

IPHC-2024-AM100-07 Rev\_1

### **Fisheries Data Overview (2023)**

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#### **PURPOSE**

To provide an overview of the 2023 Pacific halibut removals, including the status of mortality reported against fishery limits adopted by the Commission and outlined in the <u>IPHC Fishery Regulations (2023)</u>. Data provided in this paper include current and projected values available as of 5 January 2024.

#### **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 <a href="IPHC-2024-AM100-10">IPHC-2024-AM100-10</a>) 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 [Pacific] 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 (as of 5 January 2024).

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	713	1,570,850	95	
IPHC Regulatory Area 2B	3,075	6,780,000	3,145	6,982,511	102	
IPHC Regulatory Area 2C	2,654	5,850,000	2,629	5,795,054	99	
IPHC Regulatory Area 3A	5,479	12,080,000	4,855	10,702,480	89	
IPHC Regulatory Area 3B	1,665	3,670,000	1,540	3,394,199	92	
IPHC Regulatory Area 4A	785	1,730,000	567	1,249,174	72	
IPHC Regulatory Area 4B	617	1,360,000	251	553,300	41	
IPHC Regulatory Area 4CDE and Closed Area	1,746	3,850,000	1,272	2,803,715	73	
Subtotal (TCEY)	16,769	36,970,000	14,969	33,000,283	89	
Non-directed commercial discard mortality (U26)	621	1,370,000	711	1,567,000	114	
Total	17,391	38,340,000	15,679	34,567,283	90	

**Table 2.** 2023 estimates of mortality reported against fishery limits (FCEY) and mortality projections by IPHC Regulatory Area (as of 5 January 2024).

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)	(%)
USA – 2A (California, Oregon, and Washington) <sup>10</sup>	748.43	1,650,000	712.53	1,570,850	95
Non-treaty directed commercial	116.94	257,819	117.58	259,226	101
Non-treaty incidental to salmon troll fishery	20.64	45,497	11.00	24,255	53
Non-treaty incidental to sablefish fishery <sup>2</sup>	31.75	70,000	20.68	45,595	65
Treaty Indian directed commercial	227.93	502,500	224.60	495,161	99
Directed commercial discard mortality <sup>3</sup>	22.68	50,000	45.36	100,000	200
Recreational – Washington	127.79	281,728	118.29	260,786	93
Recreational – Oregon	133.10	293,436	103.54	228,266	78
Recreational – California	17.93	39,520	17.39	38,337	97
Recreational discard mortality			0.93	2,058	
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	
Canada – Area 2B (British Columbia) <sup>10</sup>	3,075.36	6,780,000	3,144.53	6,932,511	102
Directed commercial fishery landings	2,281.57	5,030,000	2,232.91	4,922,721	98
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>			7.16	15,790	
Subsistence <sup>3,6</sup>	185.97	410,000	183.70	405,000	99
Non-directed commercial discard mortality (O26) <sup>3</sup>	108.86	240,000	159.66	352,000	147
IPHC fishery-independent setline survey and research <sup>4</sup>			57.96	127,789	
Non-directed commercial discard mortality (U26)	13.61	30,000	22.68	50,000	167
				c	ontinued

