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Definition of IPHC statistical areas

by

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Abstract

Since the 1920s, the International Pacific Halibut Commission has classified the coastwide Pacific halibut catch information by geographical regions called statistical areas. Initially defined to cover the major fishing grounds, additional statistical areas were added in subsequent years to cover the entire commercially fished range. Some boundaries have been revised and some areas have been deleted. Intended initially for internal use, the Commission has shared these areas with other agencies. However, the statistical areas have never been formally defined or published. This report documents historical statistical areas, the changes that have occurred, and current statistical area definitions in terms of geographic coordinates, lines of constant compass bearing, and local landmarks. With the advent of Geographic Information Systems (GIS) technology, the statistical areas are currently defined as polygons whose edges are lines of constant compass bearing and vertices are geographic reference points specified by longitude and latitude.

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Introduction

The International Pacific Halibut Commission (IPHC), formerly known as the International Fisheries Commission, was established in 1923 by a convention between the United States and Canada to manage and conserve the Pacific halibut (*Hippoglossus stenolepis*) resource in the territorial waters of both nations. During the mid 1920s, the IPHC partitioned the commercial fishing grounds into a number of geographical regions called statistical areas. These areas were used as convenient analytical units for tabulating and analysing catch data, biological and biometric data, and the migration data from tagging experiments.

Several factors have made it necessary to add, delete, or revise the statistical area boundaries: the expansion of the fishing grounds along the Aleutian Islands and into the Bering Sea, an improved understanding of halibut distribution and habitat, and the need to aggregate data into smaller management units. From the originally defined 35 areas, the Commission now recognises over one hundred statistical areas extending from California, north-westward along the North American coastline, to the United States-Russia boundary, including the Bering Sea. While originally intended for internal use, the Commission shares its statistical area definitions with other organisations that wish to compare interagency data sets. This distribution has increased over the years and has been greatly facilitated by the recent widespread acquisition and use of Geographic Information System (GIS) technology. The ability to disseminate statistical area descriptions in an electronic format that can be overlaid on maps in a GIS requires careful and accurate definitions. This report documents the current definitions of the IPHC statistical areas. In addition, details on the history and evolution of the statistical areas and their current status in the era of GIS mapping technology are provided.

Relationship of statistical areas to regulatory areas

In addition to the statistical areas, the IPHC uses a set of larger regional units called regulatory areas. The regulatory areas are the reported management units used by IPHC and have undergone some changes over the years (Skud 1977, Hoag et al. 1993). Most data are aggregated at the statistical area level and are then combined to compute statistics at the regulatory area level. Management and regulatory decisions, such as catch limits, seasons, and restrictions, are implemented at the regulatory area level. There are currently ten regulatory areas (Appendix I).

Statistical area representation in GIS

Because of its inherent association with the nautical field, all IPHC statistical areas are defined in the Mercator projection. This projection is standard on nautical charts and is the projection of the National Oceanic and Atmospheric Administration (NOAA) and the Canadian Hydrographic Service (CHS) charts used by the IPHC. In order to accommodate GIS technology and to maintain consistency with the historical definitions, all IPHC statistical areas are now

defined as polygons (i.e. closed plane figures bounded by straight lines) in a Mercator projection. The edges of all IPHC statistical areas are lines of constant compass bearing (i.e. loxodromes); the vertices are geographic reference points specified by longitude and latitude. All geographic coordinates are now referenced to the North American Datum 1983 (NAD83) unless otherwise noted.

The current IPHC statistical area definitions exist in digital form as ArcView¹ shapefiles and are available from the IPHC office in Seattle and on the internet (www.iphc.washington.edu).

Historical statistical area definitions: ca. 1925 - 1991

During the early years of the IPHC, the Pacific halibut fishing grounds were partitioned into small regional areas for convenience in analysing fisheries statistics (Thompson et al. 1931). Using a Mercator projected chart, the areas were determined by initially drawing a curve that Thompson et al. (1931) described as a baseline paralleling the trend of the coast. Beginning at a point in Coos Bay, Oregon, a tangent to the curve was estimated and a line was drawn perpendicular to the tangent; seaward to the approximate 100 fathom contour line, and landward as far as deemed necessary. Subsequent lines were drawn at intervals equal to one degree of the corresponding latitude (Thompson et al. 1931), working northward to western Akutan Island, Alaska. These perpendicular lines are informally called "Thompson lines" after former Director William F. Thompson, who initially established the statistical areas. The support points, where the Thompson lines intersect the baseline curve, are known as "Thompson points".

The Coos Bay, Oregon region became Area 1, and the subsequent areas were numbered consecutively northward into the Gulf of Alaska and westward along the coast of Alaska, into the Aleutian Islands. As there was no fishery west of Akutan Island at the time, the numbering of areas on the charts in the early Commission reports stopped at 35, the Unimak Pass statistical area (Figs. 1-4).

The Thompson lines were later defined as lines of constant compass bearing that pass through the Thompson points (Table 1).

As the halibut fishery expanded westward, additional areas were added at 60-minute intervals along the Aleutian chain and into the Bering Sea. By the 1960s, statistical area coverage extended as far as the U.S. - Russia oceanic boundary, and the Pacific boundary lines were extended northward across the Alaskan Peninsula and Aleutian Islands. The Bering Sea sections were identified by the letters "Be" (Fig. 5). In 1964, the IPHC went from the "Be" system to the current latitude-longitude grid system to conform to the changes in Bureau of Commercial Fisheries, now National Marine Fisheries Service (NMFS), areas (Gordon Peltonen, IPHC retired, personal communication).

The current Bering Sea system was based on a grid whose cells measured 60-minutes of longitude and 30-minutes of latitude. The statistical areas were given 6-digit designations based on their latitude/longitude position. The first two digits represented degrees of latitude, the third digit was an indication of minutes of latitude, and the last 3 digits represented degrees of longitude.

Statistical Areas 9 through 18, mainly in southeast Alaska and British Columbia, were further subdivided into "inside/outside", or I/O areas, when it was found that outside waters had a greater proportion of older fish than inside waters (Southward 1976). The division between I/O waters was a jagged line formed when adjacent Thompson points were connected using

6

¹ Environmental Systems Research Institute, 380 New York Street, Redlands, CA, 92373-8100, www.ersi.com

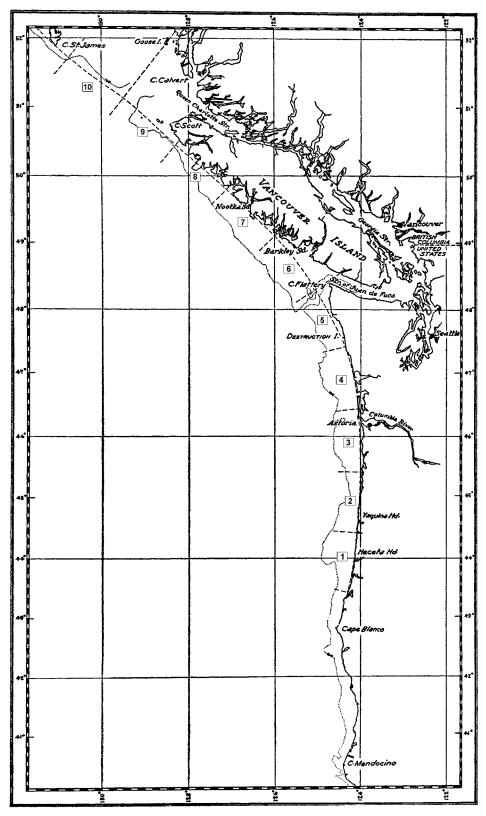
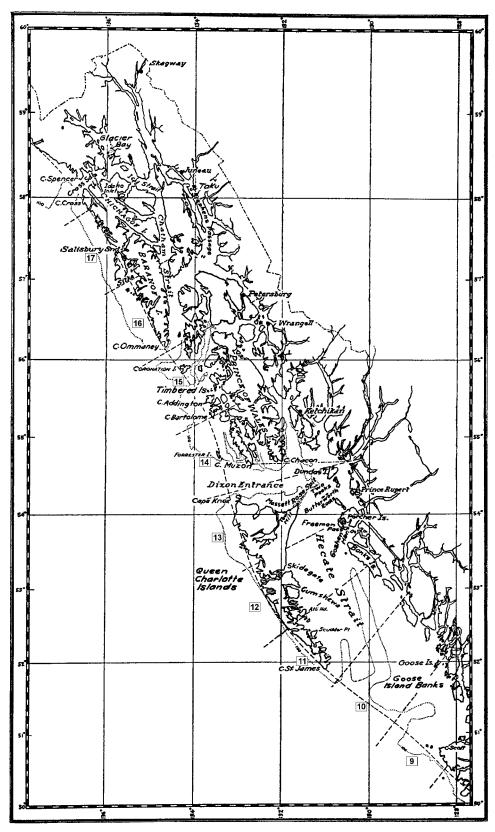


Figure 1. IPHC Statistical areas 1 through 10 from Cape Mendocino, CA to Cape St. James, B.C. as they appeared in 1931.



 $Figure\ 2.\ IPHC\ Statistical\ Areas\ 9\ through\ 17\ in\ Northern\ British\ Columbia\ and\ Southeast\ Alaska,\ 1931.$

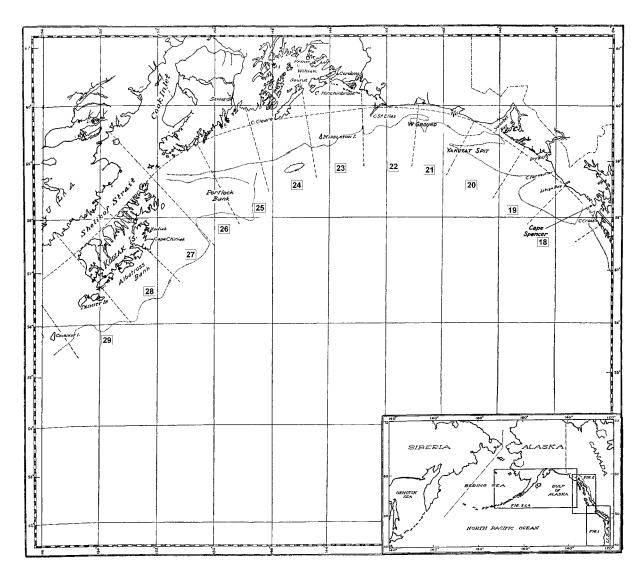


Figure 3. IPHC Statistical Areas 18 to 29, from Cape Spencer in the eastern Gulf of Alaska to the Kodiak Island, 1931.

loxodromes. This line will henceforth be referred to as the "central baseline". In cases where natural boundaries exist, such as Graham Island in Area 13, these were used as I/O divisions (Fig. 6).

