

North Pacific Fishery Management Council

Dan Hull, Chairman
Chris Oliver, Executive Director
Telephone (907) 271-2809
www.npfmc.org



605 W. 4th Avenue, Suite 306
Anchorage, AK 99501-2252
Fax (907) 271-2817

Enforcement Committee Agenda

December 7, 2016

1pm – 4pm

**Aspen/Spruce Room, Hilton
Anchorage, Alaska**

The December 2016 Enforcement meeting has one agenda item: 1) review discussion paper on comingling of guided and unguided halibut. Provided below is background information for that agenda item.

I. Comingling of Guided Halibut with Unguided Halibut on the same Charter Vessel

At the June 2016 meeting, the Council tasked staff to prepare a discussion paper on information concerning comingling of guided and unguided halibut on the same vessel for presentation at a future Council meeting. To assist in the preparation of the discussion paper, the Enforcement Committee will review the preliminary draft at this meeting that is included in the Background Information section.

At the October 2016 Enforcement Committee meeting, the committee held a working session to review the draft discussion paper. After reviewing the draft discussion paper, the committee focused on further development of the potential alternatives in the discussion paper and recognized that another work session during the December Council meeting would be necessary to finalize the potential alternatives.

The included updated discussion paper provides information on current comingling regulations, a description of guided and unguided halibut fisheries management and halibut removals from area 2C and 3A, a description of how comingled guided and unguided halibut could occur, and updated potential alternatives and options to limit comingling of guided and unguided halibut on the same vessel at that same time.

BACKGROUND INFORMATION

Agenda Item I

Comingling of Halibut from Guided and Unguided Trips on the Same Vessel

**Discussion Paper for Enforcement Committee
December 2016**

I. Introduction

At the June 2016 meeting, the Council tasked staff to prepare a discussion paper on information concerning comingling of halibut for presentation at future Council meeting. Due to the different regulations applicable to guided and unguided (i.e., chartered and non-chartered) halibut fishing trips, possessing halibut harvested from both on the same vessel at the same time presents challenges for accountability that cannot be overcome with the current regulatory tools. This type of scenario can occur on multi-day and “mothership” charter fishing and floating lodges, and to a lesser extent on vessels that are owned by self-guided fishing operations that also provide sport fishing guide services to their clients that request them. Once guided and unguided halibut are comingled aboard a vessel there is no way for Office of Law Enforcement (OLE) to determine which halibut were harvested under the guided regulations and which halibut were harvested under the unguided regulations. Compliance can be maximized and the duration of an at-sea vessel boarding can be minimized when regulations serve a clear purpose and are drafted concisely, unambiguously and require no interpretation by guides, anglers or authorized officers in the field. The current regulatory structure allows guided and unguided halibut to be comingled on a vessel but does not provide the regulated public or authorized officers with a mechanism (beyond the honor system) to ensure compliance with the more restrictive guided halibut regulations. prohibition of comingling guided and unguided halibut to ensure proper accounting of catch in all categories would require a regulatory change.

The potential for comingling guided and unguided halibut exists on every vessel that harvests halibut and every floating lodge that services halibut harvesters. The issue is likely to expand as charter operators (and their employees) look for ways to maximize halibut harvests for guided and non-guided anglers on their vessels.

At the October 2016 Enforcement Committee meeting, the committee held a working session to review the draft discussion paper. After reviewing the draft discussion paper, the committee focused on further development of the potential alternatives in the discussion paper and recognized that another work session during the December Council meeting would be necessary to finalize the potential alternatives.

The following updated discussion paper provides information on current comingling regulations, a description of guided and unguided halibut fisheries management and halibut removals from area 2C and 3A, a description of how comingled guided and unguided halibut could occur, and updated potential alternatives and options to limit comingling of guided and unguided halibut on the same vessel at the same time.