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)	(%)
USA – Area 2C (southeastern Alaska) <sup>10</sup>	2,653.51	5,850,000	2,628.59	5,795,054	99
Directed commercial fishery landings	1,546.75	3,410,000	1,368.86	3,017,811	88
Directed commercial discard mortality	68.04	150,000	51.26	113,000	75
Metlakatla (Annette Islands Reserve)			17.30	38,140	
Guided recreational fishery	362.87	800,000	356.72	786,438	102
Guided recreational discard mortality <sup>7</sup>			11.95	26,338	
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	93
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	17.69	39,000	65
IPHC fishery-independent setline survey and research <sup>4</sup>			157.35	346,908	
Non-directed commercial discard mortality (U26)			0.00	0	
USA – Area 3A (central Gulf of Alaska) <sup>10</sup>	5,479.39	12,080,000	4,854.56	10,702,480	89
Directed commercial fishery landings	3,556.16	7,840,000	3,247.19	7,158,822	91
Directed commercial discard mortality	263.08	580,000	258.55	570,000	98
Guided recreational fishery	857.29	1,890,000	701.46	1,546,445	83
Guided recreational discard mortality <sup>7</sup>			4.18	9,219	
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	82
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	102.97	227,000	58
IPHC fishery-independent setline survey and research <sup>4</sup>			33.55	73,957	
Non-directed commercial discard mortality (U26)	108.86	240,000	72.57	160,000	67
USA – Area 3B (western Gulf of Alaska) <sup>10</sup>	1,664.68	3,670,000	1,539.58	3,394,199	92
Directed commercial fishery landings	1,401.60	3,090,000	1,271.89	2,804,039	91
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 <sup>7</sup>			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	84.82	187,000	69
IPHC fishery-independent setline survey and research <sup>4</sup>			66.54	146,685	
Non-directed commercial discard mortality (U26)	45.36	100,000	30.84	68,000	68
USA – Area 4A (eastern Aleutians) <sup>10</sup>	784.71	1,730,000	566.62	1,249,174	72
Directed commercial fishery landings	639.57	1,410,000	419.12	924,010	66
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 <sup>7</sup>			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	127.91	282,000	113
IPHC fishery-independent setline survey and research <sup>4</sup>					
Non-directed commercial discard mortality (U26)	45.36	100,000	60.78	134,000	134
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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)	(%)	
USA – Area 4B (central/western Aleutians) <sup>10</sup>	616.89	1,360,000	250.97	553,300	41	
Directed commercial fishery landings	553.38	1,220,000	182.83	403,082	33	
Directed commercial discard mortality <sup>3</sup>	4.54	10,000	2.27	5,000	50	
Recreational fishery <sup>3</sup>	0.00	0	0.00	0		
Recreational discard mortality <sup>7</sup>			0.00	0		
Subsistence <sup>3</sup>			0.10	218		
Non-directed commercial discard mortality (O26) <sup>3</sup>	58.97	130,000	65.77	145,000	112	
IPHC fishery-independent setline survey and research <sup>4</sup>						
Non-directed commercial discard mortality (U26)	4.54	10,000	6.35	14,000	140	
USA – Area 4CDE and Closed (Bering Sea) <sup>10</sup>	1,746.33	3,850,000	1,271.74	2,803,715	73	
Directed commercial fishery landings	916.26	2,020,000	574.47	1,266,498	63	
Directed commercial discard mortality <sup>3</sup>	36.29	80,000	23.59	52,000	65	
Recreational fishery <sup>3</sup>	0.00	0	0.00	0		
Recreational discard mortality <sup>7</sup>			0.00	0		
Subsistence <sup>3,9</sup>	18.14	40,000	6.00	13,217	33	
Non-directed commercial discard mortality (O26) <sup>3</sup>	780.18	1,720,000	667.69	1,472,000	86	
IPHC fishery-independent setline survey and research <sup>4</sup>						
Non-directed commercial discard mortality (U26)	399.16	880,000	515.73	1,137,000	129	
Totals <sup>10</sup>	16,769.31	36,970,000	14,968.67	33,000,283	89	
Directed commercial fishery	11,924.94	26,290,000	10,280.83	22,665,360	86	
Recreational fishery	2,989.17	6,590,000	2,727.09	6,012,210	91	
Subsistence <sup>3,9</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	1,260.53	2,779,000	89	
IPHC fishery-independent setline survey and research <sup>4</sup>			320.69	707,005		
Non-directed commercial discard mortality (U26)	621.42	1,370,000	710.78	1,567,000	114	

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

<sup>&</sup>lt;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>&</sup>lt;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>&</sup>lt;sup>4</sup> Includes U32 Pacific halibut landed during FISS.

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

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

<sup>&</sup>lt;sup>7</sup> Limit/projection included in limit/projection listed above; percent attained reflects all mortality components included in the limit/projection.

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

<sup>&</sup>lt;sup>9</sup> Includes U32 CDQ landings retained for personal consumption and not accounted as commercial CDQ landings in IPHC Regulartory Areas 4D and 4E.

<sup>&</sup>lt;sup>10</sup> Sum excludes non-directed commercial discard mortality (U26).