By the mid-1970s, it became necessary to define more-localised fishing areas, as regions of interest became more refined. The inside waters of SE Alaska and British Columbia were further divided. All the original, numbered definitions for Outside waters were expanded by adding a zero to the end: 14-O, for example, became 140 (Southward 1976). The Inside waters were defined using the original prefix with an additional number from 1 to 4. For example, 14-I was subdivided into 141, 142, 143, and 144 (Appendix II). In a few cases, areas were divided into shallow and deep areas. Areas 23, 24, 25, and 29 were split into 230/231, 240/241, 250/251, and 290/291, respectively, using the central baseline as the division (Fig. 7).

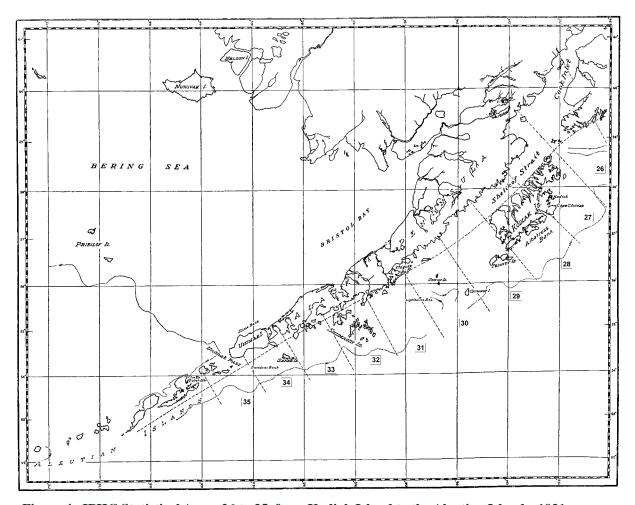


Figure 4. IPHC Statistical Areas 26 to 35, from Kodiak Island to the Aleutian Islands, 1931.

Revisions to the statistical areas definitions: 1992

The statistical area definitions were reviewed in 1991. During the discussions, the Commission staff considered replacing the 60-minute statistical area system with a 60-nautical mile rectangular grid system. Changing to a grid system would facilitate the comparison of IPHC data to that of other agencies, because most of those other systems are grids. The disadvantage would be its effect on historical IPHC data. The importance of the historical time series was paramount; therefore, in order to maintain consistency in data reporting, the IPHC's 60-minute system did not change. The previous conversion to a grid system in the Bering Sea was a different matter because there was little legacy data from that region at that time.

Clarification of the statistical area definitions was needed, however, because multiple IPHC staff members used different paper charts with inconsistently drawn statistical area boundaries to plot fishing locations and, hence, determine statistical areas where fishing effort occurred. Before clarification, individual views did not always result in the same statistical area assignment. All statistical area lines were reviewed and a consensus on statistical area definitions was reached. In general, the commonly termed fishing grounds (Appendix III) in British Columbia were placed in one statistical area by using a fathom depth contour as a boundary. In the inside waters of S.E Alaska, landmasses, straits, and narrows were used to set borders for statistical areas.

Table 1. Current baselines determined from original charts used by Thompson.

Area Division	Base Latitude	Base Longitude	Directions from base (true degrees)
006-007	40°26.4' N	124°24.3' W	270° - 90°
007-008	41°30' N	124°09' W	269° - 89°
008-009	42°28' N	124°33' W	279° - 99°
009-010	43°28' N	124°20' W	282° - 102°
010-020	44°26' N	124°05' W	278° - 98°
020-030	45°25' N	124°00' W	271° - 91°
030-040	46°27' N	124°05' W	261° - 81°
040-050	47°25' N	124°22' W	251° - 71°
$050-060^{1}$	48°20' N	125°00' W	237° - 57°
060-070	49°05' N	126°00' W	228° - 48°
070-080	49°52' N	127°05' W	225° - 45°
080-090	50°31' N	128°15' W	222° - 42°
090-100	51°10' N	129°30' W	218° - 38°
100-110	51°46' N	130°45' W	219° - 39°
110-120	52°28' N	131°58' W	232° - 52°
120-130	53°18' N	132°48' W	245° - 65°
130-140	54°17' N	133°15' W	255° - 75°
140-150	55°13' N	133°45' W	244° - 64°
150-160	56°05' N	134°40' W	240° - 60°
160-170	56°58' N	135°30' W	241° - 61°
170-180	57°49' N	136°26' W	235° - 55°
180-190	58°37' N	137°43' W	224° - 44°
190-200	59°13' N	139°10' W	213° - 33°
200-210	59°42' N	140°55' W	200° - 20°
210-220	59°56' N	142°52' W	187° - 07°
220-230	59°58' N	144°52' W	177° - 357°
230-240	59°52' N	146°50' W	172° - 352°
240-250	59°40' N	148°47' W	164° - 344°
250-260	59°20' N	150°38' W	153° - 333°
260-270	58°45' N	152°20' W	139° - 319°
270-280	58°03' N	153°35' W	137° - 317°
280-2902	57°20' N	154°58' W	141° - 321°
290-300	56°45' N	156°27' W	148° - 328°
300-310	56°12' N	158°01' W	151° - 331°
310-320	55°43' N	159°35' W	152° - 332°
320-330	55°15' N	161°08' W	152° - 332°
330-340	54°47' N	162°40' W	152° - 332°
340-350 ³	54°20' N	164°12′ W	152° - 332°
350-360	53°52' N	165°43' W	152° - 332°
360-370	53°23' N	167°12' W	152° - 332°
370-380	52°56' N	168°42' W	157° - 337°
380-390	52°32' N	170°15' W	161° - 341°
390-400	52°15' N	171°49' W	165° - 345°

Table 1. continued

400-410 52°02' N 173°23' W 169° - 349° 410-420 51°50' N 175°00' W 169° - 349° 420-430 51°38' N 176°36' W 170° - 350°	
420-430 51°38' N 176°36' W 170° - 350°	
430-440 51°28' N 178°13' W 175° - 355°	
440-450 51°25' N 179°49' W 180° - 0°	
450-460 51°33' N 178°33' E 192° - 12°	
460-470 51°47' N 177°00' E 197° - 17°	
470-480 52°06' N 175°29' E 200° - 20°	
480-490 52°27' N 173°57' E 203° - 23°	
490-500 52°52' N 172°29' E 205° - 25°	
500-510 53°18' N 170°59' E 207° - 27°	
510-520 53°47' N 169°32' E 210° - 30°	
520-530 ⁴ 54°16' N 168°04' E 210° - 30°	
530-540 ⁴ 54°46' N 166°36' E 210° - 30°	
540-550 ⁴ 55°17' N 165°05' E 210° - 30°	
550-560 ⁴ 55°47' N 163°33' E 210° - 30°	

¹ 050-060 baseline subsequently replaced by Canada/U.S. boundary definition

A complete set of nautical charts, including the agreed-upon boundary lines, was produced to document statistical area changes. These charts became the new reference standards for the IPHC statistical areas.

The following list summarises the newly defined, or clarified, statistical areas by regulatory area. Table 2 catalogues the statistical areas affected and the results of the changes.

Regulatory Area 2A

- 1. Additional statistical areas (009, 008, 007, and 006) were added south of Coos Bay. Historically, Area 00 was used to summarize all catch south of Coos Bay, although areas labelled -1, -2, and -3 may appear on some maps in past publications (Fig. 5).
- 2. The 050/060 Thompson line was eliminated. The division line was redefined as the U.S.-Canada boundary.
- 3. All U.S catch plotted as statistical Area 060 was assigned to statistical Area 050, to take regulatory area allocation issues into account. To the same end, Canadian catch in Area 050 was assigned to Area 060.
- 4. Statistical Area 051 was eliminated as no catch was ever recorded from this region (Fig. 8). The area became a part of Area 050.

Regulatory Area 2B

- 1. Baselines for Statistical Areas 060 and 070 were extended inside of Vancouver Island creating Statistical Areas 061 and 071.
- 2. The line between Statistical Area 091 and 102 was modified to include the 50-fathom curve, placing the 'Goose Island Fishing Grounds' in one area: Statistical Area 102.
 - 3. Statistical Areas 101, 111, and 113 around Cape St. James were eliminated (Fig. 9).

² 280-290 baseline subsequently replaced by Regulatory Area 3A/3B boundary definition

³ 340-350 baseline subsequently replaced by Regulatory Area 3B/4A boundary definition

⁴ Areas are in Russian territorial waters, but maintained for historical purposes

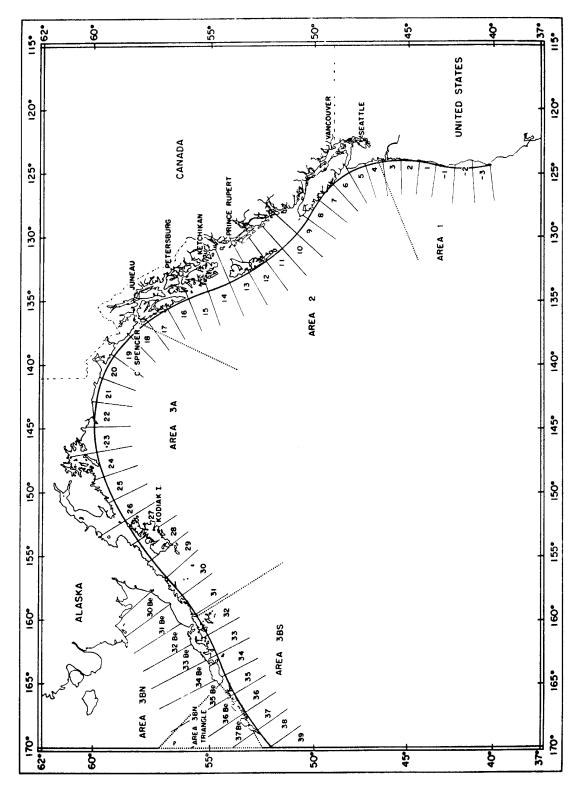


Figure 5. IPHC statistical areas of 1963. Note Bering Sea 'Be' areas.

