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## Fisheries Data Overview (2023): Preliminary

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### PURPOSE

To provide a preliminary overview of the 2023 Pacific halibut removals, including the status of mortality reported against fishery limits adopted by the Commission and outlined in the [IPHC Fishery Regulations \(2023\)](#). Data provided in this paper include current and projected values as of 1 November 2023.

### BACKGROUND

The International Pacific Halibut Commission (IPHC) estimates all Pacific halibut (*Hippoglossus stenolepis*) removals taken in the IPHC Convention Area and uses this information in its yearly stock assessment (see [IPHC-2023-IM099-10](#)) and other analyses. The data are compiled by the IPHC Secretariat and include data from federal and state agencies of each Contracting Party. All 2023 data are in net weight (head-off, dressed, ice and slime deducted) and considered preliminary at this time. The IPHC Regulatory Areas are provided in [Figure 1](#).

The report provides a preliminary summary of removals in Tables [1](#) and [2](#). [Table 2](#) provides estimates of mortality reported against the fishery limits (FCEY) resulting from the IPHC-adopted distributed mortality (TCEY) limits and the existing Contracting Party catch sharing arrangements, as well as non-FCEY mortality projections, by IPHC Regulatory Area. [Figure 2](#) provides cumulative percentage of directed commercial Pacific halibut limit landed by week.

### DEFINITIONS

**Directed commercial fisheries** include commercial landings and discard mortality. Directed commercial discard mortality continues to include estimates of sub-legal Pacific halibut (under 81.3 cm or 32 inches, also called U32), fish that die on lost or abandoned fishing gear, and fish discarded for regulatory compliance reasons.

**Recreational fisheries** include recreational landings (including landings from commercial leasing) and discard mortality.

**Subsistence fisheries** are non-commercial, customary, and traditional use of Pacific halibut for direct personal, family, or community consumption or sharing as food, or customary trade. Subsistence fisheries include:

- i) ceremonial and subsistence (C&S) removals in the IPHC Regulatory Area 2A treaty Indian fishery,
- ii) the sanctioned First Nations Food, Social, and Ceremonial (FSC) fishery conducted in British Columbia,
- iii) federal subsistence fishery in Alaska that uses Alaska Subsistence Halibut Registration Certificate (SHARC), and
- iv) U32 Pacific halibut retained for personal use by the Community Development Quota (CDQ) fishery in IPHC Regulatory Areas 4D and 4E.

**Non-directed commercial discard mortality** includes incidentally caught Pacific halibut by fisheries targeting other species and that cannot legally be retained, e.g., by the trawl fleet. This category refers only to those Pacific halibut that subsequently die due to capture.

**IPHC FISS and Research** includes Pacific halibut landings and removals as a result of the IPHC Fishery-Independent Setline Survey (FISS) and other research.

**Table 1.** Projected 2023 mortality reported against mortality limits (TCEYs) by IPHC Regulatory Area and U26 non-directed discards.

IPHC Regulatory Area	Mortality limits (TCEY) (net weight)		Mortality to date (net weight)		Percent attained (%)
	Tonnes (t)	Pounds (lb)	Tonnes (t)	Pounds (lb)	
IPHC Regulatory Area 2A	748	1,650,000	712	1,570,083	95
IPHC Regulatory Area 2B	3,075	6,780,000	3,097	6,828,214	101
IPHC Regulatory Area 2C	2,654	5,850,000	2,683	5,915,574	101
IPHC Regulatory Area 3A	5,479	12,080,000	5,186	11,432,994	95
IPHC Regulatory Area 3B	1,665	3,670,000	1,586	3,495,657	95
IPHC Regulatory Area 4A	785	1,730,000	598	1,318,212	76
IPHC Regulatory Area 4B	617	1,360,000	285	629,183	46
IPHC Regulatory Area 4CDE and Closed Area	1,746	3,850,000	1,361	3,001,546	78
<b>Subtotal (TCEY)</b>	<b>16,769</b>	<b>36,970,000</b>	<b>15,509</b>	<b>34,191,463</b>	<b>92</b>
Non-directed commercial discard mortality (U26)	621	1,370,000	781	1,721,000	126
<b>Total</b>	<b>17,391</b>	<b>38,340,000</b>	<b>16,290</b>	<b>35,912,463</b>	<b>94</b>

**Table 2.** 2023 estimates of mortality reported against fishery limits (FCEY) and mortality projections by IPHC Regulatory Area.

IPHC Regulatory Area	Fishery limit/mortality projection (net weight) <sup>1</sup>		Mortality to date (net weight)		Percent attained (%)
	Tonnes (t)	Pounds (lb)	Tonnes (t)	Pounds (lb)	
<b>USA – 2A (California, Oregon, and Washington)</b>	<b>748.43</b>	<b>1,650,000</b>	<b>712.18</b>	<b>1,570,083</b>	<b>95</b>
Non-treaty directed commercial	116.94	257,819	117.58	259,226	101
Non-treaty incidental to salmon troll fishery	20.64	45,497	12.52	27,600	61
Non-treaty incidental to sablefish fishery <sup>2</sup>	31.75	70,000	18.18	40,090	57
Treaty Indian directed commercial	227.93	502,500	224.50	494,933	98
Directed commercial discard mortality <sup>3</sup>	22.68	50,000	45.36	100,000	200
Recreational – Washington	127.79	281,728	117.94	260,023	92
Recreational – Oregon	133.10	293,436	104.54	230,469	79
Recreational – California	17.93	39,520	17.39	38,337	97
Recreational discard mortality	--	--	1.02	2,239	--
Treaty Indian ceremonial and subsistence	13.38	29,500	13.38	29,500	100
Non-directed commercial discard mortality (O26) <sup>3</sup>	36.29	80,000	34.47	76,000	95
IPHC fishery-independent setline survey and research <sup>4</sup>	--	--	5.29	11,666	--
Non-directed commercial discard mortality (U26)	--	--	1.36	3,000	--
<b>Canada – Area 2B (British Columbia)</b>	<b>3,075.36</b>	<b>6,780,000</b>	<b>3,097.23</b>	<b>6,828,214</b>	<b>101</b>
Directed commercial fishery landings	2,281.57	5,030,000	2,192.76	4,834,201	96
Directed commercial discard mortality <sup>3</sup>	81.65	180,000	87.09	192,000	107
Recreational fishery <sup>8</sup>	403.70	890,000	403.64	889,881	100
Recreational discard mortality <sup>3</sup>	18.14	40,000	12.40	27,330	68
Recreational fishery (XRQ - Experimental Quota) <sup>5</sup>	--	--	6.81	15,013	--
Subsistence <sup>3</sup>	185.97	410,000	183.70	405,000 <sup>6</sup>	99
Non-directed commercial discard mortality (O26) <sup>3</sup>	108.86	240,000	152.86	337,000	140
IPHC fishery-independent setline survey and research <sup>4</sup>	--	--	57.96	127,789	--
Non-directed commercial discard mortality (U26)	13.61	30,000	21.77	48,000	160