II. Current Comingling Regulations

There are currently no regulations that address the issue of possessing guided and unguided halibut on the same vessel at the same time. However, in 2003, the Council recognized that comingling subsistence harvested halibut with non-subsistence harvested halibut would present enforcement challenges. To address this challenge, the Council implemented a prohibition on possessing subsistence, sport and commercially harvested halibut on the same vessel at the same time when the final subsistence regulations were first published. The Council approved this regulatory tool to assist authorized officers in

ensuring that daily bag and possession limits, as well as other restrictions relevant to each fishery, could be enforced in the field without putting undue burden on the harvester or the agency. The relevant portion of the subsistence regulation is pasted below:

50 CFR §300.66 Prohibitions.

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

(h) Conduct subsistence fishing for halibut while commercial fishing or sport fishing for halibut, as defined in §300.61, from the same vessel on the same calendar day, or possess on board a vessel halibut harvested while subsistence fishing with halibut harvested while commercial fishing or sport fishing, except that persons authorized to conduct subsistence fishing under §300.65(g), and who land their total annual harvest of halibut...:

The IPHC Annual Management Measures at Section 25 (6) prohibit the possession of sport harvested halibut onboard a vessel when other fish or shellfish are destined for commercial sale, trade or barter. This prohibition is partially in place to assist authorized officers in ensuring that all of the regulations specific to the mechanism of harvest could be enforced efficiently while onboard a vessel.

25. Sport Fishing for Halibut—General

(6) No halibut caught in sport fishing shall be possessed on board a vessel when other fish or shellfish aboard said vessel are destined for commercial use, sale, trade, or barter.

In another IPHC Annual Management Measures at Section 28(1)(f) all halibut harvested on a charter vessel in Area 2C and Area 3A must be retained on board the vessel until the end of the fishing trip.

28(1)(f): All halibut harvested on a charter vessel fishing trip in Area 2C or Area 3A must be retained on board the charter vessel on which the halibut was caught until the end of the charter vessel fishing trip as defined at 50 CFR 300.61.

In yet another IPHC Annual Management Measures, halibut in excess of the possession limit may be possessed on a vessel that does not contain sport fishing gear

28. Sport Fishing for Halibut—Areas 2C, 3A, 3B, 4A, 4B, 4C, 4D, 4E (1) In Convention waters in and off Alaska: (e) Halibut in excess of the possession limit in paragraph (1)(c) of this section may be possessed on a vessel that does not contain sport fishing gear, fishing rods, hand lines, or gaffs.