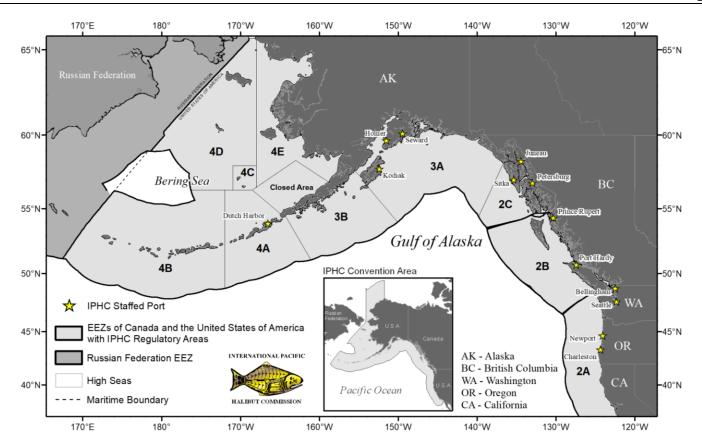


Figure 1. IPHC Convention Area and associated IPHC Regulatory Areas.

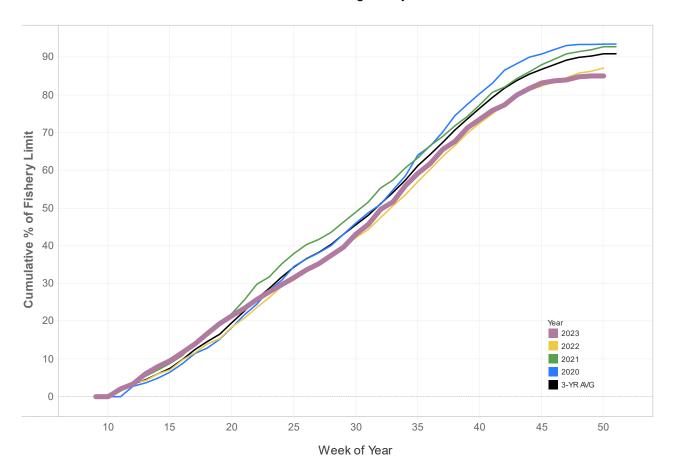


Figure 2. Cumulative percentage of quota share directed commercial Pacific halibut limit landed by week.

#### **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.

## **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 closed 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, and was further restricted by fishing period limits. The fishery closed for the remainder of the year after the third opening that commenced 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).

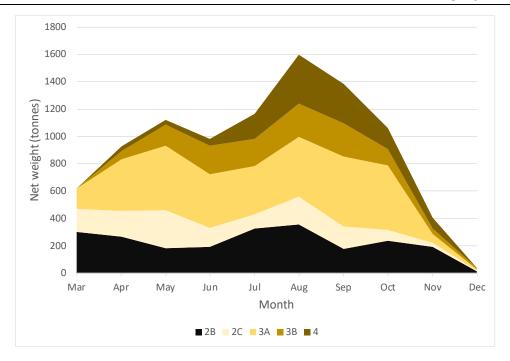
IPHC Regulatory Area		Year				
Alea	2023	2022	2021	2020	2019	
Canada: 2B	10 Mar–7 Dec (272 d)	6 Mar–7 Dec (276 d)	6 Mar–7 Dec (276 d)	14 Mar-7 Dec (268 d)	15 Mar-14 Nov (244 d)	
USA: 2A Treaty Indian	10 Mar-10 June (55 h) (Unrestricted)  10 Mar-31 May (122 h) (Restricted)  1 June-31 July (2x 24 h) (Restricted)  17 June-31 July (20 h) (Unrestricted)  1 Sept-15 Oct (2x24 h) (Restricted)	6 Mar-31 May (55 h) (Unrestricted)  6 Mar-31 May (122 h) (Restricted)  3 Jun-30 Sept (48 h and 72 h) (Restricted)	6 Mar-16 May (55 h) (Unrestricted)  6 Mar-16 May (102 h) (Restricted)  16 May-20 Jun (24 h)	14 Mar-30 Sep (55 h) (Unrestricted)  14 Mar-30 Sep (222 h) (Restricted)  5 Oct -18 Oct (13 d)	15 Mar-15 May (55 h) (Unrestricted) 15 Mar-15 May (84 h) 20 May-15 Jun (72 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)	Salmon 1 Apr – 31 Oct (213 d)	Salmon 1 Apr – 7 Dec (250 d)	Salmon 15 Apr–30 Sep (WA – 168 d)	Salmon 20 Apr - 30 Sep (WA, CA - 163 d)
moderical	Sablefish 1 Apr – 7 Dec (250 d)	Sablefish 1 Apr – 31 Oct (213 d)	Sablefish 1 Apr – 7 Dec (250 d)	15 Apr–31 Oct (OR - 199 d) 1 Aug–30 Sep (CA - 60 d)	20 Apr - 31 Oct (OR - 194 d) Sablefish 1 Apr- 31 Oct (213 d)
				Sablefish 1 Apr – 15 Nov (228 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 <u>Table 2</u>. 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 (<a href="https://www.iphc.int/data">https://www.iphc.int/data</a>).