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IPHC Regulatory Area	Fishery limit/mortality projection (net weight) <sup>1</sup>		Mortality to date (net weight)		Percent attained
	Tonnes (t)	Pounds (lb)	Tonnes (t)	Pounds (lb)	(%)
<b>USA – Area 2C (southeastern Alaska)</b>	<b>2,653.51</b>	<b>5,850,000</b>	<b>2,683.26</b>	<b>5,915,574</b>	<b>101</b>
Directed commercial fishery landings	1,546.75	3,410,000	1402.62	3,092,258	91
Directed commercial discard mortality	68.04	150,000	51.26	113,000	75
Metlakatla (Annette Island Reserve)	--	--	17.30	38,140	--
Guided recreational fishery	362.87	800,000	356.52	786,000	98
Guided recreational discard mortality <sup>7</sup>	--	--	11.79	26,000	--
Guided recreational fishery (GAF – guided angler fish) <sup>5</sup>	--	--	49.86	109,927	--
Unguided recreational fishery <sup>3</sup>	517.10	1,140,000	476.27	1,050,000	92
Unguided recreational discard mortality <sup>7</sup>	--	--	6.80	15,000	--
Subsistence <sup>3</sup>	131.54	290,000	114.53	252,492	87
Non-directed commercial discard mortality (O26) <sup>3</sup>	27.22	60,000	28.12	62,000	103
IPHC fishery-independent setline survey and research <sup>4</sup>	--	--	168.17	370,757	--
Non-directed commercial discard mortality (U26)	--	--	0.00	0	--
<b>USA – Area 3A (central Gulf of Alaska)</b>	<b>5,479.39</b>	<b>12,080,000</b>	<b>5,185.92</b>	<b>11,432,994</b>	<b>95</b>
Directed commercial fishery landings	3,556.16	7,840,000	3,556.16	7,840,000	100
Directed commercial discard mortality	263.08	580,000	258.55	570,000	98
Guided recreational fishery	857.29	1,890,000	701.25	1,546,000	82
Guided recreational discard mortality <sup>7</sup>	--	--	4.08	9,000	--
Guided recreational fishery (GAF) <sup>5</sup>	--	--	3.81	8,395	--
Unguided recreational fishery <sup>3</sup>	544.31	1,200,000	439.08	968,000	81
Unguided recreational discard mortality <sup>7</sup>	--	--	8.62	19,000	--
Subsistence <sup>3</sup>	81.65	180,000	55.18	121,642	68
Non-directed commercial discard mortality (O26) <sup>3</sup>	176.90	390,000	125.65	277,000	71
IPHC fishery-independent setline survey and research <sup>4</sup>	--	--	33.55	73,957	--
Non-directed commercial discard mortality (U26)	108.86	240,000	88.90	196,000	82
<b>USA – Area 3B (western Gulf of Alaska)</b>	<b>1,664.68</b>	<b>3,670,000</b>	<b>1,585.60</b>	<b>3,495,657</b>	<b>95</b>
Directed commercial fishery landings	1,401.60	3,090,000	1,300.67	2,867,497	93
Directed commercial discard mortality <sup>3</sup>	131.54	290,000	108.86	240,000	83
Recreational fishery <sup>3</sup>	4.54	10,000	2.72	6,000	60
Recreational discard mortality	--	--	0.00	0	--
Subsistence <sup>3</sup>	4.54	10,000	4.75	10,475	105
Non-directed commercial discard mortality (O26) <sup>3</sup>	122.47	270,000	102.06	225,000	83
IPHC fishery-independent setline survey and research <sup>4</sup>	--	--	66.54	146,685	--
Non-directed commercial discard mortality (U26)	45.36	100,000	37.19	82,000	82
<b>USA – Area 4A (eastern Aleutians)</b>	<b>784.71</b>	<b>1,730,000</b>	<b>597.93</b>	<b>1,318,212</b>	<b>76</b>
Directed commercial fishery landings	639.57	1,410,000	440.46	971,048	69
Directed commercial discard mortality <sup>3</sup>	22.68	50,000	15.42	34,000	68
Recreational fishery <sup>3</sup>	4.54	10,000	2.27	5,000	50
Recreational discard mortality	--	--	0.00	0	--
Subsistence <sup>3</sup>	4.54	10,000	1.89	4,164	42
Non-directed commercial discard mortality (O26) <sup>3</sup>	113.40	250,000	137.89	304,000	122
IPHC fishery-independent setline survey and research <sup>4</sup>	--	--	--	--	--
Non-directed commercial discard mortality (U26)	45.36	100,000	65.77	145,000	145

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IPHC Regulatory Area	Fishery limit/mortality projection (net weight) <sup>1</sup>		Mortality to date (net weight)		Percent attained
	Tonnes (t)	Pounds (lb)	Tonnes (t)	Pounds (lb)	(%)
<b>USA – Area 4B (central/western Aleutians)</b>	<b>616.89</b>	<b>1,360,000</b>	<b>285.39</b>	<b>629,183</b>	<b>46</b>
Directed commercial fishery landings	553.38	1,220,000	207.73	457,965	38
Directed commercial discard mortality <sup>3</sup>	4.54	10,000	2.27	5,000	50
Recreational fishery <sup>3</sup>	--	--	0.00	0	--
Recreational discard mortality	--	--	0.00	0	--
Subsistence <sup>3</sup>	--	--	0.10	218	--
Non-directed commercial discard mortality (O26) <sup>3</sup>	58.97	130,000	75.30	166,000	128
IPHC fishery-independent setline survey and research <sup>4</sup>	--	--	--	--	--
Non-directed commercial discard mortality (U26)	4.54	10,000	6.80	15,000	150
<b>USA – Area 4CDE and Closed (Bering Sea)</b>	<b>1,746.33</b>	<b>3,850,000</b>	<b>1,361.48</b>	<b>3,001,546</b>	<b>78</b>
Directed commercial fishery landings	916.26	2,020,000	608.87	1,342,329	66
Directed commercial discard mortality <sup>3</sup>	36.29	80,000	23.59	52,000	65
Recreational fishery <sup>3</sup>	--	--	0.00	0	--
Recreational discard mortality	--	--	0.00	0	--
Subsistence <sup>3</sup>	18.14	40,000	6.00	13,217	33
Non-directed commercial discard mortality (O26) <sup>3</sup>	780.18	1,720,000	723.03	1,594,000	93
IPHC fishery-independent setline survey and research <sup>4</sup>	--	--	--	--	--
Non-directed commercial discard mortality (U26)	399.16	880,000	558.37	1,231,000	140
<b>Totals</b>	<b>16,769.31</b>	<b>36,970,000</b>	<b>15,508.98</b>	<b>34,191,463</b>	<b>92</b>
Directed commercial fishery	11,924.94	26,290,000	10,691.75	23,571,287	90
Recreational fishery	2,989.17	6,590,000	2,726.82	6,011,614	91
Subsistence <sup>3</sup>	435.45	960,000	379.52	836,708	87
Non-directed commercial discard mortality (O26) <sup>3</sup>	1,419.74	3,130,000	1,379.37	3,041,000	97
IPHC fishery-independent setline survey and research <sup>4</sup>	--	--	331.51	730,854	--
Non-directed commercial discard mortality (U26)	621.42	1,370,000	780.63	1,721,000	126