III. Guided and Unguided Halibut Fisheries

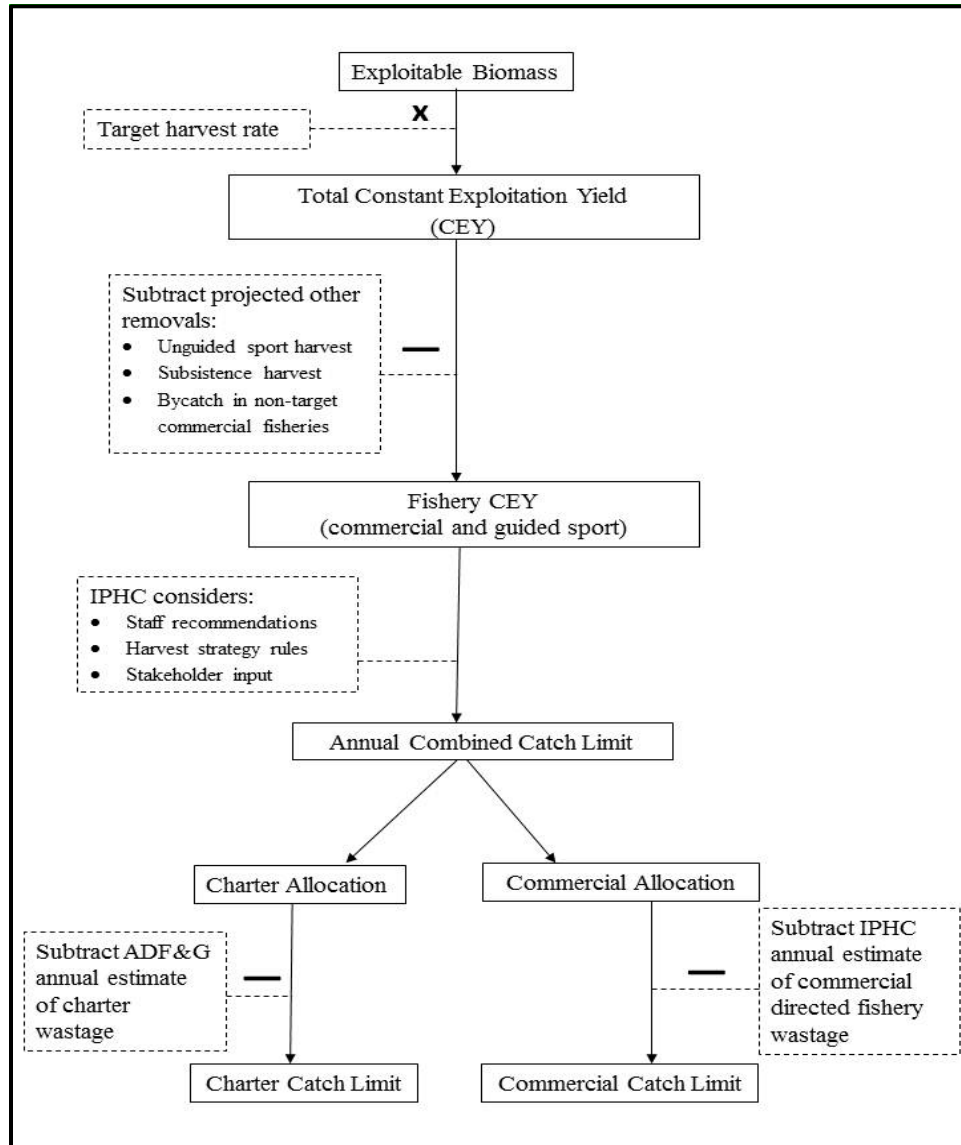
a. Sports Fishing Commingling Data

There is currently no data available to quantify the extent of mothership or multi-day charter fishing or floating lodge operations. Data is not collected by National Marine Fisheries Service (NMFS), the Alaska Department of Fish and Game (ADF&G) or the International Pacific Halibut Commission (IPHC) on the number of operators that offer multi-day or mothership fishing operations, how many multi-day or mothership trips are conducted or how many guided and unguided halibut are harvested on multi-day or mothership fishing operations. However, OLE has received inquiring from operators of multi-day, mothership fishing and floating lodge operations as to how they should treat their commingled guided and unguided halibut, and how their commingled catches would be viewed by authorized officers when they are boarded at sea. OLE personnel have encountered multi-day fishing vessels at sea that have guided and non-guided commingled halibut onboard and have been unable to verify that all of the guided halibut onboard was harvested and retained in compliance with the IPHC Annual Management Measures. It's not possible to quantify the number of inquiries or boardings regarding commingling of guided and unguided halibut that OLE personnel have been involved in.

b. Halibut Fishery Management

Guided and unguided halibut fishing operate under a different management structure. In general, guided harvest is managed under an annual allocation, while unguided harvest is not. As seen in Figure 1, projected unguided sport removals and subsistence harvest are subtracted from the total constant exploitation yield (CEY) before the catch limits are set for commercial and guided fishing. There is no catch limit assigned to this type of fishing; the total amount of removals is constrained indirectly through management measures such as bag limits and gear restrictions. Catch limits are established for the commercial and guided halibut sectors with the remaining CEY.

Figure 1 Process for setting annual combined catch limits, charter and commercial allocations, and charter and commercial catch limits for Area 2C and Area 3A under the Catch Sharing Plan



This means that while the regulations for unguided sport halibut harvest have remained at a bag limit of two fish of any size, the guided sport sector's management measures have been more restrictive and have varied over the years (particularly since the implementation of the Catch Sharing Plan (CSP)).

For the guided halibut sector, the CSP provides a systematic, timely, and responsive process to address harvest overages or underages, using the best available and most recent data. Annual management measures for implementation in the Area 2C and Area 3A¹ guided halibut fishery are set each year through a public process.

In December each year, prior to Council consideration, ADF&G presents an analysis based on the combinations of management measures requested by the Charter Halibut Management Implementation Committee. This analysis is based on a forecast of the upcoming year’s harvest under the current year (“status quo”) regulations and observed effects of various measures in past years. Projected harvests under alternative management measures are compared to the guided sector’s allocation associated with the IPHC’s “blue line” CCL for commercial and guided sport fisheries. The guided allocation is defined in relation to the magnitude of this combined catch limit. Management measures are not modified inseason, therefore the Council recommends annual management measures intended to keep guided harvest within the guided sector allocation in each area.