The 2023 directed commercial fishery landings were spread over ten months (March – December) of the year in Canada and the USA (<u>Figure 2</u>). On a month-to-month comparison, August took the lead as the busiest month for total poundage (16%) 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 <u>year-to-date visualization is also available on the IPHC website</u>.



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 and December combined with and shown above in November 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.

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

The 2023 IPHC Regulatory Area 2A fisheries and respective fishery limits are listed in <u>Table 2</u>. The total IPHC Regulatory Area 2A commercial landings (directed and incidental to salmon troll sablefish, and Treaty Indian) of 374 tonnes (824,237pounds) was 6% 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 <u>Table 4</u>.

The salmon troll fishery season was open from 1 April to 31 October in Oregon and Washington with an allowable incidental landing ratio of one Pacific halibut per two Chinook, plus an additional 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 11 tonnes (24,255 pounds) were 47% 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 7 December. 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 21 tonnes (45,595 pounds) were 35% 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. The initial unrestricted fishery, which was originally scheduled to occur between 10 March and 31 May, was extended until 10 June. The fishery had a 55-hour period limit and landed 111 tonnes (244,933 pounds). For tribes that completed their unrestricted fishery by 31 May, there were two extra 24-hour, 0.23 tonnes (500 pounds) trip limit restricted fisheries to be completed between 1 June and 31 July. A total of 0.42 tonnes (932 pounds) were landed during the extra openings. The regular season restricted fishery

was conducted between 10 March and 31 May. Each tribe had 122 hours of duration for the restricted sub-fishery, not to be prosecuted over more than six calendar days, limited to a total of 6 landings of 0.23 tonnes (500 pounds) each with no more than one landing per calendar day. A total of 39 tonnes (84,964 pounds) were landed from these restricted openings.

The initial late season unrestricted fishery occurred between 17 June and 31 July for 20 hours for each tribe. This was followed by two restricted fishery openings not to exceed 24 hours with a limit of 0.23 tonnes (500 pounds) between 1 September and 15 October. A total of 75 tonnes (164,332 pounds) were landed. Estimated overall total landings of 225 tonnes (495,161 pounds) were 1% 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	
Н	56+	2.8	2.8	.45	

### 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 138 in 2023. In addition, Pacific halibut can be landed as incidental catch in other licensed groundfish fisheries. In 2023, this occurred from a total of 80 licences from other fisheries. The 2023 directed commercial landings represented 2,233 tonnes (4,922,721 pounds) of Pacific halibut. Additionally, 7 tonnes (15,790 pounds) were leased from commercial quota to the recreational sector.

Directed commercial trips from IPHC Regulatory Area 2B were delivered into 14 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 45% while Prince Rupert received 48% of the directed commercial landings. All IVQ landings were landed in IPHC Regulatory Area 2B. In 2023, a total of 33 Canadian vessels landed frozen, head-off Pacific halibut for a total of 31 tonnes (68,867 pounds) over 65 landings. Live landings resulted in a total landed weight of <1 tonne (1,336 pounds).

## 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 7 December 2023 were 7,064 tonnes (15,574,262 pounds), 18% under the directed commercial fishery limit. By IPHC Regulatory Area, the directed commercial landings were under the fishery limit by 12% for Area 2C, 9% for Area 3A, 9% for Area 3B, 35% for Area 4A, 67% for Area 4B (IFQ/CDQ), and 37% for 4CDE/Closed (IFQ/CDQ).