Note: in italics, values not covering whole year, accurate as of report date.

<sup>1</sup> Totals by IPHC Regulatory area include all TCEY components, i.e. exclude non-directed commercial discard mortality (U26).

<sup>2</sup> Non-treaty incidental to sablefish fishery limit allocated from Washington sport allocation in accordance with the Pacific halibut Catch Sharing Plan for IPHC Regulatory Area 2A.

<sup>3</sup> Fishery projection is value from 2022 AM estimates which were used in setting the TCEY for each IPHC Regulatory Area (i.e., non-FCEY components of TCEY).

<sup>4</sup> Includes U32 Pacific halibut landed during FISS

<sup>5</sup> XRQ and GAF leased from commercial quota.

<sup>6</sup> Rollover value provided by the Fisheries and Oceans Canada (DFO) as end-of-year projection since 2007.

<sup>7</sup> Limit included in limit listed above.

<sup>8</sup> Estimation method applied by DFO under review, mortality value updated on 14 November.

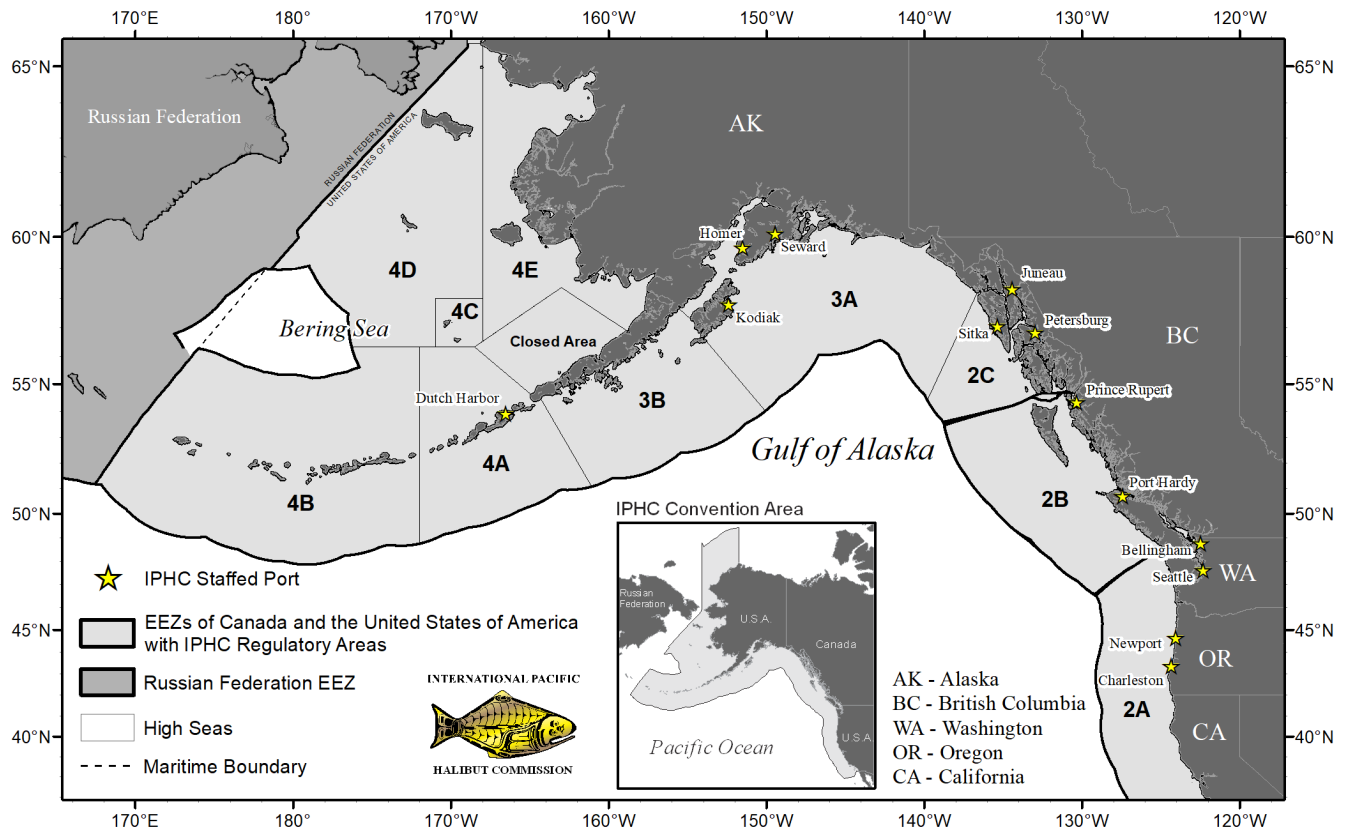


Figure 1. IPHC Convention Area and associated IPHC Regulatory Areas.