There are a variety of management measures that have been used or considered in the past to manage the charter and other recreational halibut fisheries. Some of these measures directly restrict the number or size of fish allowed to be retained. Management measures for the guided sector are at least as restrictive as for the unguided sport sector; however, in recent years they have been much more restrictive, as can be seen in Table 1 and Table 2.

Table 1 Management measures for guided sport halibut fishing in Area 2C, 2010 to 2016

Year	Mgmt type	Area 2C charter regulation	Harvest limit (Mlb)	Guided harvest (Mlb)	Guided Harvest (% of harvest limit)
2010	GHL	One fish (no size limit); no harvest by skipper & crew; line limit	0.788	1.086	138
2011	GHL	One fish with a maximum of 37 inches; no harvest by skipper and crew; line limit	0.788	0.344	44
2012	GHL	One fish U45 inches or O68 inches; no harvest by skipper and crew; line limit	0.931	0.605	65
2013	GHL	One fish U45 inches or O68 inches; no harvest by skipper and crew; line limit	0.788	0.762	97
2014	CSP	One fish U44 inches or O76 inches; no harvest by skipper and crew; line limit	0.761	0.827	109
2015	CSP	One fish U42 inches or O80 inches; no harvest by skipper and crew; line limit	0.851	0.848	0
2016	CSP	One fish U43 inches or O80 inches; no harvest by skipper and crew; line limit	0.906	Not available yet	Not available yet

Source: From NPFMC (2014) and ADF&G (2015).

Table notes: All pounds are in net weight. The guided harvest removal for 2016 (italicized) is based on preliminary estimates from ADF&G (2016). Harvest limit and guided harvest include discard mortality associated with O26 halibut released beginning with the CSP in 2014.

¹ Area 2C and Area 3A represent the vast majority (more than 99%) of the guided halibut fishing, therefore the comingling of halibut would only be a concern in these regulatory areas.

Table 2 Management measures for guided sport halibut fishing in Area 3A, 2010 to 2016

Year	Mgmt type	Area 3A charter regulation	Harvest limit (Mlb)	Guided harvest (Mlb)	Guided harvest (% of harvest limit)
2010	GHL	Two-fish bag limit (no size restrictions); no limit on crew retention	3.65	2.698	74
2011	GHL	Two-fish bag limit (no size restrictions); no limit on crew retention	3.65	2.793	77
2012	GHL	Two-fish bag limit (no size restrictions); no limit on crew retention	3.103	2.284	74
2013	GHL	Two-fish bag limit (no size restrictions); no limit on crew retention	2.734	2.514	92
2014	CSP	Two-fish bag limit (one fish U29 inches); one trip per day; no harvest by skipper and crew	1.78	2.066	116
2015	CSP	Two-fish bag limit (one fish U29 inches); one trip per day, five-fish annual limit; Thursday closure; no harvest by skipper and crew	1.89	2.063	109
2016	CSP	Two-fish bag limit (one fish U28 inches); one trip per day, four-fish annual limit; Wednesday closure; no harvest by skipper and crew; line limit	1.814	Not available yet	Not available yet

Source: From NPFMC (2014) and ADF&G (2015).

Table notes: All pounds are in net weight. The guided harvest removal for 2016 (italicized) is based on preliminary estimates from ADF&G (2016). Harvest limit and guided harvest include discard mortality associated with O26 halibut released beginning with the CSP in 2014.

c. Halibut removals in guided and unguided sport fishing

Five major categories of halibut use occur in Alaska: commercial landings, sport (guided and unguided), subsistence and personal use, discard mortality in halibut targeted fisheries, and bycatch mortality in non-halibut directed fisheries.

Table 3 and Table 4 provide Area 2C and Area 3A guided and unguided sport harvest of halibut by number of fish and Mlb from 1995 through 2014. For the 2014 season, the harvest of Area 2C guided halibut was 65,036 fish for a yield of 0.783 Mlb, while the harvest of unguided halibut was 69,060 fish for a yield of 1.170 Mlb. For Area 3A, the harvest of guided halibut was 174,351 fish for a yield of 2.034 Mlb, while the harvest of unguided halibut was 127,125 fish for a yield of 1.533 Mlb.

Table 3 Area 2C guided and unguided sport harvest of halibut to include number of fish (No. Fish) Millions of pounds (M lb.)

