

Analysis of Management Options for the Area 3A Charter Halibut Fisheries for 2023

Tables only, full report to follow.

Table 1: Estimated average net weight (headed and gutted) of Pacific halibut by length for Area 3A.
Estimates are based on the current International Pacific Halibut Commission length-weight relationships¹.

Length (in)	Net Weight (lb)	Length (in)	Net Weight (lb)	Length (in)	Net Weight (lb)	Length (in)	Net Weight (lb)
22.5	3.4	40.0	20.6	57.5	64.2	75.0	147.7
23.0	3.6	40.5	21.4	58.0	66.0	75.5	150.8
23.5	3.9	41.0	22.3	58.5	67.8	76.0	153.9
24.0	4.2	41.5	23.1	59.0	69.6	76.5	157.1
24.5	4.4	42.0	24.0	59.5	71.5	77.0	160.4
25.0	4.7	42.5	24.9	60.0	73.4	77.5	163.6
25.5	5.0	43.0	25.8	60.5	75.3	78.0	167.0
26.0	5.3	43.5	26.8	61.0	77.3	78.5	170.3
26.5	5.7	44.0	27.8	61.5	79.3	79.0	173.8
27.0	6.0	44.5	28.8	62.0	81.3	79.5	177.2
27.5	6.4	45.0	29.8	62.5	83.4	80.0	180.8
28.0	6.7	45.5	30.9	63.0	85.5	80.5	184.3
28.5	7.1	46.0	31.9	63.5	87.7	81.0	187.9
29.0	7.5	46.5	33.0	64.0	89.8	81.5	191.6
29.5	7.9	47.0	34.2	64.5	92.1	82.0	195.3
30.0	8.4	47.5	35.3	65.0	94.3	82.5	199.0
30.5	8.8	48.0	36.5	65.5	96.6	83.0	202.9
31.0	9.3	48.5	37.7	66.0	98.9	83.5	206.7
31.5	9.7	49.0	38.9	66.5	101.3	84.0	210.6
32.0	10.2	49.5	40.2	67.0	103.7	84.5	214.6
32.5	10.8	50.0	41.5	67.5	106.2	85.0	218.6
33.0	11.3	50.5	42.8	68.0	108.6	85.5	222.6
33.5	11.8	51.0	44.1	68.5	111.2	86.0	226.7
34.0	12.4	51.5	45.5	69.0	113.7	86.5	230.9
34.5	13.0	52.0	46.9	69.5	116.3	87.0	235.1
35.0	13.6	52.5	48.3	70.0	119.0	87.5	239.3
35.5	14.2	53.0	49.8	70.5	121.6	88.0	243.7
36.0	14.8	53.5	51.2	71.0	124.4	88.5	248.0
36.5	15.5	54.0	52.8	71.5	127.1	89.0	252.4
37.0	16.1	54.5	54.3	72.0	129.9	89.5	256.9
37.5	16.8	55.0	55.9	72.5	132.8	90.0	261.4
38.0	17.5	55.5	57.5	73.0	135.7	90.5	266.0
38.5	18.3	56.0	59.1	73.5	138.6	91.0	270.6
39.0	19.0	56.5	60.8	74.0	141.6	91.5	275.3
39.5	19.8	57.0	62.5	74.5	144.6	92.0	280.1

¹ IPHC length-weight relationships for IPHC Area 3A are $NetWt(lb) = 1.063 \times 10^{-5} ForkLength(cm)^{3.13}$ from [iphc-2022-lwt-3aimperial.pdf](https://www.iphc.int/~/media/Files/2022/03/lwt-3aimperial.pdf).

Table 2: Subareas of IPHC Areas 2C and 3A, ports where ADF&G halibut sampling occurs, and Subarea abbreviations used in tables and figures in this report.