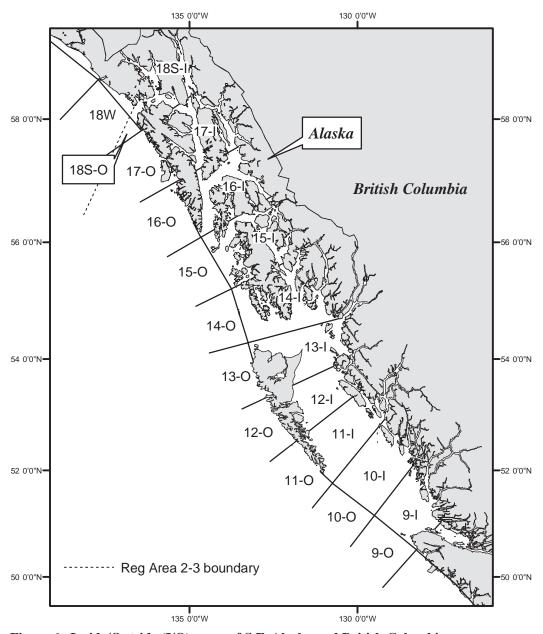


Figure 6. Inside/Outside (I/O) areas of S.E. Alaska and British Columbia.

- 4. 'Horseshoe Fishing Grounds', as reported verbally by fishers, were assigned to Statistical Area 102 if no other specific location information was given. Loran or latitude/longitude coordinates were used if available.
- 5. The 100-fathom depth contour defines Statistical Area 131 on the southern border and extends to the Exclusive Economic Zone (EEZ) for the northern border. This area is known as the 'Whaleback'.

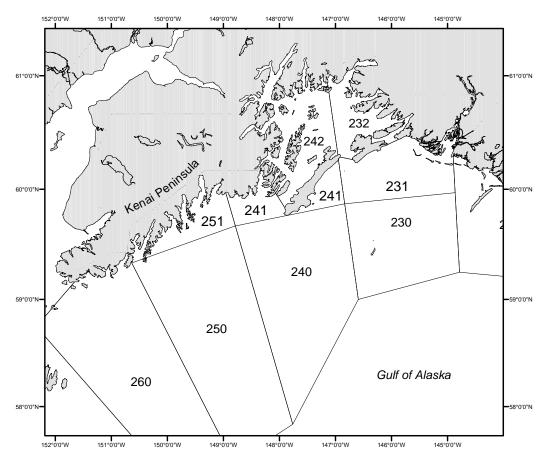


Figure 7. Shallow areas 231, 241, and 251 were later merged with their deep-water counterparts 230, 240, and 250.

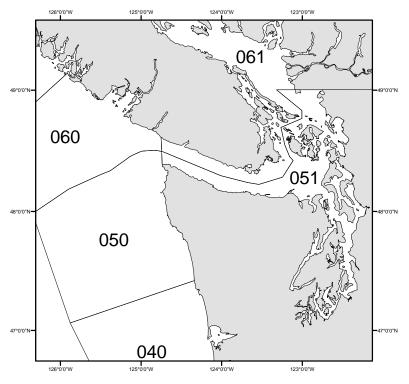


Figure 8. For simplification, Area 051 was combined with 050 because it was never utilized.

Table 2. Nomenclature changes to IPHC statistical areas in Regulatory Areas 2 and 3. Statistical areas in bold represent the areas with major boundary changes.

Regulatory Area	I/O statistical areas and pre-1976 numbering	Statistical Area: 1976 to 1992	Statistical Area: Since 1992	Comments on change
2A	0	0	006	
2A	0	0	007	
2A	0	0	008	
2A	0	0	009	
2A	1	10	010	
2A	2	20	020	
2A	3	30	030	
2A	4	40	040	
2A	5	50	050	
2A	5	51	050	Never used - recombined with 050
2B	6	60	060	
2B	6	60	061	previously no fishing I
2B	7	70	070	
2B	7	70	071	previously no fishing I
2B	8	80	080	
2B	8	81	081	
2B	9-O	90	090	
2B	9-I	91	091	
2B	9-I	92	092	
2B	10-O	100	100	
2B	10-I	101	102	Cape St. James
2B	10-I	102	102	incl Goose I. Grds, 50 Fm curve
2B	10-I	103	103	
2B	11-O	110	110	
2B	11-O	111	110	Cape St. James
2B	11-I	112	112	incl Horseshoe if lat/lon not available
2B	11-I	113	112	Cape St. James
2B	11-I	114	114	
2B	12-O	120	120	
2B	12-I	121	121	
2B	12-I	122	122	
2B	13-O	130	130	
2B	13-I	131	131	Whaleback, 100 Fm curve
2B	13-I	132	132	
2B	13-I	133	133	
2B	13-I	134	134	
2B	13-I	135	135	1999 back to 135

Table 2. continued

2C	14-O	140	140	
2C	14-I	141	141	
2C	14-I	142	142	
2C	14-I	143	143	
2C	14-I	144	144	
2C	15-O	150	150	
2C	15-I	151	151	Different than 150/160 line
2C	15-I	152	152	Different than 150/160 line
2C	15-I	153	153	Different than 150/160 line
2C	16-O	160	160	
2C	16-I	161	161	
2C	16-I	162	162	
2C	16-I	163	163	
2C	17-O	170	170	
2C	17-I	171	171	
2C	17-I	172	171/182	Reconfigured: changed I/O
2C	17-I	173	173	,
2C	17-I	174	174	
2C	18S-O	181	181	
2C	18S-I	182	182	
2C	18S-I	183	183	
				Name in 1992, Classica Para
2C 3A	18S-I 18W	182 185	184 185	New in 1992: Glacier Bay (may have been 180 at one time)
3A	19	190	190	(may have been 100 at one time)
3A	20	200	200	
3A	21	210	210	
3A	22	220	220	
3A	23	230	230	
3A	23	231	230	Recombined with 230
3A	23	232	232	
3A	24	240	240	
3A	24	241	240	Recombined with 240
3A	24	242	242	
3A	24	251	250	Recombined with 250
3A	25	251	251	
3A	26	260	260	
3A	26	261	261	
3A	27	270	270	
3A	27	271	271	
3A	27	272	261	Joined with 261, changed I/O
3A	28	280	280	280/290 use 3A/B line
3A	28	281	281	280/290 use 3A/B line

Table 2. continued

3B	29	290	290	280/290 use 3A/B line	
3B	29	291	290	Recombined with 290	
3B	30	300	300		
3B	31	310	310		
3B	32	320	320		
3B	33	330	330		
3B	34	340	340		

Regulatory Area 2C

- 1. The border between Statistical Areas 152 and 162 was drawn using natural divisions between Sumner Strait and Fredrick Sound.
- 2. The border between Statistical Area 181 and 182 was defined by the natural division on the west side of Cross Sound.
- 3. Statistical Area 172 was eliminated and the area became part of Statistical Areas 171 and 182. The goal was to place all of Icy Strait in one statistical area (Fig. 10).
- 4. A new statistical area (184) was formed to define Glacier Bay proper. The new area definition was implemented because Glacier Bay National Park was an area of interest to the fishing community and the National Park Service.

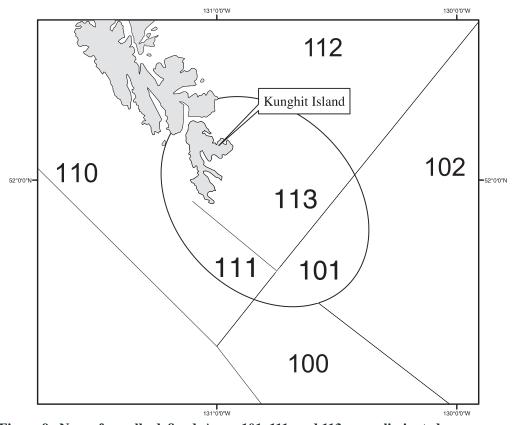


Figure 9. Never formally defined, Areas 101, 111, and 113 were eliminated

Regulatory Area 3A

- 1. The statistical areas outside of Prince William Sound and Resurrection Bay were modified. Statistical Areas 231, 241, and 251 were assimilated by Areas 230, 240, and 250, respectively.
 - 2. Statistical Area 272 was joined with Area 261 (Fig. 11).
 - 3. The dividing line between Areas 260 and 261 was clarified.

Regulatory Area 3B

- 1. Statistical Area 291 was combined with Statistical Area 290. (Fig. 11)
- 2. The regulatory area line defining 3A and 3B was used for defining the boundary between Statistical Areas 280 and 290 rather than the 280-290 Thompson line.

Regulatory Areas 4A, 4B, 4C, and 4D

- 1. The division between the Pacific Ocean and the Bering Sea was clarified as a transect through the Aleutian Islands.
- 2. The regulatory boundary line between Areas 4A-4B and 4C-4D is used for the statistical area boundary between $56^{\circ}00$ 'N and $56^{\circ}30$ 'N.
- 3. Because of their relatively small size, Statistical Areas 513175 and 530167 were not used and were merged with Areas 520175 and 533167, respectively.

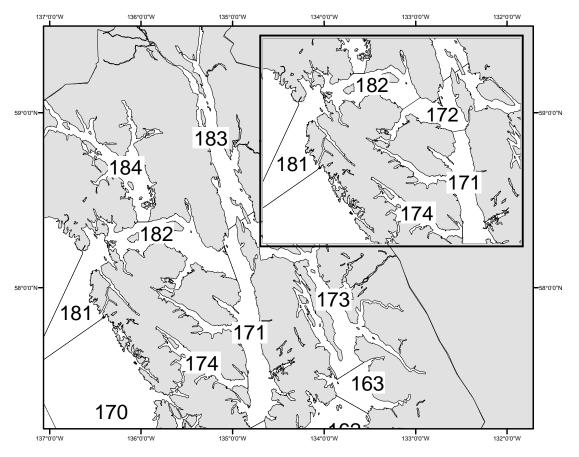


Figure 10. Area 182 was reconfigured to include all of Icy Strait. Inset: Former Area 172.

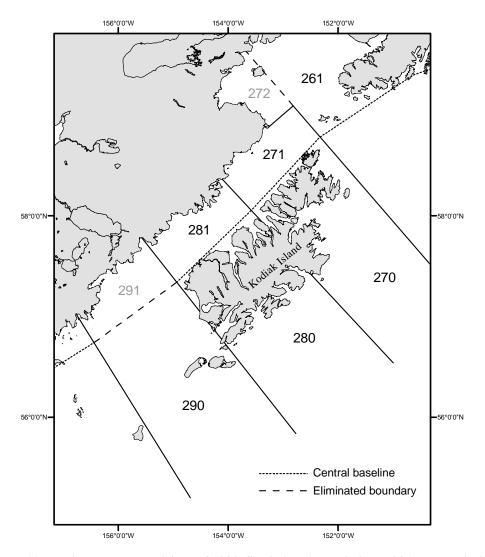


Figure 11. During the area revisions of 1992, Statistical Areas 272 and 291 were assimilated by Areas 261 and 290, respectively. The 280-290 Thompson line established prior to the definition of the formal 3A/3B boundary is portrayed.