Year	Guided ^a		Unguided		Total Sport Harvest	
	No. Fish	Yield (M lb)	No. Fish	Yield (M lb)	No. Fish	Yield (M lb)
1995	49,615	0.986	39,707	0.765	89,322	1.751
1996	53,590	1.187	41,307	0.943	94,897	2.129
1997	51,181	1.034	53,205	1.139	104,386	2.172
1998	54,364	1.584	42,580	0.917	96,944	2.501
1999	52,735	0.939	44,301	0.904	97,036	1.843
2000	57,208	1.130	54,432	1.121	111,640	2.251
2001	66,435	1.202	43,519	0.721	109,954	1.923
2002	64,614	1.275	40,199	0.814	104,813	2.090
2003	73,784	1.412	45,697	0.846	119,481	2.258
2004	84,327	1.750	62,989	1.187	147,316	2.937
2005	102,206	1.952	60,364	0.845	162,570	2.798
2006	90,471	1.804	50,520	0.723	140,991	2.526
2007	109,835	1.918	68,498	1.131	178,333	3.049
2008	102,965	1.999	66,296	1.265	169,261	3.264
2009	53,602	1.249	65,549	1.133	119,151	2.383
2010	41,202	1.086	52,896	0.885	94,098	1.971
2011	36,545	0.344	42,202	0.685	78,747	1.029
2012	42,436	0.605	54,696	0.977	97,132	1.583
2013	52,675	0.762	78,078	1.361	130,753	2.123
2014	65,036	0.783	69,060	1.170	134,096	1.954

Source: ADF&G-DSF

^a - Guided harvest estimates in numbers of fish are based on the Alaska Statewide Harvest Survey (mail survey) prior to 2014, and on the ADF&G charter logbook beginning in 2014.

Table 4 Area 3A guided and unguided sport harvest of halibut to include number of fish (No. Fish) Millions of pounds (M lb.)

Year	Guided ^a		Unguided		Total Sport Harvest	
	No. Fish	Yield (M lb)	No. Fish	Yield (M lb)	No. Fish	Yield (M lb)
1995	137,843	2.845	95,206	1.666	233,049	4.511
1996	142,957	2.822	108,812	1.918	251,769	4.740
1997	152,856	3.413	119,510	2.100	272,366	5.514
1998	143,368	2.985	105,876	1.717	249,244	4.702
1999	131,726	2.533	99,498	1.695	231,224	4.228
2000	159,609	3.140	128,427	2.165	288,036	5.305
2001	163,349	3.132	90,249	1.543	253,598	4.675
2002	149,608	2.724	93,240	1.478	242,848	4.202
2003	163,629	3.382	118,004	2.046	281,633	5.427
2004	197,208	3.668	134,960	1.937	332,168	5.606
2005	206,902	3.689	127,086	1.984	333,988	5.672
2006	204,115	3.664	114,887	1.674	319,002	5.337
2007	236,133	4.002	166,338	2.281	402,471	6.283
2008	198,108	3.378	145,286	1.942	343,394	5.320
2009	167,599	2.734	150,205	2.023	317,804	4.758
2010	177,460	2.698	124,088	1.587	301,548	4.285
2011	184,293	2.793	128,464	1.615	312,757	4.408
2012	173,582	2.284	113,359	1.341	286,941	3.626
2013	199,248	2.514	121,568	1.452	320,816	3.966
2014	174,351	2.034	127,125	1.533	301,476	3.568

Source: ADF&G-DSF

^a - Guided harvest estimates in numbers of fish are based on the Alaska Statewide Harvest Survey (mail survey) prior to 2014, and on the ADF&G charter logbook beginning in 2014.

d. Examples of guided and unguided comingling halibut

Below is a description of different situations that comingling of guided and unguided halibut occurs, which can be useful in developing potential solutions to address that stated problem.