IPHC Area	Subarea	Ports with Sampling and Angler Interviews	Abbreviations
3A	Glacier Bay (3A portion)	Gustavus, Elfin Cove	GlacB, GlacB-3A, G3A
	Yakutat	Yakutat	Yak, H
	Eastern Prince William Sound	Valdez	EPWS
	Western Prince William Sound	Whittier	WPWS
	North Gulf	Seward	NGulf, NGC
	Lower Cook Inlet	Homer	LCI
	Central Cook Inlet	Anchor Point, Deep Creek	CCI
	Kodiak	Kodiak	Kod, QR

Table 3. Forecasts of effort (angler-days), halibut harvest per unit effort (HPUE), and harvest (numbers of halibut) for Area 3A in 2023 under status quo regulations, with associated standard errors. Status quo regulations include a two-fish bag limit with a maximum size limit of 28 inches on one of the fish, no retention of halibut on Wednesdays and on two Tuesdays, CHP trip limits, and vessel trip limits.

Subarea	Effort		HPUE	Std Error	Harvest	
	(angler-days)	Std Error			(no. halibut)	Std Error
CCI	15,245	NA	1.82	0.13	27,802	1,950
EPWS	4,762	NA	1.32	0.14	6,300	693
GlacB	1,137	NA	0.68	0.17	771	192
Yak	4,186	NA	0.94	0.14	3,936	614
LCI	43,228	NA	1.75	0.08	75,496	3,393
NGulf	30,145	NA	1.21	0.11	36,407	3,190
Kod	12,307	NA	1.11	0.11	13,719	1,389
WPWS	4,699	NA	0.98	0.15	4,615	708
Area 3A	115,709	NA	1.46	NA	169,046	5,368

Table 4. Area 3A projected harvest, change in harvest, and specified dates with status quo management measures combined with Tuesday closures.

Number of Closed Tuesdays	Beginning and Ending Dates	Percentage change in harvest relative to status quo	Projected Harvest (no. Fish)
0	NA	+2.6%	173,458
1	Jul 25	+1.3%	171,206
2	Jul 25 - Aug 01	-1.5%	169,046
3	Jul 18 - Aug 01	-2.8%	166,526
4	Jul 11 - Aug 01	-3.2%	164,238
5	Jul 11 - Aug 08	-4.3%	163,616
6	Jul 04 - Aug 08	-5.4%	161,806
7	Jun 27 - Aug 08	-6.3%	159,937
8	Jun 27 - Aug 15	-7.6%	158,355
9	Jun 20 - Aug 15	-8.6%	156,257
10	Jun 13 - Aug 15	-9.6%	154,467
11	Jun 13 - Aug 22	-10.5%	152,741
12	Jun 03 - Aug 22	-11.0%	151,294
13	May 30 - Aug 22	-13.5%	150,404
48 (all season)	Feb 01 - Dec 31	-1.5%	146,266

Table 5. Area 3A projected harvest (upper table) and removals (lower table) for 2023 under a range of maximum size limits on one fish in the bag limit and **Tuesday closures**. Projected removals assume the following status quo measures: two fish bag limit – one of any size, limit of one trip per vessel and one trip per permit per day, Wednesday closure all year. All values in the table include corrections for errors in estimation of average weight and inflation factors for release mortality. Shaded cells represent projections that do not exceed the 2022 allocation of 2.11 Mlb.

Projected Harvest (number of fish)

	Number of Tuesday Closures														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	All
Harvest	173,458	171,206	169,046	166,526	164,238	163,616	161,806	159,937	158,355	156,257	154,467	152,741	151,294	150,404	146,266

Projected Charter Removals (Mlb)

Size limit	Number of Closed Tuesdays														
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	All
26	1.997	1.971	1.947	1.918	1.891	1.883	1.863	1.841	1.825	1.801	1.780	1.761	1.744	1.734	1.685
27	2.027	2.001	1.976	1.947	1.919	1.912	1.891	1.869	1.853	1.828	1.807	1.787	1.771	1.760	1.710
28	2.075	2.048	2.023	1.993	1.965	1.957	1.936	1.914	1.897	1.871	1.850	1.830	1.812	1.802	1.751
29	2.105	2.078	2.053	2.022	1.994	1.986	1.964	1.942	1.924	1.899	1.877	1.857	1.839	1.828	1.777
30	2.150	2.122	2.096	2.065	2.036	2.028	2.006	1.983	1.965	1.939	1.917	1.896	1.878	1.867	1.814
31	2.180	2.152	2.125	2.094	2.064	2.056	2.034	2.011	1.992	1.966	1.943	1.922	1.904	1.893	1.839
32	2.219	2.190	2.163	2.131	2.101	2.093	2.070	2.046	2.028	2.001	1.977	1.956	1.938	1.926	1.872