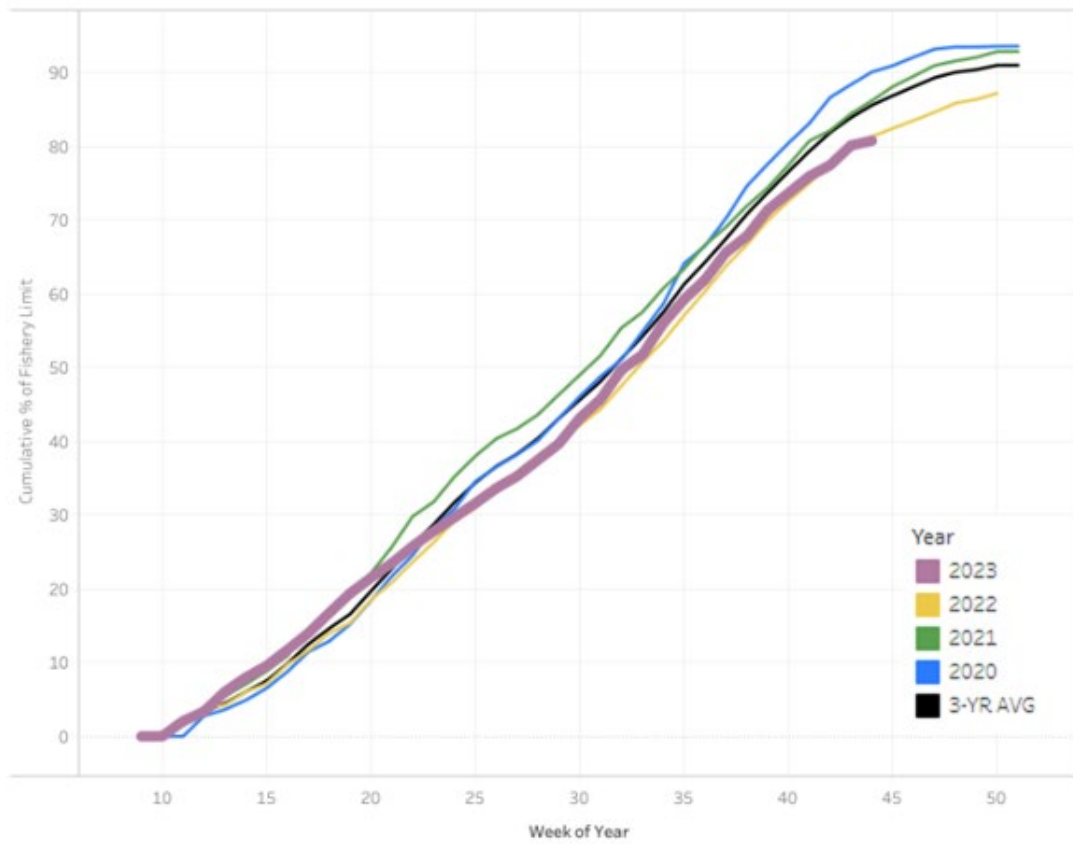


Figure 2. Cumulative percentage of quota share directed commercial Pacific halibut limit landed by week.

## DIRECTED COMMERCIAL FISHERIES

The IPHC's directed commercial fisheries span from northern California through to northern and western Alaska in USA and Canadian waters of the northeastern Pacific Ocean. The IPHC sets annual limits for the retention of Pacific halibut in each IPHC Regulatory Area. Participants in these commercial fisheries use longline and pot gear to catch Pacific halibut for sale. The directed commercial Pacific halibut fisheries in IPHC Regulatory Area 2A consisted of the directed commercial fishery with fishing period limits, the incidental Pacific halibut catch during the salmon troll and limited-entry sablefish fisheries, and the treaty Indian fisheries. Farther north, the directed commercial fisheries consisted of the Individual Vessel Quota (IVQ) fishery in IPHC Regulatory Area 2B in British Columbia, Canada; the Metlakatla fishery in IPHC Regulatory Area 2C; the Individual Fishing Quota (IFQ) system in Alaska, USA; and the CDQ fisheries in IPHC Regulatory Areas 4B and 4CDE. All 2023 landing and discard mortality data presented in this document are preliminary.

### Directed Commercial Fishing Periods

The Canadian IVQ fishery in IPHC Regulatory Area 2B and the USA IFQ and CDQ fisheries in IPHC Regulatory Areas 2C, 3A, 3B, 4A, 4B, 4C, 4D, and 4E commenced at 12 (noon) local time on 10 March and will close at 12 (noon) local time on 7 December ([Table 3](#)). The IPHC Regulatory Area 2A directed commercial fisheries, including the treaty Indian commercial fisheries, occurred during the same calendar period (10 March to 7 December 2023). In IPHC Regulatory Area 2A, the non-treaty directed commercial fishery operated under 58-hour fishing periods beginning on the fourth Tuesday in June. Each fishing period began on the Tuesday at 0800 and ended on the following Thursday at 1800 local time (58-hours), and was further restricted by fishing period limits. The fishery closed for the remainder of the year after the third opening on 1 August, when the IPHC Regulatory Area 2A directed commercial non-treaty fishery allocation was estimated to have been reached.

**Table 3.** Fishing periods for directed commercial Pacific halibut fisheries by IPHC Regulatory Area, 2019-2023 (d = days; h = hours).

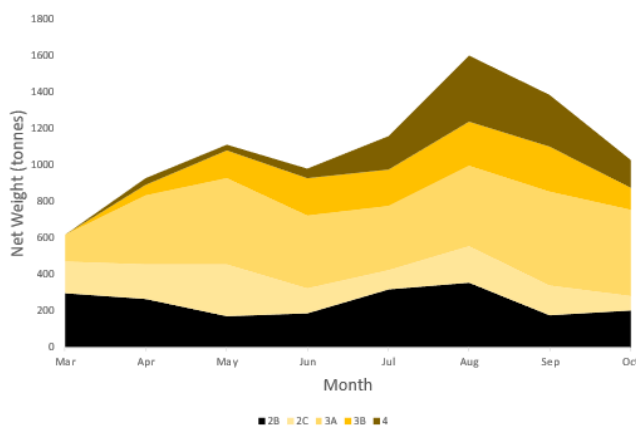
IPHC Regulatory Area	Year				
	2023	2022	2021	2020	2019
Canada: 2B	10 Mar–7 Dec (272 d)	6 Mar–7 Dec (276 d)	6 Mar–7 Dec (276 d)	14 Mar-7 Dec (268 d)	15 Mar-14 Nov (244 d)
USA: 2A Treaty Indian	31 Mar-10 June (55 h)	6 Mar-31 May (55 h)	6 Mar-16 May (55 h)	14 Mar-30 Sep (55 h)	15 Mar-15 May (55 h)
	13 June -31 July (20 h) (Unrestricted)	(Unrestricted)	(Unrestricted)	(Unrestricted)	(Unrestricted)
	10 Mar- 31 May (122h)	6 Mar-31 May (122 h) (Restricted)	6 Mar-16 May (102 h) (Restricted)	14 Mar-30 Sep (222 h) (Restricted)	15 Mar-15 May (84 h)
	1 June – 31 July 2 (24h) (Restricted)	3 Jun-30 Sept (48 h and 72 h) (Restricted)	16 May-20 Jun (24 h)	5 Oct -18 Oct (13 d)	20 May-15 Jun (72 h) (Restricted)
	31 July 15 Oct 2 (24 h) (Restricted)				11 Jun-24 Jul (35 d)
USA: 2A Commercial Directed	27-29 Jun 11-13 Jul 1-3 Aug (58 h each)	28-30 Jun 12-14 Jul 26-28 Jul (58 h each)	22-24 Jun 6-8 Jul 20-22 Jul (58 h each)	22-24 Jun 6-8 Jul 20-22 Jul 3-5 Aug 17-19 Aug (58 h each)	26 Jun 10 Jul 24 Jul (10 h each)