Mothership and multi-day guided fishing vessels - The “mothership” and multi-day fishing business models consist typically of a large vessel that is used to conduct multi-day fishing and sightseeing

adventures that has one or more small vessels associated with the larger vessel. The captain, crew and guests are lodged, fed and spend much of their time on the large vessel as it tows the smaller vessel(s) or transports them on deck. Guided halibut fishing can either be conducted from the smaller vessel(s) while the larger vessel is anchored or in transit or from the larger vessel. The halibut harvested with a guide is transferred from the smaller fishing vessel(s) to the larger vessel when the smaller vessel(s) return from fishing. During the course of the multi-day trip, crew and/or non-guided guests fish for and retain halibut from either the larger vessel or a smaller non-guided vessel. All of the non-guided halibut ultimately end up on the larger vessel along with the halibut harvested with a guide for the remainder of the trip. When the halibut harvested from guided and unguided fishing are comingled on the larger vessel, enforcement of more restrictive size, bag, possession, annual limits and daily closures on the halibut harvested with a guide becomes complicated. Any halibut harvested with a guide that does not comply with the more restrictive charter limits can simply be verbally labeled as non-guided harvested halibut. The saltwater logbook does not provide an adequate tool for verification or enforcement in this situation because the logbook is required to be completed at the end of the guided vessel fishing trip which can be when the halibut is transferred from the smaller vessel to the larger vessel or when the halibut is transferred off of the larger vessel (depending upon which vessel the halibut was harvested from)., In the later situation, comingling can occur on the larger vessel for a number of days before the logbook is completed.

Self-guided fishing vessels – Businesses that offer self-guided fishing opportunities sometimes also offer guided fishing opportunities as well. Guided and non-guided halibut harvest can occur on the same vessel if unguided halibut is harvested by sport anglers on vessel first, then the anglers request the assistance of a guide to harvest additional halibut on that trip. Possessing guided and unguided halibut on these vessels simultaneously is not currently prohibited. Enforcing some of the added restrictions on the guided halibut (size, annual limit) on these vessels can be challenging by anglers that wish to subvert the additional restrictions placed on the guided halibut.

Floating lodges – Halibut is harvested from vessels that deploy from a stationary floating platform that serves as a lodge. The floating lodge can be a large vessel at anchor, an anchored barge with structures built on it or an anchored large float house. All of the fishing is conducted from vessels that come and go from the float house daily or multiple times a day. Some of the small vessels may engage in unguided fishing trips (self-guided, employee or comp trips) and some of the vessels engage in fully guided trips. When the smaller vessels return from fishing to the floating lodge, they offload halibut harvested with a guide in addition to halibut harvested without a guide. The halibut is comingled on the floating lodge where it is not always possible for enforcement personnel to determine which halibut was harvested by guided anglers and which halibut was harvested by non-guided anglers. Halibut bag and possession limits and some other halibut fishing regulations apply on floating lodges in Alaska because the IPHC Annual Management Measures at Section 28 indicate that the sport fishing measures apply “in Convention waters in and off Alaska.

Halibut transport vessels – The IPHC Annual Management Measures at Section 28 (1)(e) allow a person on board a vessel that does not contain any sport fishing gear to exceed the possession limit of halibut. Since there is no possession limit on this type of vessel, prohibiting the possession of guided and non-guided halibut on this type of vessel would be useless, so OLE would propose excluding this type of vessel from a prohibition if adopted.

IV. Potential Alternatives and Options

Alternative 1: Take no action

This alternative is the no action alternative. Under this alternative, the current regulatory structure allowing guided and unguided caught halibut to be mixed together on a vessel would continue. There would be no mechanism, beyond the honor system, to ensure compliance with the more restrictive guided

halibut regulations. Enforcement personnel would not be able to determine which halibut were harvested under the guided regulations and which halibut were harvested under the unguided regulations.

Alternative 2: Prohibit the possession of guided and un-guided halibut simultaneously on any vessel

Under this alternative, halibut catch must be offloaded before switching to guided or unguided operation. This prohibition may not cost charter operators any effort or additional expense, but it could negatively impact the ability of non-guided anglers onboard a multi-day or mothership fishing vessel and floating lodge to harvest and retain halibut.

Alternative 3: Identify guided and un-guided halibut on the same vessel

Option 3a: Tag or cut fin of guided and unguided halibut

Clipping a fin is already used to mark GAF. Using the same mechanism to mark non-GAF fish could create confusion. Cutting fins or tagging halibut by a guide or the angler that harvested the halibut is essentially a self-reporting mechanism that relies on the honor system that cannot be verified or validated by authorized officers. Adopting a requirement to clip a fin would require effort from the charter guide, crew or non-guided anglers and would provide little or no additional benefit to ensure that all anglers onboard are in compliance with the more restrictive guided halibut regulations.