Two of the changes led to a departure from the historical I/O reporting method, which is still used in current Annual Reports to maintain a somewhat consistent data time-series. The elimination of Areas, 172 and 272, forced a portion of the 17-I catch to be reported as 18S-I while a portion of Area 27 catch was now reported as Area 26. Changes to the statistical area designations and the I/O scheme are summarized in Table 2.

Revisions to the statistical area definitions: 1999

Two ill-defined boundaries were left unresolved after 1992. Both the central baseline and the landmass, Baranof Island, formed the division between Areas 160 and 161. Area 161 essentially wrapped around Cape Ommaney from the east and continued up the west coast of Baranof Island. It was never specified how far north 161 extended. In 1999, the 160/161 division was defined as a line connecting the Area 150/160 basepoint to the Cape Ommaney light (Fig. 12). A similar situation occurred between Areas 110 and 112, at the southern end of the Queen Charlotte Islands. This dividing line was drawn from the Area 110/120 basepoint to Cape St. James.

Revisions to the statistical area definitions: 2003

When the staff of the IPHC began defining the statistical areas for use in GIS, the opportunity was taken to further refine the statistical areas to aid in data manipulation. A new statistical area on the western side of Regulatory Area 4A was established. Statistical Area 400 originally straddled the Area 4A/4B line. To facilitate the summary of statistical area data at a regulatory area level, Area 400 was divided along the regulatory area boundary. The 4A portion was designated Area 395, while the 4B portion remained Area 400.

Where appropriate, and where practical, all coastal statistical areas were extended to the 1000-fathom line.

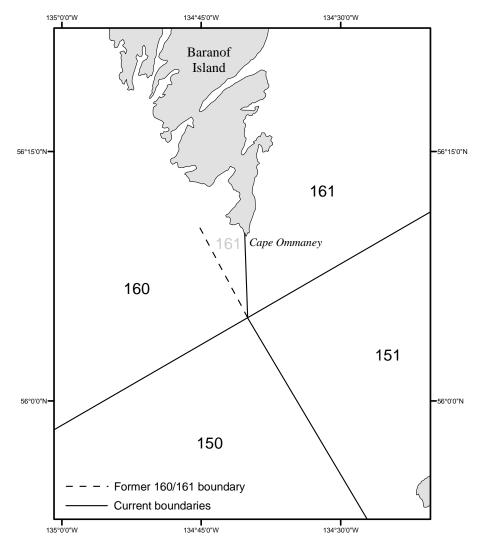


Figure 12. The boundary between Areas 160 and 161 near Cape Ommaney was clarified. Initially the boundary continued northward along the west coast of Baranof Island for an undefined distance.

Current statistical area definitions: 2003

The following section gives a general description of the statistical areas currently used by IPHC. The central baseline mentioned in some descriptions is a line formed by connecting adjacent Thompson points with lines of constant compass bearing.

IPHC statistical areas are now defined in GIS as polygons, created by determining the latitude/longitude coordinates of the polygons' vertices and connecting these points with rhumb lines. These sets of coordinates are now the current definitions, superseding all previous definitions. While still accurate, the system of points and bearings (Table 1) are maintained only as a convenience for drawing statistical areas on paper charts and should henceforth be treated as approximations of the areas. A table of the coordinate definitions and the GIS polygon files are available from the IPHC office. Inconsistent coordinate formats can be noted in the following descriptions. These differences are due to the origin of the information. Coordinates in Degrees, Decimal Minutes (DDM) were determined by plotting on charts while those in Degrees, Minutes, Seconds (DDS) originated from references such as the United States Coast Guard Light List. For a list of geographic and geodatabase sources, see Appendix IV.

The statistical area figures included below are for general reference only. Statistical area line positions, whether hand-drawn on charts or entered into a GIS, may vary marginally in relation to landmasses depending on the quality and scale of the maps used when charting.

California, Oregon, Washington: Regulatory Area 2A (Statistical Areas 006-050)

For a visual representation of Areas 006 through 050, refer to Figure 13.

Area 006

Area 006 includes all waters south of the 006-007 baseline, which runs exactly east/west from Cape Mendocino light.

• All contiguous waters south of a line bearing 270°/90° true through 40°26'24"N, 124°24'24"W.

Area 007

Area 007 includes the waters between Cape Mendocino and the 007-008 baseline, which meets the California coast at a point just south of the Klamath River.

- All contiguous waters north of a line bearing 270°/90° true through 40°26'24"N, 124°24'24"W; and
- South of a line bearing 269°/89° true through 41°30'N, 124°09'W

Area 008

Area 008 includes the waters between the 007-008 baseline and the 008-009 baseline, which intersects the Oregon coastline just north of the Rogue River.

- All contiguous waters north of a line bearing 269°/89° true through 41°30'N, 124°09'W;
 and
- South of a line bearing 279°/99° true through 42°28'N, 124°33'W

Area 009

Area 009 includes the waters between the 008-009 baseline and the 009-010 baseline, which crosses the coastline just north of the entrance to Coos Bay.

All contiguous waters north of a line bearing 279°/99° true through 42°28'N, 124°33'W;
 and

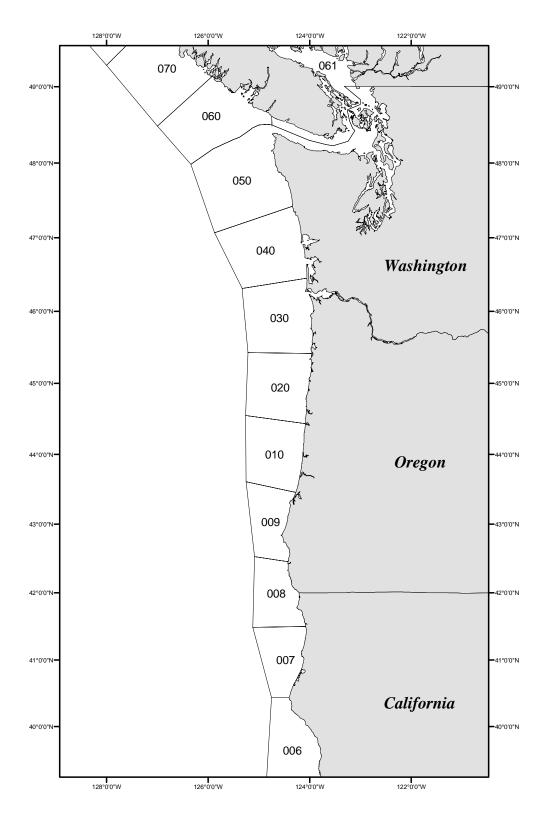


Figure 13. The IPHC statistical areas of Regulatory Area 2A, whose range is from northern California to Washington State.

• South of a line bearing 282°/102° true through 43°28'N, 124°20'W

Area 010

Area 010 includes the waters between the 009-010 baseline and the 010-020 baseline at Alsea Bay.

- All contiguous waters north of a line bearing 282°/102° true through 43°28'N, 124°20'W; and
- South of a line bearing 278°/98° true through 44°26'N, 124°05'W

Area 020

Area 020 includes the waters between Alsea Bay and the 020-030 baseline at Netarts Bay.

- All contiguous waters north of a line bearing 278°/98° true through 44°26'N, 124°05'W; and
- South of a line bearing 271°/91° true through 45°25'N, 124°00'W

Area 030

Area 030 encompasses the waters between the 020-030 baseline and the 030-040 baseline, which intersects the Washington coast at the south end of Willapa Bay. Area 030 does not include Willapa Bay, but does include all of Netarts Bay, Tillamook Bay, and the mouth of the Columbia River.

- All contiguous water north of a line bearing 271°/91° true through 45°25'N, 124°00'W;
 and
- South of a line bearing 261°/81° true through 46°27'N, 124°05'W

Area 040

Area 040 encompasses the waters between the 030-040 baseline and the 040-050 baseline just north of Cape Elizabeth. It includes all of Willapa Bay and Grays Harbor.

- All contiguous waters north of a line bearing 261°/81° true through 46°27'N, 124°05'W;
 and
- South of a line bearing 251°/71° true through 47°25'N, 124°22'W

Area 050

Area 050 includes all waters between the 040-050 baseline and the Regulatory Area 2A/2B dividing line. It includes all waters in Juan de Fuca Strait on the Washington State side of the international boundary, the waters of the San Juan Islands, and all adjacent inlets and passages (Fig. 14).

 All contiguous U.S. waters north of a line bearing 251°/71° true through 47°25'N, 124°22'W

For GIS purposes, the international boundary was defined as a line denoted by connecting the following points²:

² *note NAD27, from Fed. Reg. v 60 no. 163 p 43826

- 48°11.08'N, 125°53.80'W
- 48°18.37'N, 125°29.97'W
- 48°20.27'N, 125°22.80'W
- 48°26.78'N, 125°09.20'W
- 48°27.17'N, 125°08.42'W
- 48°28.15'N, 125°05.78'W
- 48°29.73'N, 125°00.10'W
- 48°29.95'N, 124°59.23'W
- 48°30.23'N, 124°54.87'W
- 48°30.37'N, 124°50.35'W
- 48°30.18'N, 124°47.22'W

British Columbia: Regulatory Area 2B (Statistical Areas 060-135)

Area 060

Area 060 includes Canadian waters south of the 060-070 baseline, which meets Vancouver Island at Tofino. The eastern boundary is defined by Vancouver Island and by the line drawn from Carmanah Point light to Cape Flattery. It includes the waters of Barkley Sound and Alberni Inlet (Fig. 14).