Table 6. Area 3A projected harvest, change in harvest, and specified dates with status quo management measures with all Tuesdays closed combined with Monday and Thursday closures and Wednesdays closed all season.

a. Monday closures

Number of Closed Mondays	Beginning and Ending Dates	Percentage change in harvest relative to status quo	Projected Harvest (no. Fish)
0	No Closed Days	-13.5%	146,266
1	26-Jul	-15.0%	143,632
2	Jul 26 - Aug 02	-16.3%	141,481
3	Jul 19- Aug 02	-15.1%	143,466
4	Jul 12 - Aug 02	-15.6%	142,689
5	Jul 12 - Aug 09	-15.9%	142,116
6	Jul 05 - Aug 09	-16.4%	141,245
7	Jun 28 - Aug 09	-16.9%	140,397
8	Jun 28 - Aug 16	-17.2%	140,042
9	Jun 21 - Aug 16	-17.6%	139,259
10	Jun 14 - Aug 16	-18.1%	138,497
11	Jun 14 - Aug 23	-18.4%	138,009
12	Jun 07 - Aug 23	-18.4%	137,863
13	June 07 - Aug 30	-18.7%	137,418
48 (all season)	Feb 01 - Dec 31	-19.7%	135,673

b. Thursday closures

Number of Closed Thursdays	Beginning and Ending Dates	Percentage change in harvest relative to status quo	Projected Harvest (no. Fish)
0	No Closed Days	-13.5%	146,266
1	29-Jul	-14.7%	144,200
2	Jul 29 - Aug 05	-16.0%	142,012
3	Jul 22 - Aug 05	-14.8%	144,079
4	Jul 15 - Aug 05	-15.4%	142,960
5	Jul 15 - Aug 09	-15.8%	142,279
6	Jul 08 - Aug 12	-16.3%	141,417
7	Jul 01 - Aug 12	-16.8%	140,600
8	Jul 01 - Aug 19	-17.2%	139,928
9	Jun 24 - Aug 19	-17.6%	139,233
10	Jun 17 - Aug 19	-18.2%	138,289
11	Jun 17 - Aug 26	-18.4%	137,889
12	Jun 10 - Aug 26	-18.8%	137,190
13	June 03 - Aug 26	-19.3%	136,475
48 (all season)	Feb 01 - Dec 31	-19.7%	135,664

Table 7. Area 3A projected harvest (upper table) and removals (lower table) for 2023 under a range of maximum size limits on one fish in the bag limit and with **Tuesdays** closed all year and **Monday closures**. Projected removals assume the following status quo measures: two fish bag limit – one of any size, limit of one trip per vessel and one trip per permit per day, Wednesday closure all year. All projections were below the 2022 allocation of 2.11 Mlb. All values in the table include corrections for errors in estimation of average weight and inflation factors for release mortality.

Projected Harvest (number of fish)

	Number of Monday Closures														All
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
Harvest	146,266	143,632	141,481	143,466	142,689	142,116	141,245	140,397	140,042	139,259	138,497	138,009	137,863	137,418	135,673

Projected Charter Removals (Mlb)

Size limit	Number of Monday Closures														All
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
26	1.685	1.654	1.630	1.649	1.639	1.632	1.620	1.608	1.603	1.593	1.583	1.576	1.573	1.567	1.542
27	1.710	1.679	1.655	1.674	1.664	1.656	1.645	1.633	1.627	1.617	1.607	1.600	1.597	1.590	1.565
28	1.751	1.719	1.694	1.713	1.703	1.696	1.684	1.671	1.666	1.656	1.645	1.638	1.635	1.628	1.603
29	1.777	1.744	1.719	1.738	1.728	1.720	1.708	1.696	1.690	1.680	1.669	1.662	1.658	1.652	1.626
30	1.814	1.782	1.755	1.775	1.764	1.757	1.744	1.731	1.726	1.715	1.704	1.697	1.693	1.687	1.660
31	1.839	1.806	1.779	1.800	1.789	1.781	1.768	1.755	1.749	1.738	1.727	1.720	1.716	1.710	1.683
32	1.872	1.838	1.811	1.831	1.820	1.812	1.799	1.786	1.780	1.769	1.757	1.750	1.747	1.740	1.712