Option 3b: Halibut catch must be separated into different holds or bins by operation type.

Separating halibut by a guide or the angler that harvested the halibut is also essentially a self-reporting mechanism that relies on the honor system that cannot be verified or validated by authorized officers. Adopting this requirement may require some effort on the part of the charter guide, crew or non-guided anglers to separate the halibut and would provide little or no additional benefit to ensure that all anglers onboard are in compliance with the more restrictive guided halibut regulations.

Alternative 4: Halibut harvested using sport fishing guide services that is possessed with halibut harvested not using sport fishing guide services on a fishing vessel² or other floating facility³ on convention waters in Area 2C or 3A, the IPHC annual management measures for guided sport fishing for the area that the halibut was harvested apply to all halibut onboard that fishing vessel or floating facility.

Under this alternative, the more restrictive annual management measures for charter harvested halibut would apply to all halibut onboard a vessel or floating facility anytime charter harvested halibut and non-charter halibut are combined on that vessel or floating facility. Applying the more restrictive size and bag limits to all halibut onboard reduces the opportunity for charter anglers to retain halibut that does not comply with the annual management measures. This alternative would not affect the charter halibut anglers. It would place restrictions on non-guided anglers that fish from or retain halibut on vessels or floating facilities shared by guided anglers.

² Fishing vessel is defined in the NPHA and means any vessel engaged in catching fish in Convention waters or in processing or transporting fish loaded in Convention waters; any vessel outfitted to engage in any activity described herein; or any vessel in normal support of any vessel described herein.

³ Floating facility includes float homes, float cabins, float camps, floating lodges, floating platforms, floating docks and other similar floating commercial, non-commercial, residential or fishing support facilities that are anchored, or moored, or tethered to shore on convention waters.

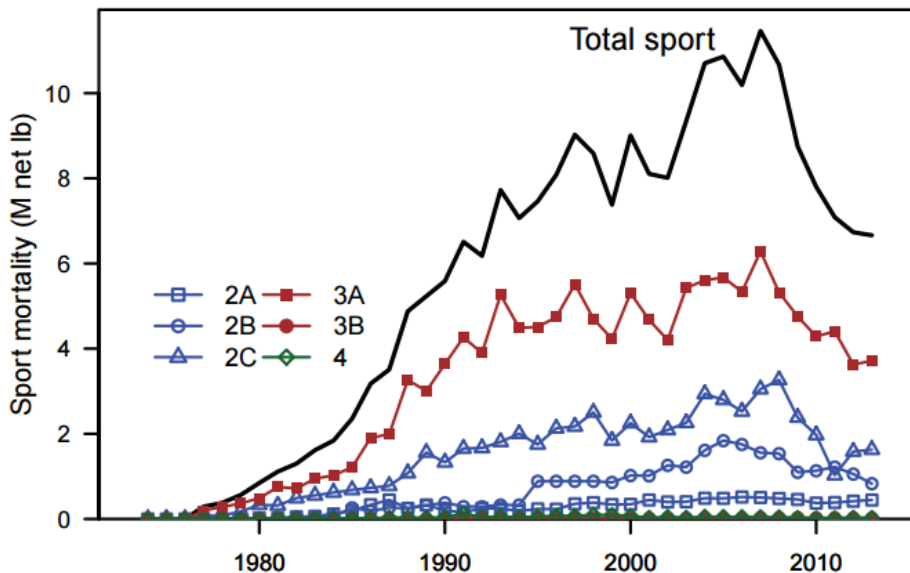
Appendix

Coastwide Sport Halibut

The coastwide sport harvest of halibut (including guided and unguided) has grown considerably since IPHC began keeping sport catch statistics in the late 1970s (**Error! Reference source not found.**). The sport harvest first reached one Mlb in 1981 and continued to grow, surpassing five Mlb in 1989 and 10 Mlb in 2004. Sport harvest peaked at 11.5 Mlb in 2007 and has since declined somewhat to 7.5 million pounds in 2011.

In Alaska, the harvest by the sport fishery has followed a similar trend, in part because it makes up the vast majority of coastwide sport halibut fishing. Alaska sport fishing harvest of halibut peaked at 9.4 Mlb in 2009. Increased fishery restrictions coupled with declines in abundance have resulted in the harvest in 2012 of 6.87 Mlb. **Error! Reference source not found.** reinforces the fact that all nearly all of Alaskan sport halibut harvest comes from Area 3A and Area 2C.

