC to facilitate discussion and collaboration on potential bycatch reduction targets, management measures, and monitoring programs that fall under the Council's authority.

Actions proposed for the coming year include 1) discussing the development of a broader strategy or set of principles for addressing bycatch, including exploration of a number of alternative concepts for dealing with bycatch; and 2) discussing a plan for examining the magnitude and impacts of other sources of halibut mortality. The Project Team presentation is posted at http://www.iphc.int/meetings/2014am/bycatchpresentation2014amv4.pdf.

The Commission approved the Project Team's proposed next steps and appointed Commissioners Boyce and Alverson to guide the effort on behalf of the Commission.

Performance Review

The Commission reviewed the implementation of recommendations from the 2012 Performance Review. Action taken since the review has produced increased openness and transparency in Commission meetings and operations, and the recommendations have been incorporated into ongoing work to improve the Commission's procedures and processes, including the development of scientific advice, planning and review of research, and operation of the advisory bodies.

The Commission reviewed draft revisions to its rules of procedure and financial regulations, which were developed in response to the performance review, and expects to approve them within the next two months. The Commission also reviewed a draft progress report on the performance review and its follow-up actions, and directed the report to be posted for the public. Performance review information, including the progress report, can be found on the Commission website at http://iphc.int/meetings-and-events/review.html.

IPHC Merit Scholarship

The Commission honored Mr. Spencer Lunda of Juneau, Alaska, as the twelfth recipient of the IPHC Merit Scholarship. Mr. Lunda was present to accept the scholarship at the opening public session of the Annual Meeting.

Upcoming Meetings

The 2014 Interim Meeting of the Commission will be held December 2-3, 2014, in Seattle, Washington. This Interim Meeting will be held in a larger venue in order to make it more accessible to the public. The next Annual Meeting of the Commission is planned for January 26-30, 2015, in Vancouver, British Columbia. The 2016 Annual Meeting is tentatively slated for January 25-29 in Juneau, Alaska.

Commission Membership

Canadian Government Commissioner Paul Ryall of Vancouver, British Columbia, was elected Chair for the coming year. United States Government Commissioner Dr. James W. Balsiger of Juneau, Alaska, was elected Vice-Chair. The other Canadian Commissioners are David Boyes of Courtenay, British Columbia, and Ted Assu of Campbell River, British Columbia. Commissioner Assu replaced Commissioner Michael Pearson at the conclusion of the Annual Meeting. The other United States Commissioners are Robert Alverson of Seattle, Washington, and Donald Lane of Homer, Alaska, both appointed in early January this year.

- END -

Bruce M. Leaman, Executive Director

Phone: (206) 634-1838 FAX: (206) 632-2983 Web: <u>www.iphc.int</u>

North Pacific Fishery Management Council

Eric A. Olson, Chairman Chris Oliver, Executive Director

Telephone (907) 271-2809



605 W. 4th Avenue, Suite 306 Anchorage, AK 99501-2252

Fax (907) 271-2817

Visit our website: http://www.npfmc.org

February 25, 2014

Dr. Bruce Leaman, Executive Director International Pacific Halibut Commission 2320 West Commodore Way, Suite 300 Seattle, Washington 98199-1287

Dear Dr. Leaman:

The Council reviewed discussion papers on the bycatch of Pacific halibut in directed groundfish fisheries in the Bering Sea/Aleutian Islands in June 2012 and February 2014. The Commission reported on the status of the Pacific halibut stock and the effects of bycatch on the halibut resource and fishery yields at those same meetings. In response to the paper, report, and stakeholder input in February 2014, the Council requested a summary by IPHC staff on the status of the BSAI halibut resource and the impact of halibut prohibited species catch (PSC) in the BSAI trawl and fixed gear groundfish fisheries on halibut stock biomass, the reproductive potential of the halibut stock, and short and long-term halibut yields to all of the directed halibut fisheries in the BSAI areas. The Council would like to request this report at the June 2014 meeting in Nome, Alaska.

The Council also requested a series of industry reports on progress for voluntarily implementing measures in their cooperative and/or inter-cooperative agreements to minimize halibut PSC, including development of effective and verifiable measures for halibut avoidance and individual accountability and use of incentives to reduce PSC. These reports are scheduled for June 2014. A separate timeline will be identified for an analysis to revise Federal regulations to allow deck sorting of halibut on BSAI trawl catcher processors to reduce the halibut discard mortality rate.

In February, the Council also initiated a regulatory amendment to allow the use of pot gear to retain halibut in Area 4A that are harvested incidentally in sablefish pots in the BSAI when IFQs are held to cover the harvests of both species. The Commission supported the development of the appropriate regulations for this proposed action to redefine legal gear for Area 4A at its January 2014 Annual Meeting. A future analysis would consider methods to limit this allowance to incidental catch and not lead to a directed halibut pot fishery. For this limited fishery, implementation of a discard mortality rate and/or maximum retainable allowance, requirements for removal of pots and marking of buoys may be considered. The Council will determine the schedule for this analysis at its next meeting. It may schedule initial review in December 2014, with final action in February 2015 in order to allow the Commission to consider this information and take action at its January 2015 Annual Meeting. Complementary implementation identifying pots as legal gear in Area 4A in both Federal and Commission regulations would be required.

Note also that the Council will include a similar option to allow halibut retention to minimize bycatch when it considers a proposed action to allow the use pot longline gear in the Gulf of Alaska. Initial review and final action are scheduled for June 2014 and October 2014, respectively. Should the Council adopt that option for the GOA, but the Commission does not take a complementary action during its January

2015 meeting, then that element would not proceed to rulemaking. As always, the staffs of the Commission and Council will coordinate the preparation of these documents.

Again, we will coordinate further at the staff level on all of these issues, but we would like confirmation that someone from your staff will be able to attend the June meeting in Nome to present information (per the first paragraph above) on the impacts of halibut PSC removals on the short and long-term yields of halibut in the BSAI. Thank you in advance for assisting the Council as they address this important issue.

Sincerely,

Chris Oliver

Executive Director