Table 8. Area 3A projected harvest (upper table) and removals (lower table) for 2023 under a range of maximum size limits on one fish in the bag limit and with **Tuesdays** closed all year and **Thursday closures**. Projected removals assume the following status quo measures: two fish bag limit – one of any size, limit of one trip per vessel and one trip per permit per day, Wednesday closure all year. All projections were below the 2022 allocation of 2.11 Mlb. All values in the table include corrections for errors in estimation of average weight and inflation factors for release mortality.

Projected Harvest (number of fish)

	Number of Thursday Closures														All
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
Harvest	146,266	144,200	142,012	144,079	142,960	142,279	141,417	140,600	139,928	139,233	138,289	137,889	137,190	136,475	135,664

Projected Charter Removals (Mlb)

Size limit	Number of Thursday Closures														All
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
26	1.685	1.661	1.636	1.656	1.640	1.632	1.620	1.609	1.600	1.591	1.579	1.573	1.563	1.554	1.540
27	1.710	1.686	1.660	1.681	1.665	1.656	1.644	1.633	1.624	1.615	1.602	1.596	1.587	1.577	1.564
28	1.751	1.726	1.700	1.721	1.704	1.696	1.683	1.672	1.663	1.654	1.640	1.634	1.625	1.615	1.601
29	1.777	1.751	1.725	1.746	1.729	1.720	1.708	1.696	1.687	1.678	1.664	1.658	1.648	1.638	1.624
30	1.814	1.789	1.761	1.783	1.766	1.757	1.744	1.732	1.722	1.713	1.699	1.693	1.683	1.673	1.658
31	1.839	1.813	1.786	1.807	1.790	1.781	1.768	1.756	1.746	1.737	1.723	1.716	1.706	1.695	1.681
32	1.872	1.846	1.817	1.839	1.822	1.812	1.799	1.787	1.777	1.767	1.753	1.746	1.736	1.725	1.711

Table 9. Estimated effects of **annual limits of two to four halibut** on Area 3A anglers and projected harvest for 2023 under a maximum size limit on one of two fish in the bag limit, vessel trip limit, permit trip limit, and a Wednesday closure. The percent of affected anglers is the portion of individual anglers that harvested more than each specified annual limit in 2022.

Annual Limit	Subarea									
	CCI	EPWS	GlacBay	Yak	LCI	NGulf	Kod	WPWS	Area 3A	
Estimated percent of anglers affected by an annual limit:										
2	13.8%	8.3%	16.2%	21.6%	14.6%	9.1%	43.3%	3.2%	14.4%	
3	11.9%	4.5%	3.7%	10.7%	11.6%	5.9%	31.0%	1.5%	10.6%	
4	2.7%	1.7%	0.2%	4.6%	2.6%	1.6%	16.4%	0.3%	3.2%	
Estimated percent change in harvest relative to no annual limit:										
2	-15.4%	-8.7%	-12.7%	-21.1%	-14.4%	-9.8%	-38.4%	-3.7%	-15.2%	
3	-9.2%	-4.2%	-2.4%	-9.9%	-7.8%	-5.0%	-23.4%	-1.4%	-8.4%	
4	-3.8%	-1.7%	-0.1%	-4.4%	-2.5%	-1.9%	-12.7%	-0.4%	-3.4%	
Projected harvest (number of halibut):										
2	23,983	5,917	684	3,145	66,292	33,914	8,659	4,553	147,148	
3	25,734	6,210	764	3,591	71,459	35,726	10,775	4,662	158,921	
4	27,248	6,369	782	3,811	75,544	36,893	12,286	4,712	167,646	
No Annual Limit	28,336	6,480	783	3,988	77,485	37,591	14,066	4,729	173,458	

Table 10. Area 3A projected harvest (upper table) and removals (lower table) for 2023 under a range of maximum size limits on one fish in the bag limit and for **annual limits ranging from two to four fish** per year. Projected removals assume the following status quo measures: two fish bag limit, limit of one trip per vessel and one trip per permit per day, and a Wednesday closure all year. All values in the table include corrections for errors in estimation of average weight and inflation factors for release mortality. Shaded cells represent projections that do not exceed the 2022 allocation of 2.11 Mlb.