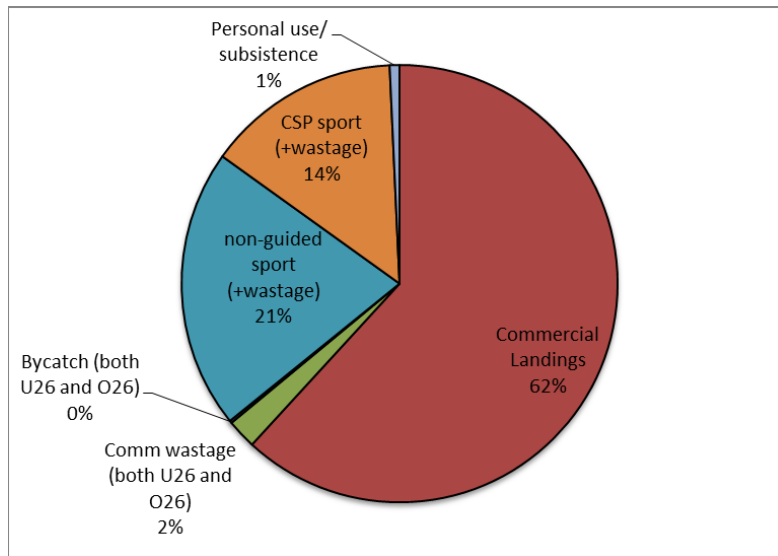
Figure 2 Sport catch removals (millions of pounds, net weight) since accounting began, 1977-2012



Source: The Pacific Halibut: Biology, Fishery, and Management, Tech Memo No. 59 (IPHC 2014).

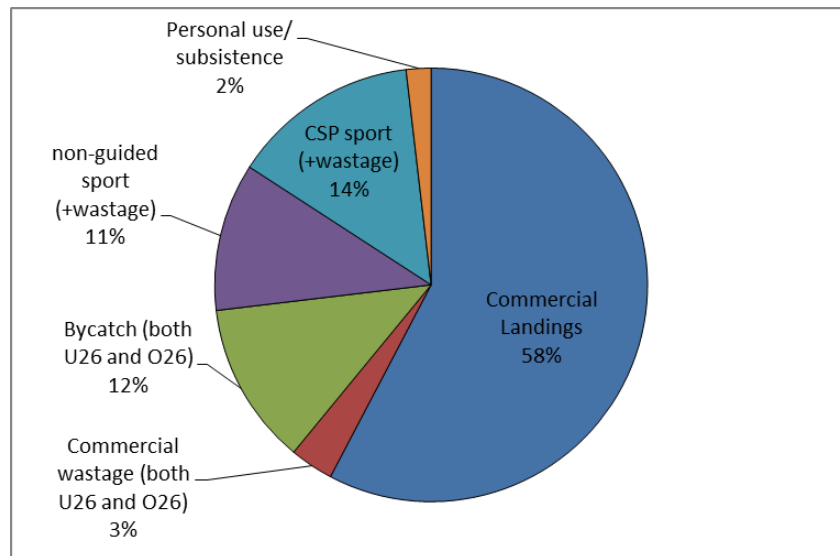
Sport removal of halibut (including the unguided sector) is an important proportion of halibut removals (**Error! Reference source not found.** and **Error! Reference source not found.**). In Area 2C, the IPHC catch table for 2015 allocated 0.79 mt to the guided halibut sport fishing sector and its wastage (i.e. 14 percent of the total removals). As prescribed in the CSP, this represents 18.3 percent of the total O26 FCEY. Area 3A guided halibut sport fishing sector was allocated 1.49 Mlb (14 percent of the total projected removals for 2015).

Figure 3 Projected halibut removals for Area 2C based on IPHC halibut catch for the 2015 blue line values



Source: IPHC (2015) Final decision table, available at: http://www.iphc.int/meetings/2015am/Final_Adopted_catch_limits_1_30_15.pdf

Figure 4 Projected halibut removals for Area 3A based on IPHC halibut catch for the 2015 blue line values



Source: IPHC (2015) Final decision table, available at: http://www.iphc.int/meetings/2015am/Final_Adopted_catch_limits_1_30_15.pdf