Homer received approximately 21% (1,469 tonnes or 3,239,937 pounds) of the Alaskan directed commercial landings, making it the port that received the greatest landed volume in 2023. Kodiak received the second largest landing volume at 13% (890 tonnes or 1,963,063pounds) of the Alaskan commercial landings. In Southeast Alaska, the two largest landing volumes were received in Sitka and Juneau, with

their combined landings representing 14% (957 tonnes or 2,108,928 pounds) of the directed commercial Alaskan landings. The Alaskan QS catch that was landed in Bellingham, WA was less than 2%.

In Alaska, 25 tonnes (56,000 pounds) of Pacific halibut were caught with pot gear and landed within the directed commercial fishery, representing 0.4% 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 <u>Table 2</u>.

#### **RECREATIONAL FISHERIES**

The 2023 recreational removals of Pacific halibut, including discard mortality, was estimated at 2,727 tonnes (6,012,210 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 <u>Table 2</u>. Historical recreational removals are also available at the <u>IPHC website</u>, <u>section on fishery information</u>.

### **Recreational Landings**

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 239 tonnes (WA, OR and CA; 527,389 pounds), 14% under the recreational fishery limit. Recreational fishery harvest seasons by subareas varied and were managed in season with fisheries open in Washington from 6 April to 30 September, in Oregon from 1 May to 31 October, and in California from 1 May to 4 August.

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 estimates of the recreational landings in Canada have been revised to include corrected and updated length-weight relationship (<a href="IPHC-2023-AM099-INF04">IPHC-2023-AM099-INF04</a>). See 2023 Canadian National Report (<a href="IPHC-2023-AM100-NR01 Rev\_1">IPHC-2023-AM100-NR01 Rev\_1</a>) for details.

Recreational landings in British Columbia are also allowed under <u>Pacific Region Experimental</u> <u>Recreational [Pacific] Halibut Program.</u>

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: 20 June, 27 June, 4 July, 11 July, 18 July, 25 July, 1 August, 8 August, and 15 August.

In addition, a Guided Angler Fish (GAF) program allows 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 <u>Table 2</u>. 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 [Pacific] Halibut Registration Certificates (SHARC).

The coastwide subsistence estimate for 2023 was 380 tonnes (836,708 pounds) (<u>Table 2</u>). This includes U32 fish retained for personal consumption in CDQ fishery (excluded from commercial CDQ landings statistics), reported directly to the IPHC in accordance with Section 14 of the IPHC Fishery Regulations (2023). Historical subsistence removals are also available at the <u>IPHC website</u>, <u>section on fishery information</u>.

## Estimated subsistence harvests by area

In the commercial Pacific halibut fisheries coastwide, the state and federal regulations require that takehome 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 takehome fish within the commercial fisheries, with exception of U32 fish retained by CDQ groups, 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.

# 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 applicants must obtain a SHARC license. 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 and 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).

# <u>CDQ – Coastal Villages Regional Fund (CVRF)</u>

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 <u>Table 2</u>. Historical data are also available on the <u>IPHC website</u>, <u>section</u> on fishery information.

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

### Non-directed commercial discard mortality (CDM)

Estimates of non-directed CDM of Pacific halibut are provided by Contracting Party agencies. The amounts are estimated because not all fisheries have 100% monitoring, and not all Pacific halibut that are discarded are assumed not to survive. The IPHC relies upon information supplied by observer programs run by Contracting Party agencies for non-directed CDM estimates in most fisheries. Non-IPHC research survey information is used to generate estimates of non-directed CDM in the few cases where fishery observations are unavailable.

## Non-directed Commercial Discard Mortality by Area

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, which operates observer programs off the USA West Coast.

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

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

# 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 CDM 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 CDM 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 CDM, but data from these state-managed fisheries are currently unavailable.

Estimates of non-directed CDM 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 CDM estimates for IPHC Regulatory Area 3 have both a greater uncertainty and potential for bias then 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 (<u>Table 2</u>) due to groundfish fisheries which target flatfish in the Bering Sea.

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

In 2023, 321 tonnes (707,005 pounds) of Pacific halibut were landed from the FISS and other IPHC research, including IPHC Bait Study. Totals landed from each IPHC Regulatory Area documented in <u>Table 2</u>.

#### 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-2024-AM100-07 Rev\_1 which provides the Commission with an 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).