Projected Harvest (number of fish)			
Year	Annual Limit (number of halibut)		
	2	3	4
2023	147,149	158,921	167,646

Projected Charter Removals (Mlb)			
Size Limit (in)	Annual Limit (number of halibut)		
	2	3	4
26	1.692	1.831	1.928
27	1.717	1.858	1.958
28	1.758	1.902	2.004
29	1.784	1.930	2.034
30	1.823	1.972	2.077
31	1.848	1.999	2.106
32	1.881	2.034	2.143

Table 11. Area 3A projected harvest and removals for 2023 under annual limits with a range of maximum size limits on one fish in the bag limit and Tuesday closures. Projected removals assume the following status quo measures: two fish bag limit – one of any size, limit of one trip per vessel and one trip per permit per day, Wednesday closure all year. All values in the table include corrections for errors in estimation of average weight and inflation factors for release mortality. Shaded cells represent projections that do not exceed the 2022 allocation of 2.11 Mlb.

a. Four-fish annual limit

		Number of Tuesday Closures														
		0	1	2 (Status Quo)	3	4	5	6	7	8	9	10	11	12	13	All
Size Limit (in)	Harvest	167,646	165,466	163,376	160,935	158,719	158,126	156,370	154,559	153,036	150,997	149,259	147,589	146,180	145,317	141,323
	26	1.928	1.904	1.880	1.852	1.826	1.819	1.799	1.778	1.763	1.739	1.719	1.700	1.684	1.674	1.627
	27	1.958	1.932	1.909	1.880	1.854	1.847	1.826	1.805	1.789	1.765	1.745	1.726	1.710	1.700	1.652
	28	2.004	1.978	1.954	1.925	1.898	1.891	1.870	1.848	1.832	1.807	1.786	1.767	1.750	1.740	1.691
	29	2.034	2.008	1.983	1.953	1.926	1.918	1.897	1.876	1.859	1.834	1.812	1.793	1.776	1.766	1.716
	30	2.077	2.050	2.025	1.995	1.967	1.959	1.938	1.916	1.898	1.873	1.851	1.831	1.814	1.803	1.752
	31	2.106	2.079	2.053	2.023	1.994	1.986	1.965	1.942	1.925	1.899	1.877	1.856	1.839	1.828	1.777
	32	2.143	2.116	2.090	2.058	2.029	2.022	1.999	1.976	1.959	1.933	1.910	1.889	1.871	1.860	1.808

b. Three-fish annual limit

		Number of Tuesday Closures														
		0	1	2 (Status Quo)	3	4	5	6	7	8	9	10	11	12	13	All
Size Limit (in)	Harvest	158,921	156,851	154,867	152,547	150,444	149,886	148,218	146,497	145,062	143,123	141,469	139,885	138,542	137,721	133,942
	26	1.831	1.807	1.785	1.758	1.733	1.727	1.707	1.688	1.673	1.651	1.631	1.614	1.598	1.589	1.544
	27	1.858	1.834	1.812	1.784	1.759	1.753	1.733	1.713	1.698	1.675	1.656	1.638	1.622	1.613	1.567
	28	1.902	1.878	1.855	1.827	1.801	1.794	1.775	1.754	1.739	1.715	1.695	1.677	1.661	1.651	1.605
	29	1.930	1.905	1.882	1.854	1.828	1.821	1.801	1.780	1.764	1.740	1.720	1.702	1.685	1.675	1.628
	30	1.972	1.946	1.922	1.893	1.867	1.860	1.839	1.818	1.802	1.778	1.757	1.738	1.721	1.711	1.663
	31	1.999	1.973	1.949	1.919	1.892	1.885	1.864	1.843	1.827	1.802	1.781	1.762	1.745	1.735	1.686
	32	2.034	2.008	1.983	1.953	1.926	1.919	1.897	1.876	1.859	1.834	1.812	1.793	1.776	1.765	1.716