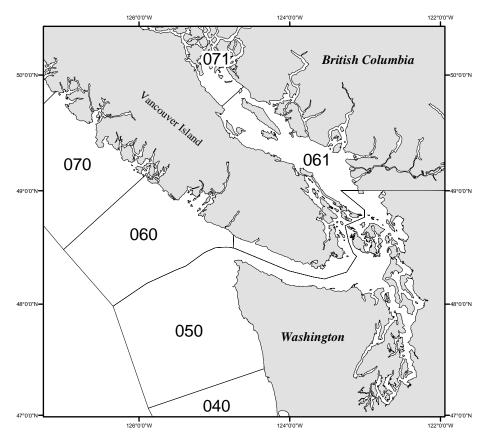


Figure 14. IPHC statistical areas in the vicinity of the U.S.-Canada/Regulatory Area 2A-2B boundary in the Strait of Georgia and Juan de Fuca Strait.

- All Canadian waters west of a line from 48°23'30"N, 124°44'12"W (Cape Flattery Light) to 48°36'43"N, 124°45'00"W (Carmanah Pt. Lt.); and
- South of a line bearing 228°/48° true through 49°05'N, 126°00'W

Area 061 includes all Canadian waters north of the Regulatory Area 2A/2B boundary, east of the Carmanah Point – Cape Flattery line, and south of the 060-070 eastern baseline that runs through the Strait of Georgia (Fig. 14).

- All Canadian waters east of a line from 48°23'30"N, 124°44'12"W (Cape Flattery Light) to 48°36'43"N, 124°45'00"W (Carmanah Pt. Lt.); and
- South of a line bearing 228°/48° true through 49°05'N, 126°00'W

For visual representations of Areas 070 through 081, refer to Figures 15 and 16.

Area 070

Area 070 includes all waters west of Vancouver Island between the 060-070 baseline and the 070-080 baseline at Tatchu Point.

• All contiguous waters west of Vancouver Island and

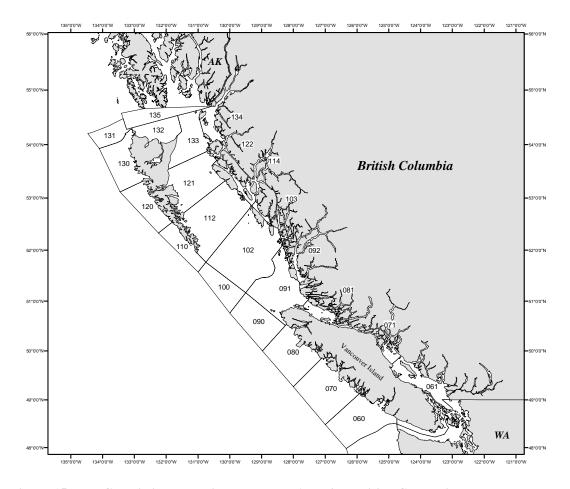


Figure 15. IPHC statistical areas in Regulatory Area 2B, British Columbia.

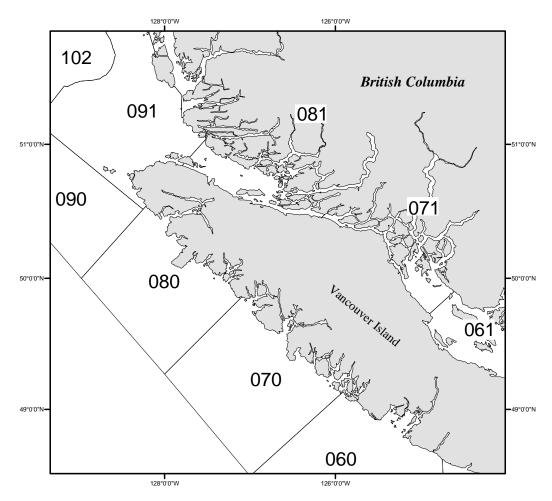


Figure 16. IPHC Areas 070-091 at the northern end of Vancouver Island.

- North of a line bearing 228°/48° true through 49°05'N, 126°00'W; and
- South of a line bearing 225°/45° true through 49°52'N, 127°05'W

Area 071 includes inside waters north of the 060-070 baseline that runs through the Strait of Georgia and south of the 070-080 eastern baseline that runs through Johnstone Strait.

- All contiguous waters east of Vancouver Island; and
- North of a line bearing 228°/48° true through 49°05'N, 126°00'W; and
- South of a line bearing 225°/45° true through 49°52'N, 127°05'W

Area 080

Area 080 includes all waters west of Vancouver Island between the 070-080 baseline and the 080-090 baseline, which meets Vancouver Island at Topknot Point.

- All contiguous waters west of Vancouver Island; and
- North of a line bearing 225°/45° true through 49°52'N, 127°05'W; and
- South of a line bearing 222°/42° true through 50°31'N, 128°15'W

Area 081 includes inside waters north of the 070-080 baseline that runs through Johnstone Strait and south of the 080-090 eastern baseline that runs through Gordon Channel, including Knight Inlet.

- All contiguous waters east of Vancouver Island; and
- North of a line bearing 225°/45° true through 49°52'N, 127°05'W; and
- South of a line bearing 222°/42° true through 50°31'N, 128°15'W

For a visual representation of Areas 090 through 103, refer to Figure 17.

Area 090

Area 090 includes the waters bounded on the south and north by the 080-090 and 090-100 baselines, respectively, and by the central baseline on the east.

- All contiguous waters north of a line bearing 222°/42° true through 50°31'N, 128°15'W; and
- South of a line bearing 218°/38° true through 51°10'N, 129°30'W; and
- West of a line joining 50°31'N, 128°15'W and 51°10'N, 129°30'W

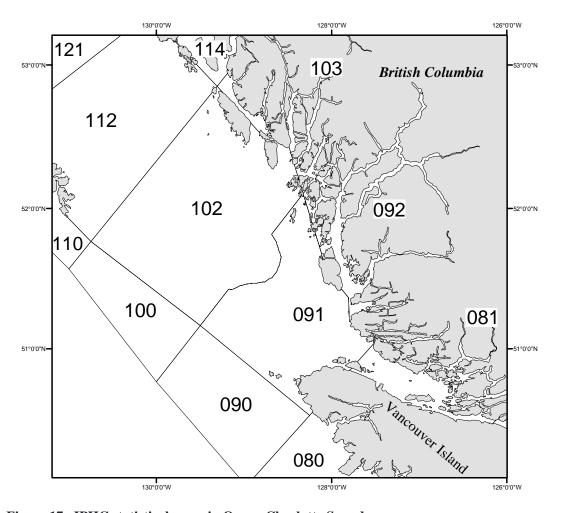


Figure 17. IPHC statistical areas in Queen Charlotte Sound.

Area 091 includes all waters north of the 080-090 baseline that runs through Gordon Channel; south of the 090-100 baseline; east of Area 090; and west of Area 092. It excludes Goose Island Bank waters shallower than 50 fathoms.

- All contiguous waters north of a line bearing 222°/42° true through 50°31'N, 128°15'W;
 and
- South of a line bearing 218°/38° true through 51°10'N, 129°30'W (excluding waters north of the Goose Island Bank 50 fm contour line); and
- East of a line joining 50°31'N, 128°15'W and 51°10'N, 129°30'W; and
- West of
 - a line joining 52°06.3'N, 128°19.5'W and 51°40.1'N, 128°06.5'W; and
 - Calvert Island (51°35'N, 128°03'W); and
 - a line joining 51°25'47.4"N, 127°53'11.8"W (Clark Point); 51°22'0.9"N, 127°48'29.3"W (Dugout Rocks); and 51°11.7'N, 127°47.8'W (N of Cape Caution)

Area 092

Area 092 includes all waters north of the 080-090 baseline; south of the 090-100 baseline; and east of Calvert Island and Area 091. Major regions include: Fitz Hugh Sound, Fisher Channel, Dean Channel, and Burke Channel.

- All contiguous waters north of a line bearing 222°/42° true through 50°31'N, 128°15'W; and
- South of a line bearing 218°/38° true through 51°10'N, 129°30'W (includes Briggs and Roscoe Inlets); and
- East of
 - a line joining 52°06.3'N, 128°19.5'W and 51°40.1'N, 128°06.5'W; and
 - Calvert Island; and
 - a line joining 51°25'47.4"N, 127°53'11.8"W (Clark Point); 51°22'0.9"N, 127°48'29.3"W (Dugout Rocks); and 51°11.7'N, 127°47.8'W (N of Cape Caution)

Area 100

Area 100 includes all waters between the 090-100 and 100-110 baselines and west of the central baseline. This is the southwest portion of Queen Charlotte Sound.

- All contiguous waters north of a line bearing 218°/38° true through 51°10'N, 129°30'W;
 and
- South of a line bearing 219°/39° true through 51°46'N, 130°45'W; and
- West of a line joining 51°10'N, 129°30'W with 51°46'N, 130°45'W

Area 102

Area 102 includes all waters north of the 090-100 baseline; south of the 100-110 baseline; west of Aristazabal Island and Price Island, including the waters of Laredo Sound and Milbanke Sound; and east of Area 100. It also includes all of the contiguous Goose Island Bank waters less than 50 fathoms that are south of the 090-100 line.

- All contiguous waters north of a line bearing 218°/38° true through 51°10'N, 129°30'W (including waters north of the south-eastward-dipping Goose Island 50 fm contour); and
- South of a line bearing 219°/39° true through 51°46'N, 130°45'W; and
- East of a line joining 51°10'N, 129°30'W with 51°46'N, 130°45'W; and

- West of
 - a line from 52°51.2'N, 129°18.5'W to 52°32.2'N, 128°49.8'W; and
 - Swindle Island; and
 - a line joining 52°32'N, 128°32.3W with 52°06.3'N, 128°19.5'W

Area 103 includes all waters north of the 090-100 baseline, south of the 100-110 baseline and east of Area 102. It is comprised of the waters of Laredo Channel, Finlayson Channel, Mathieson Channel, and the southern portion of Princess Royal Channel.

- All contiguous waters north of a line bearing 218°/38° true through 51°10'N, 129°30'W (excluding Briggs and Roscoe Inlets); and
- South of a line bearing 219°/39° true through 51°46'N, 130°45'W; and
- East of
 - a line from 52°51.2'N, 129°18.5'W to 52°32.2'N, 128°49.8'W; and
 - Swindle Island; and
 - a line joining 52°32'N, 128°32.3W with 52°06.3'N, 128°19.5'W

For a visual representation of Areas 110 through 130, refer to Figure 18.