USA: 2A Commercial Incidental	Salmon 1 Apr – 31 Oct (213 d)  Sablefish 1 Apr – 31 Oct (213 d)	Salmon 1 Apr – 31 Oct (213 d)  Sablefish 1 Apr – 31 Oct (213 d)	Salmon 1 Apr – 7 Dec (250 d)  Sablefish 1 Apr – 7 Dec (250 d)	Salmon 15 Apr–30 Sep (WA – 168 d)  15 Apr–31 Oct (OR - 199 d)  1 Aug–30 Sep (CA - 60 d)  Sablefish 1 Apr – 15 Nov (228 d)	Salmon 20 Apr - 30 Sep (WA, CA - 163 d)  20 Apr - 31 Oct (OR - 194 d)  Sablefish 1 Apr- 31 Oct (213 d)
USA: Alaska (2C, 3A, 3B, 4A, 4B, 4CDE)	10 Mar–7 Dec (272 d)	6 Mar–7 Dec (276 d)	6 Mar–7 Dec (276 d)	14 Mar-15 Nov (246 d)	15 Mar-14 Nov (244 d)

### Directed Commercial Landings

Directed commercial fishery limits and landings by IPHC Regulatory Area for the 2023 fishing season are shown in [Table 2](#). The directed commercial fishery limit, as referred to here, is the IPHC commercial fishery limit set by the Contracting Parties following the IPHC Annual Meeting and is equivalent to the Fishery Constant Exploitation Yield (FCEY). The fishery limits with adjustments from the underage and overage programs from the previous year’s quota share programs are not shown. The *Use of Fish* allocation in IPHC Regulatory Area 2B, as defined in the Pacific Region Integrated Fisheries Management Plan – Groundfish are also not presented. Historical landings and fishery limits are available on the IPHC website (<https://www.iphc.int/data>).

The 2023 directed commercial fishery landings were spread over ten months (March – December) of the year in Canada and the USA ([Figure 2](#)). On a month-to-month comparison, August took the lead as the busiest month for total poundage (18%) landed from IPHC Regulatory Area 2B. On a month-to-month comparison, August was also the busiest month for total poundage (18%) from Alaska, USA. A [year-to-date visualization is also available on the IPHC website](#).



Regulatory Area 2B landings from DFO Fishery Operations System (FOS).  
 Regulatory Areas 2C, 3, and 4 landings from NOAA Fisheries Restricted Access Management (RAM) Program.  
 Regulatory Area 3B: March combined with and shown above in April to preserve confidentiality.  
 Regulatory Area 4: March combined with and shown above in April to preserve confidentiality.

**Figure 2.** 2023 directed commercial landings (tonnes, net weight, preliminary) of Pacific halibut for individual quota fisheries by IPHC Regulatory Area and month.



### *Canada – IPHC Regulatory Area 2B (British Columbia)*

Under the IVQ fishery in British Columbia, Canada, the number of active Pacific halibut licences (L licences) and First Nations communal commercial licences (FL licences) was 135 in 2023. In addition, Pacific halibut can be landed as incidental catch in other licensed groundfish fisheries. Pacific halibut was landed from a total of 211 active licences in 2023, with 76 of these licences from other fisheries. The 2023 directed commercial landings represented 1,978 tonnes (4,361,127 pounds) of Pacific halibut (as of 1 November 2023).

Directed commercial trips from IPHC Regulatory Area 2B were delivered into 13 different ports in 2023. The ports of Port Hardy (including Coal Harbour and Port McNeill) and Prince Rupert/Port Edward were the major landing locations, receiving 93% of the commercial landings. Port Hardy received 44% while Prince Rupert received 50% of the directed commercial landings. All IVQ landings were landed in IPHC Regulatory Area 2B. In 2023, a total of 31 Canadian vessels landed frozen, head-off Pacific halibut for a total of 32 tonnes (70,175 pounds) over 61 landings.

According to logbook data, minimal weight of Pacific halibut was caught with pot gear and landed within the directed commercial fishery in IPHC Regulatory Area 2B.

### *USA – IPHC Regulatory Area 2A (Washington, Oregon, California)*

The 2023 IPHC Regulatory Area 2A fisheries and respective fishery limits are listed in [Table 2](#). The total IPHC Regulatory Area 2A commercial landings (directed and incidental to salmon troll and sablefish) of 368 tonnes (811,781 pounds) is 7% below the fishery limit. The total non-treaty directed commercial landings of 118 tonnes (259,226 pounds) was over 1% of the fishery limit of 117 tonnes (257,819 pounds) after three 58-hour openers. The fishing period limits by vessel size class for each opening in 2023 are listed in [Table 4](#).

The salmon troll fishery season began on 1 April with an allowable incidental landing ratio of one Pacific halibut per two Chinook, plus an “extra” Pacific halibut per landing, and a vessel trip limit of 35 fish. On 30 June, the fishery was extended at the same ratio and landing limit. Total landings of 13 tonnes (27,600 pounds) are 39% under the fishery limit (21 tonnes or 45,497 pounds).

Incidental Pacific halibut retention during the limited-entry sablefish fishery was open from 1 April to 31 October. Beginning 1 April, the allowable landing ratio was 0.07 tonnes (150 pounds) of Pacific halibut to 0.45 tonnes (1,000 pounds) of sablefish, and up to two additional Pacific halibut in excess of the ratio limit. The total landings of 18 tonnes (40,090 pounds) were 43% under the fishery limit (32 tonnes or 70,000 pounds).