Table 11. (continued)

c. Two-fish annual limit

		Number of Tuesday Closures														
		0	1	2 (Status Quo)	3	4	5	6	7	8	9	10	11	12	13	All
Size Limit (in)	Harvest	147,149	145,226	143,387	141,231	139,279	138,769	137,223	135,622	134,300	132,495	130,955	129,487	128,233	127,469	123,981
	26	1.692	1.670	1.649	1.624	1.601	1.595	1.578	1.560	1.546	1.525	1.507	1.491	1.476	1.468	1.427
	27	1.717	1.695	1.674	1.649	1.626	1.619	1.602	1.583	1.569	1.548	1.530	1.513	1.499	1.490	1.448
	28	1.758	1.736	1.714	1.688	1.664	1.658	1.640	1.621	1.607	1.585	1.566	1.549	1.534	1.526	1.483
	29	1.784	1.761	1.739	1.713	1.689	1.683	1.664	1.645	1.630	1.608	1.589	1.572	1.557	1.548	1.504
	30	1.823	1.799	1.777	1.750	1.725	1.719	1.700	1.680	1.665	1.643	1.623	1.606	1.590	1.581	1.537
	31	1.848	1.824	1.801	1.774	1.749	1.743	1.723	1.704	1.688	1.666	1.646	1.628	1.612	1.603	1.558
	32	1.881	1.856	1.833	1.806	1.780	1.774	1.754	1.734	1.718	1.695	1.675	1.657	1.641	1.631	1.586

Table 12. Area 3A projected harvest and specified dates with Wednesday closures.

a. Wednesday closures

Number of Closed Wednesdays	Beginning and Ending Dates	Projected Harvest (no. Fish)
0	No Closed Days	204,594
1	Aug 02	201,656
2	Aug 02 - Aug 09	200,450
3	Jul 26 - Aug 09	199,234
4	Jul 19 - Aug 09	198,017
5	Jul 19 - Aug 16	196,418
6	Jul 12 - Aug 16	194,283
7	Jul 05 - Aug 16	192,353
8	Jul 05 - Aug 23	189,972
9	Jun 28 - Aug 23	187,252
10	Jun 21 - Aug 23	185,605
11	Jun 21 - Aug 30	182,607
12	Jun 14 - Aug 30	179,547
13	June 07 - Aug 30	176,747
48 (all season)	Feb 01 - Dec 31	173,458

Table 13. Area 3A projected harvest (upper table) and removals (lower table) for 2023 under a range of maximum size limits on one fish in the bag limit and variable **Wednesday closures**. Projected removals assume the other following status quo measures: two fish bag limit – one of any size, limit of one trip per vessel and one trip per permit per day. All values in the table include corrections for errors in estimation of average weight and inflation factors for release mortality. Shaded cells represent projections that do not exceed the 2022 allocation of 2.11 Mlb.

Projected Harvest (number of fish)

	Number of Wednesday Closures														All
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
Harvest	204,594	201,656	200,450	199,234	198,017	196,418	194,283	192,353	189,972	187,252	185,605	182,607	179,547	176,747	173,458

Projected Charter Removals (Mlb)

Size limit	Number of Wednesday Closures														All
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	
26	2.357	2.323	2.309	2.294	2.279	2.261	2.236	2.213	2.185	2.153	2.135	2.100	2.067	2.034	1.997
27	2.393	2.359	2.344	2.329	2.313	2.295	2.270	2.247	2.218	2.186	2.167	2.132	2.098	2.065	2.027
28	2.450	2.415	2.399	2.384	2.368	2.350	2.324	2.300	2.271	2.238	2.219	2.183	2.148	2.114	2.075
29	2.486	2.450	2.434	2.419	2.403	2.384	2.358	2.334	2.304	2.270	2.251	2.215	2.179	2.145	2.105
30	2.537	2.501	2.486	2.471	2.454	2.435	2.408	2.384	2.353	2.319	2.299	2.262	2.226	2.191	2.150
31	2.574	2.537	2.521	2.505	2.488	2.469	2.441	2.417	2.386	2.351	2.331	2.293	2.256	2.221	2.180
32	2.657	2.619	2.565	2.549	2.532	2.512	2.485	2.459	2.428	2.393	2.373	2.334	2.296	2.261	2.219