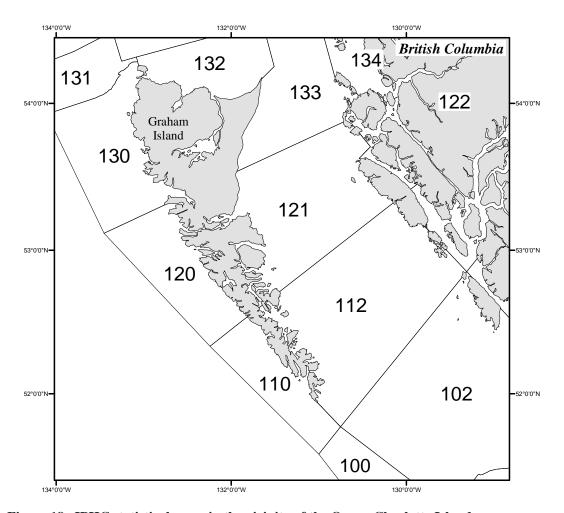


Figure 18. IPHC statistical areas in the vicinity of the Queen Charlotte Islands.

Area 110 includes the waters west of the Queen Charlotte Islands between the 100-110 baseline just south of Cape St. James and the 110-120 baseline, which meets Morseby Island just south of Barry Inlet. The eastern boundary is defined by Morseby Island, Kunghit Island, a line connecting the two islands on the eastern side of Rose Inlet, and by a line drawn from Cape St. James to the 100-110 basepoint.

- All contiguous waters north of a line bearing 219°/39° true through 51°46'N, 130°45'W;
 and
- South of a line bearing 232°/52° true through 52°28'N, 131°58'W; and
- West of
 - Moresby Island; and
 - a line connecting 52°10.2'N, 131°06.6'W (east Rose Inlet) to 52°06.4'N, 131°04.4'W; and
 - Kunghit Island; and
 - a line joining the Cape St. James light (51°56'10"N, 131°00'52"W) with 51°46'N, 130°45'W

Area 112

Area 112 includes all waters north of the 100-110 baseline; south of the 110-120 baseline; east of Moresby Island and a line from 51°46'N, 130°45'W to the Cape St. James light; and west of a line running 137°-317° through the Abrams Island light.

- All contiguous waters north of a line bearing 219°/39° true through 51°46'N, 130°45'W; and
- South of a line bearing 232°/52° true through 52°28'N, 131°58'W; and
- East of
 - Moresby Island; and
 - a line connecting 52°10.2'N, 131°06.6'W (east Rose Inlet) to 52°06.4'N, 131°04.4'W; and
 - Kunghit Island; and
 - a line joining the Cape St. James light (51°56'10"N, 131°00'52"W) with 51°46'N, 130°45'W; and
- West of
 - a line joining 52°51.2'N, 129°18.5'W to 53°09.9'N, 129°47.6'W; and
 - Banks Island

Area 114

Area 114 includes all waters north of the 100-110 baseline; south of the 110-120 baseline; and east of Area 112. It includes the waters of the southern half of Principe Channel, Squally Channel, Whale Channel, and Ursula Channel. It also includes all the waters of Douglas Channel and Gardner Canal.

- All contiguous waters north of a line bearing 219°/39° true through 51°46'N, 130°45'W (including Gardner Canal); and
- South of a line bearing 232°/52° true through 52°28'N, 131°58'W; and
- East of
 - a line joining 52°51.2'N, 129°18.5'W to 53°09.9'N, 129°47.6'W; and
 - Banks Island

Area 120

Area 120 includes the waters west of the Queen Charlotte Islands between the 110-120 baseline at Barry Inlet on Morseby Island and the 120-130 baseline at Kano Inlet on Graham Island.

- All contiguous waters north of a line bearing 232°/52° true through 52°28'N, 131°58'W;
 and
- South of a line bearing 245°/65° true through 53°18'N, 132°48'W; and
- West of
 - the Queen Charlotte Islands; and
 - Skidegate Channel: 53°11'N, 132°17.5'W to 53°07'N, 132°17.5'W

Area 121 includes waters north of the 110-120 baseline, south of the 120-130 baseline, and east of the Queen Charlotte Islands; and west of Porcher Island, McCauley Island, and Banks Island, including Browning Entrance.

- All contiguous waters north of a line bearing 232°/52° true through 52°28'N, 131°58'W;
 and
- South of a line bearing 245°/65° true through 53°18'N, 132°48'W; and
- East of
 - the Queen Charlotte Islands; and
 - Skidegate Channel 53°11'N, 132°17.5'W to 53°07'N, 132°17.5'W; and
- West of
 - Banks Island; and
 - a line joining the Larsen Harbour light (53°37'45"N, 130°32'18"W) to the Hankin Rock light (53°42'28"N, 130°24'36"W) to the Moore Island light (53°47'23"N, 130°31'13"W); and
 - a line joining 53°50.3'N, 130°35'W to 53°51.75'N, 130°38'W

Area 122

Area 122 includes all waters north of the 110-120 baseline, south of the 120-130 baseline and east of Area 121. It includes all the waters of Kitkatla Inlet, Porcher Inlet, and the northern portions of Grenville Channel and Principe Channel.

- All contiguous waters north of a line bearing 232°/52° true through 52°28'N, 131°58'W;
 and
- South of a line bearing 245°/65° true through 53°18'N, 132°48'W (including Kitkatla and Porcher Inlets; and
- East of
 - Banks Island; and
 - a line joining the Larsen Harbour light (53°37'45"N, 130°32'18"W) to the Hankin Rock light (53°42'28"N, 130°24'36"W) to the Moore Island light (53°47'23"N, 130°31'13"W); and
 - a line joining 53°50.3'N, 130°35'W to 53°51.75'N, 130°38'W

Area 130

Area 130 includes all waters west of Graham and Langara Islands, north of the 120-130 baseline at Kano Inlet, and waters north and west of Beresford Bay that are shallower than 100 fathoms.

- All contiguous waters north of a line bearing 245°/65° true through 53°18'N, 132°48'W (including Shields Bay); and
- West of
 - Graham Island; and
 - a line from 54°11.65'N, 133°00'W to 54°10.9'N, 133°01.9'W across Parry Passage;
 and

- a line bearing 345° true from the Langara Point light (54°15'23"N, 133°03'30"W); and
- South of
 - the 100 fm depth contour from north of Langara Point to 54°02.3'N, 133°32.55'W; and
 - a line joining 54°02.3'N, 133°32.55'W to 53°55.7'N, 134°06.5'W

For a visual representation of Areas 131 through 135, refer to Figure 19.

Area 131

Area 131 encompasses all waters of the Whaleback fishing grounds that are north and west of Beresford Bay and deeper than 100 fathoms. It is bounded on the north by the Fishing Zones of Canada boundary between BC and Alaska. It does not include waters that are both north of the 130-140 baseline and east of the central baseline.

- All contiguous waters west of a line bearing 345° true from the Langara Point light (54°15'23"N, 133°03'30"W); and
- North of
 - the 100 fm depth contour from north of Langara Point to 54°02.3'N, 133°32.55'W;

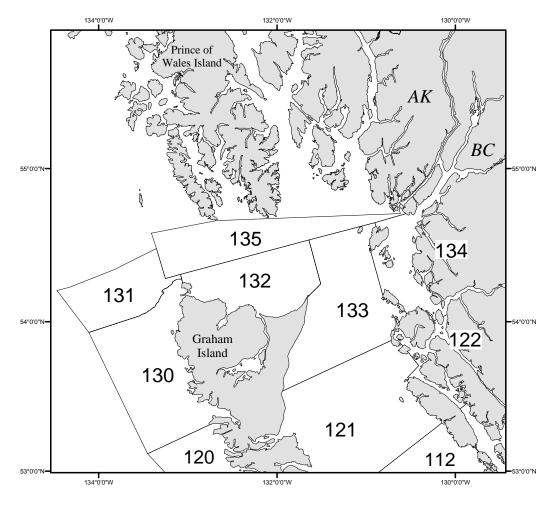


Figure 19. IPHC statistical areas in Dixon Entrance used for classification of Canadian fishing effort.

33

and

- a line joining 54°02.3'N, 133°32.55'W to 53°55.7'N, 134°06.5'W; and
- South of the Fishing Zone of Canada as described in the Fishing Zones of Canada (Zones 4 and 5) Order, Consolidated Regulations of Canada, c. 1548; and
- Excludes:
 - waters north of a line bearing 75° true from 54°17'N, 133°15'W; and
 - waters east of a line connecting 54°17'N, 133°15'W to 54°28.8'N, 133°21.2'W

Area 132

Area 132 includes all waters at the north end of Graham Island that are south of the 130-140 baseline and essentially between Langara Island and Overfall Shoal.

- All contiguous waters north of Graham Island; and
- South of a line bearing 75° true from 54°17'N, 133°15'W; and
- East of
 - a line from 54°11.65'N, 133°00'W to 54°10.9'N, 133°01.9'W across Parry Passage;
 and
 - Langara Island; and
 - a line bearing 345° true from the Langara Point light (54°15'23"N, 133°03'30"W); and
- West of
 - a line from Rose Point (54°09.2'N, 131°40.2'W) to the Rose Spit light (54°14'54"N, 131°30'42"W); and
 - a line bearing 345° true from the Rose Spit light

Area 133

Area 133 includes all waters east of Graham Island, north of the 120-130 baseline, south of the 130-140 baseline, and west of Dundas Island, Stephens Island, and Porcher Island.

- All contiguous waters north of a line bearing 245°/65° true through 53°18'N, 132°48'W;
 and
- south of a line bearing 75° true from 54°17'N, 133°15'W; and
- East of
 - a line from Rose Point (54°09.2'N, 131°40.2'W) to the Rose Spit light (54°14'54"N, 131°30'42"W); and
 - a line bearing 345° true from the Rose Spit light; and
- West of
 - a line passing through 54°38.9'N, 130°54.1'W and 54°37'N, 130°53.2'W; and
 - the coast of Dundas Island; and
 - a line from the Dundas Island light (54°27'36"N, 130°56'56.5"W) to 54°10.7'N, 130°49'W; and
 - a line from 54°06.8'N, 130°37.9'W to 54°00'N, 130°28'W

Area 134

Area 134 includes all waters north of the 120-130 baseline that runs through Porcher Island and south of the 130-140 baseline, that ends at the south end of Wales Island. It includes Chatham Sound and the Canadian portion of the Portland Canal.