In IPHC Regulatory Area 2A, north of Point Chehalis (46°53.30' N. latitude), the treaty Indian tribes manage the directed commercial landings for three fisheries under a Memorandum of Understanding among the 13 tribes. These consist of an unrestricted fishery, a restricted fishery with trip limits, and a late season fishery. These fisheries are subject to in-season management. There was an unrestricted, open access fishery, not to exceed 55 hours from 31 March to 10 June; and another unrestricted fishery on 13 July to 31 July for 20 hours. This was followed by two restricted fishery openings not to exceed 24 hours with limit of 0.23 tonnes (500 pounds) from 31 July to 15 October. Estimated total landings of 225 tonnes (494,933 pounds) were 2% under the fishery limit (228 tonnes or 502,500 pounds).



**Table 4.** The fishing periods and limits (tonnes, dressed, head-on with ice/slime) by vessel class used in the 2023 directed commercial fishery in IPHC Regulatory Area 2A.

Vessel Class		Fishing Period (dates) & Limits (t)		
Letter	Feet	27-29 June	11-13 July	1-3 August
A, B and C	1-35	1.2	1.2	.45
D and E	36-45	1.9	1.9	.45
F and G	46-55	2.5	2.5	.45
H	56+	2.8	2.8	.45

*USA – IPHC Regulatory Areas 2C, 3, and 4 (Alaska)*

In Alaska, the National Oceanic and Atmospheric Administration Fisheries (NOAA Fisheries) Restricted Access Management (RAM) Program allocated Pacific halibut quota share (QS) to recipients by IPHC Regulatory Area. Quota share transfers were permitted with restrictions on the amount of QS a person could hold and the amount that could be fished per vessel. In 2023, RAM reported that 2,241 persons/entities held QS.

The total 2023 landings from the IFQ/CDQ Pacific halibut fishery for the waters off Alaska through 1 November 2023 were 6,823 tonnes (15,042,472 pounds), 21% under the directed commercial fishery limit. By IPHC Regulatory Area, the directed commercial landings were under the fishery limit by 14% for Area 2C, 10% for Area 3A, 13% for Area 3B, 38% for Area 4A, 68% for Area 4B (IFQ/CDQ), and 43% for 4CDE/Closed (IFQ/CDQ).

Homer received approximately 21% (1,403 tonnes or 3,093,000 pounds) of the directed commercial landings of Alaskan catch making it the port that received the greatest landed volume in 2023. Kodiak received the second and Seward the third largest landing volume at 12% (827 tonnes or 1,823,000 pounds) and 9% (582 tonnes or 1,284,000 pounds) of the Alaskan commercial landings, respectively. In Southeast Alaska, the two largest landing volumes were received in Sitka and Juneau, with their combined landings representing 13% (916 tonnes or 2,019,000 pounds) of the directed commercial Alaskan landings. The Alaskan QS catch that was landed in Bellingham, WA was less than 2%.

In Alaska, 24 tonnes (52,00 pounds) of Pacific halibut were caught with pot gear and landed within the directed commercial fishery, representing 0.3% of the total Alaska landings.

The Metlakatla Indian Community (within IPHC Regulatory Area 2C) was authorized by the United States government to conduct a commercial Pacific halibut fishery within the Annette Islands Reserve. There were 12 two-day openings between 14 April and 15 September for total landings of 17 tonnes (38,140 pounds). The fishery closed on 17 September.

**Directed Commercial Discard Mortality**

Incidental mortality of Pacific halibut in the directed commercial Pacific halibut fishery is the mortality of all Pacific halibut that do not become part of the landed catch. The three main sources of discard mortality estimate include: 1) fish that are captured and discarded because they are below the legal-size limit of 81.3 cm (32 inches); 2) fish that are estimated to die on lost or abandoned fishing gear; and 3) fish that are discarded for regulatory reasons (e.g., the vessels trip limit has been exceeded). The methods that are applied to produce each of these estimates differ due to the amount and quality of information available. Information on lost gear and regulatory discards is collected through logbook interviews and fishing logs received by mail. The ratio of U32 to O32 Pacific halibut (>81.3 cm or 32 inches in length) is determined from the IPHC FISS in most areas and by direct observation in the IPHC Regulatory Area 2B fishery. Different mortality rates are applied to each category: released Pacific halibut have an estimated 16% mortality rate and Pacific halibut mortality from lost gear is assumed 100%.

Pacific halibut discard mortality estimates from the commercial Pacific halibut fishery are summarized by IPHC Regulatory Area in [Table 2](#).

## RECREATIONAL FISHERIES

The 2023 recreational removals of Pacific halibut, including discard mortality, was estimated at 2,727 tonnes (6,011,614 pounds). Changes in harvests varied across areas, in some cases, in response to changes in size restrictions. Recreational fishery limits and landings are detailed by IPHC Regulatory Area in [Table 2](#). Historical recreational removals are also available at the [IPHC website, section on recreational fisheries data](#).

### Recreational Landings

#### *Canada – IPHC Regulatory Area 2B (British Columbia)*

IPHC Regulatory Area 2B operated under a 133 cm (52.4 inch) maximum size limit and one Pacific halibut had to be between 90 and 133 cm (35.4 - 52.4 inches) or two under 90 cm (35.4 inch) when attaining the two fish possession limit, with an annual limit of ten per licence holder ([FN100](#)). Effective 1 April, the maximum size limit was decreased to 126 cm (49.6 inch) ([FN0264](#)). On 8 July, the daily limit was increased to equal the possession limit, that is one fish between 90 and 126 cm (35.4 - 49.6 inch) or two fish under 90 cm (35.4 inch) ([FN0628](#)). The fishery closed on 30 September ([FN1049](#)). The IPHC Regulatory Area 2B recreational harvest was at 100% of the recreational fishery limit at 404 tonnes (889,881 pounds).

**Note:** The estimation method for recreational landings in Canada is currently under review, due to questions raised regarding the methods for calculation of recreational mortality provided in the 2022 [Canadian National Report](#).

**Note:** In 2022, the IPHC updated the length-weight relationship (see [IPHC-2023-AM099-INF04](#)). Application of the updated length-weight relationship is under review by the DFO.

#### *USA – IPHC Regulatory Area 2A (Washington, Oregon, California)*

The 2023 IPHC Regulatory Area 2A recreational allocation was 279 tonnes (614,684 pounds) net weight and based on the Pacific Fishery Management Council's Catch Sharing Plan formula, which divides the overall fishery limit among all sectors. The recreational allocation was further subdivided to seven subareas, after 32 tonnes (70,000 pounds) were allocated to the incidental Pacific halibut catch in the commercial sablefish fishery in Washington. This subdivision resulted in 128 tonnes (281,728 pounds) being allocated to Washington subareas, 133 tonnes (293,436 pounds) to Oregon subareas and 18 tonnes (39,520 pounds) to California. The IPHC Regulatory Area 2A recreational harvest totaled 240 tonnes (WA + OR + CA; 528,829 pounds), 14% under the recreational fishery limit. Recreational fishery harvest seasons by subareas varied and were managed in season with fisheries opening on 1 April.