Table 14. Projected harvest and removals with seasonal closures in Area 3A under with all days of the week open. Two options for halibut seasons were analyzed, May 16 – July 31 and June 1 – July 31. Projected removals include all other status quo management measures: bag limit of two fish, maximum size of 28-inches on one fish, and a limit of one trip per vessel and one trip per permit per day. All values in the table include corrections for errors in estimation of average weight and inflation factors for release mortality. All projections were below the 2022 allocation of 2.11 Mlb.

Season dates	Harvest	Removals (Mlb)
May 16 – July 31	133,671	1.595
June 1 – July 31	122,177	1.462

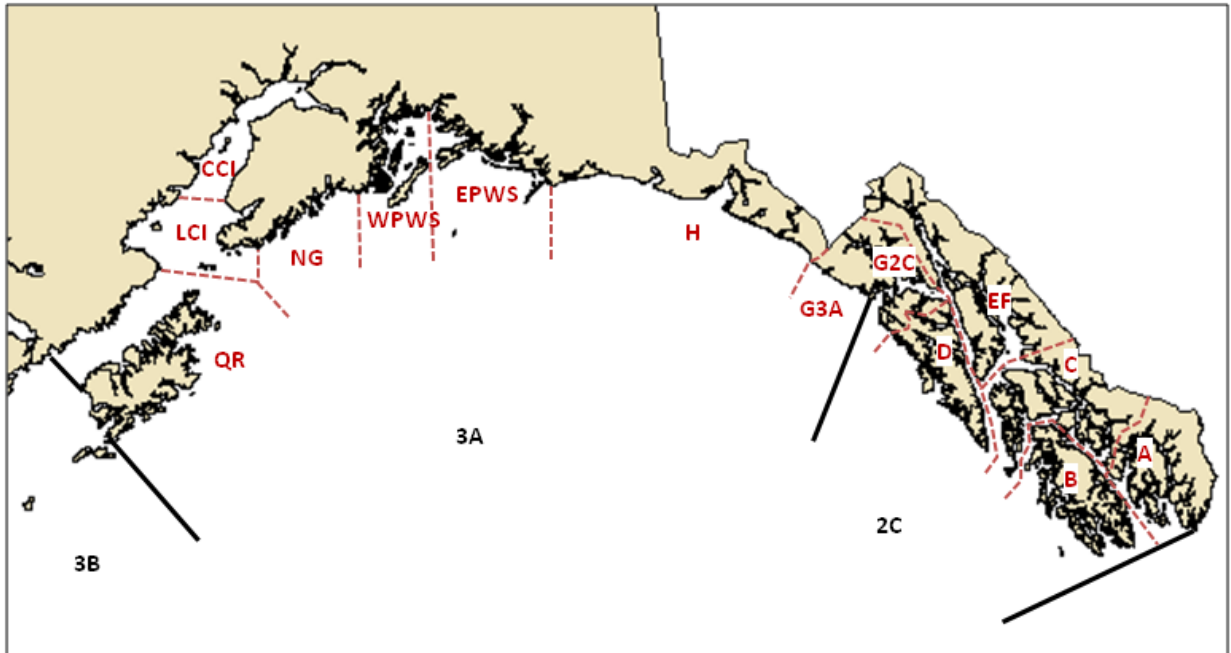


Figure 1. Subareas of IPHC Areas 2C and 3A used for analysis and reporting. A – Ketchikan; B - Prince of Wales (Craig, Klawock); C - Petersburg, Wrangell; D – Sitka; EF - Juneau, Haines, Skagway; G2C - Glacier Bay, Elfin Cove (2C areas); G3A - Glacier Bay, Elfin Cove (3A Areas); H – Yakutat; EPWS - Eastern Prince William Sound (Valdez, Cordova); WPWS - Western Prince William Sound (Whittier); NG - North Gulf (Seward); CCI - Central Cook Inlet (Deep Creek, Anchor Point); LCI - Lower Cook Inlet (Homer); QR – Kodiak.