- All contiguous waters north of
- Porcher Island; and
- a line connecting 54°00'N, 130°15.5'W to 54°04.3'N, 130°00'W; and
- South of a line bearing 75° true from 54°17'N, 133°15'W to Wales Island; and

- East of
 - a line passing through 54°38.9'N, 130°54.1'W and 54°37'N, 130°53.2'W; and
 - the coast of Dundas Island; and
 - a line from the Dundas Island light (54°27'36"N, 130°56'56.5"W) to 54°10.7'N, 130°49'W; and
 - a line from 54°06.8'N, 130°37.9'W to 54°00'N, 130°28'W; and
 - all Canadian waters within Pearse Canal and Portland Canal that are east of a line passing through 54°44.5'N, 130°35.7'W to 54°47'N, 130°37.7'W

Statistical Area 135 is used for Canadian vessels and includes all Canadian waters north of the 130-140 baseline, east of the central baseline, and west of Wales Island.

- All contiguous waters north of a line bearing 75° true from 54°17'N, 133°15'W; and
- South of
 - the A-B line from the 1903 Alaska boundary Tribunal decision³; and
 - a line passing through the Cape Muzon light (54°39'48"N, 132°41'30"W) and the Point Marsh light (54°42'42"N, 132°17'43"W); and
 - East of a line passing through 54°17'N, 133°15'W and 55°13'N, 133°45'W; and
 - Canadian waters west of
 - Wales Island; and
 - a line passing through 54°44.5'N, 130°35.7'W to 54°47'N, 130°37.7'W

SE Alaska: Regulatory Area 2C (Statistical Areas 140-184)

For visual representations of Areas 140 through 153, refer to Figures 20 and 21.

Area 140

Area 140 includes all U.S. waters west of the central baseline, which crosses Forrester Island, and that are south of the 140-150 baseline.

- U.S. waters west of a line passing through 54°17'N, 133°15'W and 55°13'N, 133°45'W;
 and
- South of a line bearing 244°/64° true through 55°13'N, 133°45'W

Area 141

Area 141 includes the waters north of a rhumb-line which crosses both the Cape Muzon light and the Pt. Marsh light, south of the 140-150 baseline crossing Cape Bartolome, east of the central baseline, and west of Dall Island.

- All contiguous waters north of a line passing through the Cape Muzon light (54°39'48"N, 132°41'30"W) and the Point Marsh light (54°42'42"N, 132°17'43"W); and
- South of a line bearing 244°/64° true through 55°13'N, 133°45'W; and
- East of a line passing through 54°17'N, 133°15'W and 55°13'N, 133°45'W; and
- West of
 - Dall Island and Prince of Wales Island; and
 - a line from 55°16'N, 133°06.67'W to 55°15.5'N, 133°08.2'W across Tlevak Narrows

³ as documented in <u>British and Foreign State Papers</u>, Vol. 98, p. 152. http://www.lexum.umontreal.ca/ca/us/en/cus.1903.149.en.html

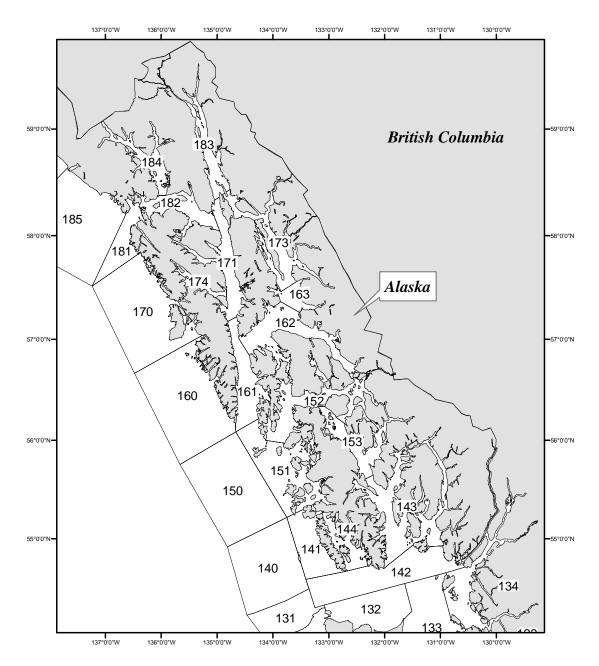


Figure 20. IPHC statistical areas of Regulatory Area 2C, southeast Alaska.

Statistical Area 142 is used for U.S. vessels and includes all waters of Dixon Entrance that are north of the 130-140 baseline and east of the central baseline, including waters on the Alaskan side of the international boundary in Portland Canal.

- All contiguous U.S. waters north of a line bearing 75° true from 54°17'N, 133°15'W (including Pearse and Portland Canals); and
- East of a line passing through 54°17'N, 133°15'W and 55°13'N, 133°45'W; and
- South of
 - a line that extends from the Point Marsh light (54°42'42"N, 132°17'43"W) that passes through the Cape Muzon light (54°39'48"N, 132°41'30"W); and

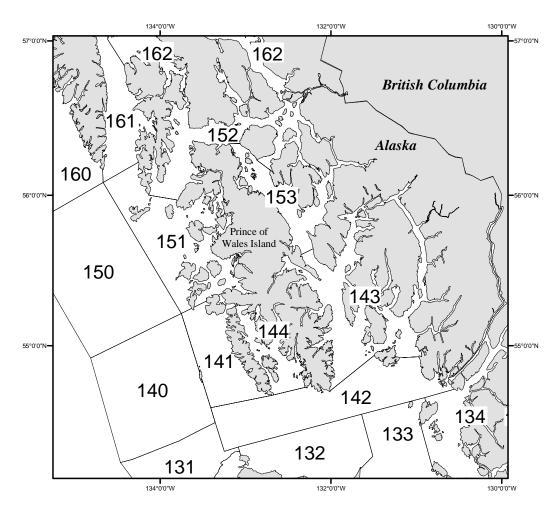


Figure 21. Statistical areas in Dixon Entrance and near Prince of Wales Island.

- Prince of Wales Island; and
- a line from the Cape Chacon light (54°41'26"N, 132°01'01"W) to 54°56.1'N, 131°29.6'W; and
- Duke Island; and
- a line from 54°54.8'N, 131°20'W to 54°55.8'N, 130°50'W

Area 143 includes all waters south of the 140-150 eastern baseline crossing Clarence Strait and east of Prince of Wales Island. It includes the waters surrounding Revillagigedo Island, Annette Island, and Gravina Island as well as all of Kasaan Bay, Cholmondeley Sound, and Moira Sound.

- All contiguous waters north of
- a line from the Cape Chacon light (54°41'26"N, 132°01'01"W) to 54°56.1'N, 131°29.6'W; and
- Duke Island; and
- a line from 54°54.8'N, 131°20'W to 54°55.8'N, 130°50'W; and
- South of a line bearing 244°/64° true through 55°13'N, 133°45'W (including Behm Canal); and
- East of Prince of Wales Island

Area 144 includes Cordova Bay, Tlevak Strait, and all waters east of Dall Island, west of Prince of Wales Island, and north of a line drawn from Cape Muzon light to Point Marsh light.

- All contiguous waters north of a line passing through the Cape Muzon light (54°39'48"N, 132°41'30"W) and the Point Marsh light (54°42'42"N, 132°17'43"W); and
- East of
 - a line from 55°16'N, 133°06.67'W to 55°15.5'N, 133°08.2'W across Tlevak Narrows; and
 - Dall Island: and
 - West of Prince of Wales Island

Area 150

Area 150 includes the waters bounded on the south by the 140-150 baseline at Cape Bartolome, on the north by the 150-160 baseline just south of Cape Ommaney, and by the central baseline running west of Coronation Island.

- All contiguous waters north of a line bearing 244°/64° true through 55°13'N, 133°45'W;
 and
- South of a line bearing 240°/60° true through 56°05'N, 134°40'W; and
- West of a line linking 55°13'N, 133°45'W to 56°05'N, 134°40'W

Area 151

Area 151 includes Iphigenia Bay and adjoining waters east of the central baseline, west of Prince of Wales Island, and north of the 140-150 baseline. The northern boundary of the area is defined by the 150-160 baseline as far east as Kuiu Island and a line drawn between the Cape Decision light and Cape Pole. El Capitan Pass is included up to the north end of Kosciusko Island.

- All contiguous waters north of a line bearing 244°/64° true through 55°13'N, 133°45'W; and
- South of
- a line bearing 240°/60° true through 56°05'N, 134°40'W; and
 - Kuiu Island: and
 - a line from the Cape Decision light (56°00'06"N, 134°08'12"W) to Cape Pole (55°58.22'N, 133°48.3'W); and
 - Kosciusko Island; and
 - (east of) a line linking 55°13'N, 133°45'W to 56°05'N, 134°40'W across El Capitan Passage; and
 - West of Prince of Wales Island; and
 - East of the central baseline from 55°13'N, 133°45'W to 56°05'N, 134°40'W

Area 152

Area 152 includes the waters of Sumner Strait, westward to the vicinity of Wrangell Island. It includes Affleck Canal and Duncan Canal as well as Eastern Passage and Stikine Strait in the east.

- All contiguous waters north of
- a line from the Cape Decision light (56°00'06"N, 134°08'12"W) to Cape Pole (55°58.22'N, 133°48.3'W); and
- Kosciusko Island; and

- (west of) a line linking 55°13'N, 133°45'W to 56°05'N, 134°40'W across El Capitan Passage; and
- Prince of Wales Island; and
- a line from the Point Colpoys light (56°20'12"N, 133°11'54"W) to 56°20.3'N, 133°03.9'W; and
- Zarembo Island; and
- a line from Pt. Nesbitt (56°13.9'N, 132°52.25'W) to Pt. Harrington (56°10.15'N, 132°43.2'W); and
- Etolin Island; and
- South of
 - Kuiu Island; and
 - a line from 56°40'N, 133°47.3'W to 56°40.8'N, 133°40'W across Keku Strait;
 and
 - Kupreanof Island; and
 - a line from 56°37.2'N, 133°00'W to 56°40'N, 132°51.1'W across Wrangell Narrows; and
 - Mitkof Island; and
 - a line from 56°34.2'N, 132°40'W to 56°37.47'N, 132°33.15'W across Dry Strait; and
 - Dry Island; and
 - a line from 56°40'N, 132°27.1'W to 56°46.6'N, 132°20W'; and
- West of
 - the Alaska mainland; and
 - a line from 56°24'N, 132°09.2'W to 56°20'N, 132°03.6'W across Eastern Passage; and
 - Wrangell Island; and
 - a line from 56°20'N, 132°13.2'W to 56°10'N, 132°15.6'W across Zimovia Strait

Area 153 includes the section of Clarence Strait north of the 140-150 baseline and south of Point Colpoys light. It also includes Ernest Sound, Blake Channel, and the Bradfield Canal. A line between Point Nesbitt and Point Harrington and one between Etolin Island and Wrangell Island, near the narrowest part of Zimovia Strait, further define the northern boundary.