#### *IPHC Regulatory Areas 2C, 3, and 4 (USA: Alaska)*

A reverse slot limit allowing for the retention of one Pacific halibut, if less or equal 101.6 cm (40 inches) or more or equal 203.2 cm (80 inches) in total length, was in place for the charter fishery in IPHC Regulatory Area 2C. Retention was also forbidden on any Monday from 24 July to 31 December. In IPHC Regulatory Area 3A, charter anglers were allowed to retain two fish per day, but only one could exceed 71.1 cm (28 inches) in length. One trip per calendar day per charter permit was allowed, with no charter retention of Pacific halibut on Wednesdays or on the following Tuesdays: June 20, June 27, July 4, July 11, July 18, July 25, August 1, August 8, August 15.

The Contracting Party agencies in Alaska (USA) have a program (Guided Angler Fish or GAF) that allow recreational harvesters to land fish that is leased from commercial fishery quota shareholders for the current season.

## Recreational Discard Mortality

Pacific halibut discarded for any reason suffer some degree of discard mortality and impacts more of the stock with the increasing use of size restrictions, such as reverse slot limits. Current year estimates from USA agencies of recreational discard mortality have been received and are provided in [Table 2](#). Canada has not provided recreational discard mortality estimates; therefore, the discard mortality rate from IPHC Regulatory Area 2C is applied to the estimated landings from IPHC Regulatory Area 2B.

## SUBSISTENCE FISHERIES

Pacific halibut is taken throughout its range as subsistence harvest by several fisheries. Subsistence fisheries are non-commercial, customary, and traditional use of Pacific halibut for direct personal, family, or community consumption or sharing as food, or customary trade. The primary subsistence fisheries are the treaty Indian Ceremonial and Subsistence fishery in IPHC Regulatory Area 2A off northwest Washington State, the First Nations Food, Social, and Ceremonial (FSC) fishery in British Columbia, and the subsistence fishery by rural residents and federally recognized native tribes in Alaska documented via Subsistence Halibut Registration Certificates (SHARC).

The coastwide subsistence estimate for 2023 was 380 tonnes (836,708 pounds) ([Table 2](#)). Historical subsistence removals are also available at the [IPHC website, section on subsistence fishing](#).

## Estimated subsistence harvests by area

In the commercial Pacific halibut fisheries coastwide, the state and federal regulations require that take-home Pacific halibut caught during commercial fishing be recorded as part of the commercial fishery on the landing records (i.e., State fish tickets or Canadian validation records). This is consistent across areas, including the quota share fisheries in Canada and USA, and as part of fishing period limits and Pacific halibut ratios in the incidental fisheries in IPHC Regulatory Area 2A. Therefore, personal use fish or take-home fish within the commercial fisheries are accounted for as commercial catch and are not included here.

### *IPHC Regulatory Area 2A (USA: Washington, Oregon, California)*

The Pacific Fishery Management Council's Catch Sharing Plan allocates the Pacific halibut fishery limit to commercial, recreational, and treaty Indian users in IPHC Regulatory Area 2A. The treaty tribal fishery limit is further sub-divided into commercial and C&S fisheries. It is estimated that 13 tonnes (29,500 pounds) were retained as C&S. A revised estimate of the 2023 removals will be provided at the end of the year.

### *IPHC Regulatory Area 2B (Canada: British Columbia)*

The source of Pacific halibut subsistence harvest in British Columbia is the First Nations FSC fishery. The IPHC receives some logbook and landing data for this harvest from the DFO, but those data have not been adequate for the IPHC to make an independent estimate of the FSC fishery harvest. DFO estimated the First Nations FSC harvest to be 136 tonnes (300,000 pounds) annually until 2006, and since 2007, the yearly estimate has been provided as 184 tonnes (405,000 pounds).

### *IPHC Regulatory Areas 2C, 3, and 4 (USA: Alaska)*

In 2003, the subsistence Pacific halibut fishery off Alaska was formally recognized by the North Pacific Fishery Management Council and implemented by IPHC and NOAA Fisheries regulations. The fishery allows the customary and traditional use of Pacific halibut by rural residents and members of federally recognized Alaska, USA native tribes who can retain Pacific halibut for non-commercial use, food, or customary trade. The NOAA Fisheries regulations define legal gear, number of hooks, and daily bag limits, and IPHC regulations set the fishing season. Prior to subsistence fishing, eligible persons registered with NOAA Fisheries Restricted Access Management to obtain a SHARC. The Division of Subsistence at Alaska

Department of Fish and Game (ADF&G) was contracted by NOAA Fisheries to estimate the subsistence harvest in Alaska through a data collection program. A voluntary survey of fishers is conducted by mail or phone, with some onsite visits. Beginning in 2018, this survey is conducted on a biannual schedule, rather than annually. The 2022 estimate has been carried forward for 2023 are provided in [Table 2](#).

In addition to the SHARC harvest, IPHC regulations allow Pacific halibut less than 81.3 cm or 32 inches in fork length (also called U32) to be retained in the IPHC Regulatory Area 4D and 4E commercial Pacific halibut CDQ fishery, under an exemption requested by the North Pacific Fishery Management Council, if the fish are not sold or bartered. The exemption originally applied only to CDQ fisheries in IPHC Regulatory Area 4E in 1998 but was expanded in 2002 to also include IPHC Regulatory Area 4D. The CDQ organizations are required to report to the IPHC the amounts retained during their commercial fishing operations. This harvest is not included in the SHARC program estimate and is reported separately.

Reports for 2023 removals were received from three CDQ management organizations: Bristol Bay Economic Development Corporation (BBEDC), Norton Sound Economic Development Corporation (NSEDC), and Coastal Villages Regional Fund (CVRF).

#### CDQ – Bristol Bay Economic Development Corporation (BBEDC)

BBEDC requires their fishers to record the lengths of retained U32 Pacific halibut in a separate log, which are then tabulated by BBEDC at the conclusion of the season. The lengths were converted to weights using the IPHC length/weight relationship and summed to estimate the total retained U32 weight. Pacific halibut were landed by BBEDC vessels primarily in King Salmon and Naknek in a lesser amount. BBEDC reported 3 harvesters landed 25 U32 Pacific halibut (<1 tonne; 295 pounds).

#### CDQ – Coastal Villages Regional Fund (CVRF)

CVRF reported that no Pacific halibut were landed by their fishers or received by their facilities.

#### CDQ – Norton Sound Economic Development Corporation (NSEDC)

NSEDC required their fishers to offload the U32 Pacific halibut for weighing. The fish were not washed nor were the heads removed. The U32 Pacific halibut were then returned to the harvester. NSEDC reported 35 U32 Pacific halibut weighing <1 tonne (350 pounds), weighted head-on, were caught in the local CDQ fishery and landed at the Nome plant.

### **NON-DIRECTED COMMERCIAL DISCARD MORTALITY**

The IPHC accounts for non-directed commercial discard mortality by IPHC Regulatory Area and sector. All removals for 2023 are provided in [Table 2](#). Historical data are also available on the [IPHC website, section on non-directed discard mortality](#).

### **Estimating Non-Directed Commercial Discard Mortality**

Non-directed commercial discard mortality of Pacific halibut is estimated because not all fisheries have 100% monitoring and not all Pacific halibut that are discarded are assumed to die. Agencies estimate the amount of non-directed commercial discard that will not survive, called non-directed commercial discard mortality.

The IPHC relies upon information supplied by observer programs run by Contracting Party agencies for non-directed commercial discard mortality estimates in most fisheries. Non-IPHC research survey information is used to generate estimates of non-directed commercial discard mortality in the few cases where fishery observations are unavailable. Trawl fisheries off British Columbia are monitored, and non-directed commercial discard mortality information is provided to IPHC by DFO. NOAA Fisheries operates observer programs off the USA West Coast and Alaska, which monitor the major groundfish fisheries. Data collected by NOAA fisheries observer programs are used to estimate non-directed commercial discard mortality.

## Non-directed Commercial Discard Mortality by Area

### *Canada – IPHC Regulatory Area 2B (British Columbia)*

In Canada, Pacific halibut non-directed commercial discard mortality in trawl fisheries are capped at 454 tonnes round weight by DFO. Non-trawl non-directed commercial discard mortality is handled under the IVQ system within the directed Pacific halibut fishery cap.

### *USA – IPHC Regulatory Area 2A (Washington, Oregon, California)*

Groundfish fisheries off Washington, Oregon, and California are managed by NOAA Fisheries, following advice and recommendations developed by the Pacific Fishery Management Council. Non-directed commercial discard mortality projected estimates are provided by NOAA Fisheries.

### *USA – IPHC Regulatory Areas 2C, 3, and 4 (Alaska)*

Groundfish fisheries in Alaska are managed by NOAA Fisheries, following advice and recommendations developed by the North Pacific Fishery Management Council. Non-directed commercial discard mortality projected estimates for Alaskan areas are provided by NOAA Fisheries and ADF&G.

#### IPHC Regulatory Area 2C (Southeast Alaska)

For the federal waters of IPHC Regulatory Area 2C, only non-directed commercial discard mortality by hook-and-line vessels fishing in the outside waters were reported by NOAA Fisheries. These vessels are primarily targeting Pacific cod and rockfish (*Sebastes* spp.) in open access fisheries, and sablefish in the IFQ fishery. In 1998, a no trawl zone was established in the Gulf of Alaska eliminating trawl fishing in this area.

Fisheries occurring within state waters and resulting in Pacific halibut non-directed commercial discard mortality include pot fisheries for red and golden king crab, and tanner crab. Information is provided periodically by ADF&G, and the estimate was rolled forward from 2022 to 2023.

#### IPHC Regulatory Area 3 (Eastern, Central and Western Gulf of Alaska)

IPHC Regulatory Area 3 is comprised of Areas 3A and 3B. For the purposes of stock assessment and management, IPHC tracks non-directed commercial discard mortality in both IPHC Regulatory Areas. Federal groundfish fisheries operate throughout both areas and a subset of these vessels are monitored for discarded Pacific halibut. Trawl fisheries are responsible for most of the non-directed commercial discard mortality in Regulatory Area 3, with hook-and-line fisheries a distant second. State-managed crab and scallop fisheries are also known to take Pacific halibut as non-directed commercial discard mortality, but data from these state-managed fisheries are currently unavailable.

Estimates of non-directed commercial discard mortality in IPHC Regulatory Area 3 reflect different levels of observer coverage by gear and type of fishing trip. 2021 coverage rates vary from 100% to 15% of the estimated discarded groundfish pounds by gear and fishery (Table 3-4 in [AFSC 2021](#)). The lowest coverage rates are realized for the non-pelagic trawl fishery, which also has the highest likelihood of encountering Pacific halibut. Analyses of observed and unobserved trip properties (magnitude of the landings, trip duration, species composition of the landed catch, etc.) have shown that observed trips are not representative of all trips in some of these metrics (observed and unobserved) (Appendix A in [AFSC 2019](#)). Therefore, non-directed discard mortality estimates for IPHC Regulatory Area 3 have both a greater uncertainty and potential for bias than those from areas with higher coverage rates and/or where there is no evidence of different behavior when observed.

#### IPHC Regulatory Area 4 (Bering Sea and Aleutian Islands)

In IPHC Regulatory Area 4CDE non-directed commercial discard mortality estimates have typically been the highest ([Table 2](#)) due to groundfish fisheries which target flatfish in the Bering Sea.

**IPHC FISHERY-INDEPENDENT SETLINE SURVEY (FISS)**

Approximately 332 tonnes (730,854 pounds) of Pacific halibut were landed from the FISS and in 2023 with the amount landed from each IPHC Regulatory Area documented in [Table 2](#). This also includes IPHC Bait Study Research that is still ongoing.

**NON-IPHC RESEARCH REMOVALS**

In 2023, four IPHC research permits were issued to NOAA to allow the harvest of Pacific halibut while conducting their Gulf of Alaska, Eastern Bering Sea, and Northern Bering Sea standardised bottom trawl surveys. A fifth research permit was issued to the U.S. Department of Energy to allow retention of Pacific halibut for radionuclide analysis. Amounts retained will be reported when available.

**RECOMMENDATION**

That the Commission:

- 1) **NOTE** paper IPHC-2023-IM099-07 Rev\_2 which provides the Commission with a preliminary overview of the 2023 Pacific halibut removals, including the status of mortality reported against fishery limits adopted by the Commission and outlined in the [IPHC Fishery Regulations \(2023\)](#).

**APPENDICES**

Nil.