- All contiguous waters north of a line bearing 244°/64° true through 55°13'N, 133°45'W; and
- South of
 - a line from the Point Colpoys light (56°20'12"N, 133°11'54"W) to 56°20.3'N, 133°03.9'W; and
 - Zarembo Island and
 - a line from Pt. Nesbitt (56°13.9'N, 132°52.25'W) to Pt. Harrington (56°10.15'N, 132°43.2'W); and
 - Etolin Island; and
 - a line from 56°20'N, 132°13.2'W to 56°10'N, 132°15.6'W across Zimovia Strait; and
 - Wrangell Island; and
 - (east of) a line from 56°24'N, 132°09.2'W to 56°20'N, 132°03.6'W across Eastern Passage; and
 - West of Cleveland Peninsula; and
 - East of Prince of Wales Island

For a visual representation of Areas 160 through 182, refer to Figure 22.

Area 160

Area 160 includes all waters west of Baranof Island that are between the 150-160 baseline, which meets Kuiu Island between Table Bay and Port Malmesbury, and the 160-170 baseline in Sitka Sound. In the southeast corner of the area, a line drawn from the 150-160 basepoint to Cape Ommaney completes the boundary.

- All contiguous waters north of a line bearing 240°/60° true through 56°05'N, 134°40'W; and
- South of a line bearing 241°/61° true through 56°58'N, 135°30'W; and
- West of
 - a line from 56°05'N, 134°40'W to the Cape Ommaney (56°09.8'N, 134°40.3'W); and
 - Baranof Island

Area 161

Area 161 includes the waters of Chatham Strait north of the 150-160 baseline and south of the 160-170 baseline.

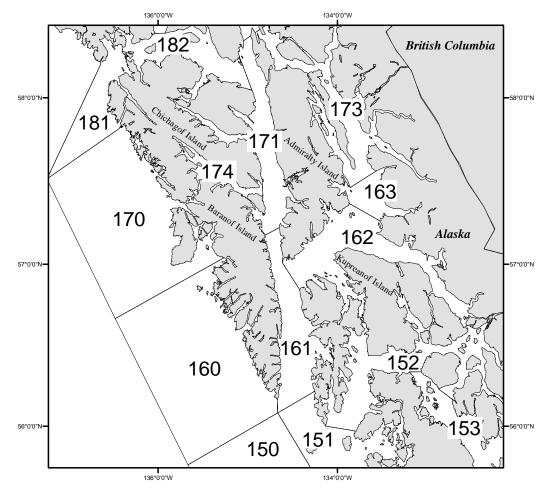


Figure 22. IPHC statistical areas at the northern extent of Regulatory Area 2C in southeast Alaska.

- All contiguous waters north of a line bearing 240°/60° true through 56°05'N, 134°40'W;
 and
- South of a line bearing 241°/61° true through 56°58'N, 135°30'W; and
- East of
 - Baranof Island; and
 - a line from 56°05'N, 134°40'W to the Cape Ommaney (56°09.8'N, 134°40.3'W); and
- West of
 - Admiralty Island; and
 - a line connecting Port Gardner light (57°00'36"N, 134°36'54"W) to the Kingsmill Pt. light (56°50'36"N, 134°25'12"W); and
 - Kuiu Island

Area 162 includes the waters of Frederick Sound and Keku Strait.

- All contiguous waters north of
- Kuiu Island; and
- a line from 56°40'N, 133°47.3'W to 56°40.8'N, 133°40'W across Keku Strait; and
- Kupreanof Island; and
- a line from 56°37.2'N, 133°00'W to 56°40'N, 132°51.1'W across Wrangell Narrows; and
- Mitkof Island; and
- a line from 56°34.2'N, 132°40'W to 56°37.47'N, 132°33.15'W across Dry Strait;
 and
- Dry Island; and
- a line from 56°40'N, 132°27.1'W to 56°46.6'N, 132°20W'; and
- South of
 - Admiralty Island; and
 - a line from False Point Pybus (57°22'N, 133°51.9'W) to McNairy Point (57°12.25'N, 133°20'W); and
 - the Alaska mainland from Cape Fanshaw, eastward; and
 - East of a line connecting Port Gardner light (57°00'36"N, 134°36'54"W) to the Kingsmill Pt. light (56°50'36"N, 134°25'12"W)

Area 163

Area 163 includes the waters off Point Hobart, east of Admiralty Island, south of the 160-170 baseline, and north of Frederick Sound. The area includes Gambier Bay.

- All contiguous waters north of a line from False Point Pybus (57°22'N, 133°51.9'W) to McNairy Point (57°12.25'N, 133°20'W); and
- South of a line bearing 241°/61° true through 56°58'N, 135°30'W, including Gambier Bay; and
- East of Admiralty Island

Area 170

Area 170 includes the waters west of Chichagof Island and Baranof Island that are between the 160-170 baseline and the 170-180 baseline. It includes Salisbury Sound and the northern portion of Sitka Sound.

- All contiguous waters north of a line bearing 241°/61° true through 56°58'N, 135°30'W; and
- South of a line bearing 235°/55° true through 57°49'N, 136°26'W; and

- West of
 - Chichagof Island; and
 - a line from 57°26'N, 135°36.7'W to 57°24'N, 135°33.4'W across Peril Strait;
 and
 - Baranof Island

Area 171 includes the section of Chatham Strait north of the 160-170 baseline and south of the 170-180 baseline at the Mouth of Lynn Canal. It is bounded on the west by a line connecting Point Augusta and Point Couverden and by a line marking the entrance to Peril Strait, between Point Hayes and Point Thatcher. It includes Tenakee Inlet, Freshwater Bay, and Kelp Bay.

- All contiguous waters north of a line bearing 241°/61° true through 56°58'N, 135°30'W, including Whitewater Bay; and
- South of a line bearing 235°/55° true through 57°49'N, 136°26'W; and
- West of Admiralty Island; and
- East of
 - a line from Point Couverden (58°11.4'N, 135°03.3'W) to the Point Augusta light (58°02'24"N, 134°57'06"W); and
 - · Chichagof Island and
 - a line from Point Thatcher (57°25'N, 134°49.9'W) to Point Hayes (57°28.8'N, 134°50.1'W) at the entrance of Peril Strait; and
 - Catherine Island and Baranof Island, including Kelp Bay

Area 173

Area 173 includes Stephens Passage and all adjacent waterways north of the 160-170 baseline, south of the 170-180 baseline at the mouth of Lynn Canal, and east of Admiralty Island. It includes Holkham Bay, Endicott Arm, and Taku Inlet.

- All contiguous waters north of a line bearing 241°/61° true through 56°58'N, 135°30'W, including Endicott Arm; excluding Gambier Bay; and
- South of a line bearing 235°/55° true through 57°49'N, 136°26'W; and
- East of Admiralty Island; and
- West of the Alaska Mainland

Area 174

Area 174 includes the waters of Hoonah Sound and Peril Strait between Chichagof Island and Baranof Island.

- All contiguous waters of Hoonah Sound and Peril Strait that are north of a line from 57°26'N, 135°36.7'W to 57°24'N, 135°33.4'W across the south-western Peril Strait entrance; and
- west of a line from Point Thatcher (57°25'N, 134°49.9'W) to Point Hayes (57°28.8'N, 134°50.1'W) at the east entrance of Peril Strait

Area 181

Area 181 includes the waters bounded by the 170-180 baseline, the 2C/3A area dividing line at Cape Spencer, and lines connecting Point Wimbledon, North Inian Pass light, and Point Lavinia light. It includes Cross Sound and all of Lisianski Inlet and Taylor Bay.

- All contiguous waters north of a line bearing 235°/55° true through 57°49'N, 136°26'W to Point Urey on Chichagof Island; and
- southeast of the Regulatory Area 2C-3A border defined as: a line running 340° true

from Cape Spencer Light (58°11'54"N, 136°38'24"W) and a line running 205° true from said light; and

- West of an irregular line from Point Wimbledon to Point Lavinia as denoted by connecting the following waypoints:
 - 58°20'N, 136°22.7'W
 - 58°16'18"N, 136°24'06"W (North Inian Pass light)
 - 58°14.8'N, 136°21.7'W
 - 58°14.6'N, 136°22.3'W
 - 58°14'N, 136°21.9'W
 - 58°13'18"N, 136°21'18"W (Point Lavinia light)

Area 182

Area 182 encompasses the waters of Icy Strait, including Dundas Bay, Excursion Inlet, and Port Frederick.

- All contiguous waters north of Chichagof Island that are west of a line from Point Couverden (58°11.4'N, 135°03.3'W) to the Point Augusta light (58°02'24"N, 134°57'06"W); and
- East of an irregular line from Point Wimbledon to Point Lavinia as denoted by connecting the following waypoints:
 - 58°20'N, 136°22.7'W
 - 58°16′18″N, 136°24′06″W (North Inian Pass light)
 - 58°14.8'N, 136°21.7'W
 - 58°14.6'N, 136°22.3'W
 - 58°14'N, 136°21.9'W
 - 58°13'18"N, 136°21'18"W (Point Lavinia light); and
 - South of a line from Point Carolus (58°22.7'N, 136°02.6'W) to Point Gustavus (58°22.8'N, 135°54.8'W)

For a visual representation of Areas 183 and 184, refer to Figure 23.

Area 183

Area 183 includes Lynn Canal and all adjacent waterways north of the 170-180 baseline.

 All contiguous waters of Lynn Canal that are north of a line bearing 235°/55° true through 57°49'N, 136°26'W

Area 184

Area 184 includes Glacier Bay and all adjacent inlets north of a line joining Point Carolus to Point Gustavus.

• All contiguous waters of Glacier Bay that are north of a line from Point Carolus (58°22.7'N, 136°02.6'W) to Point Gustavus (58°22.8'N, 135°54.8'W)

Gulf of Alaska: Regulatory Area 3A (Statistical Areas 185-281)

For visual representations of Areas 185 through 200, refer to Figures 24 and 25.

Area 185

Area 185 includes all waters between the 2C/3A dividing line and the 180-190 baseline at Lituya Bay.

• All contiguous waters west of a line running 340° true from Cape Spencer Light (58°11'54"N, 136°38'24"W) and north and west of a line running 205° true from said

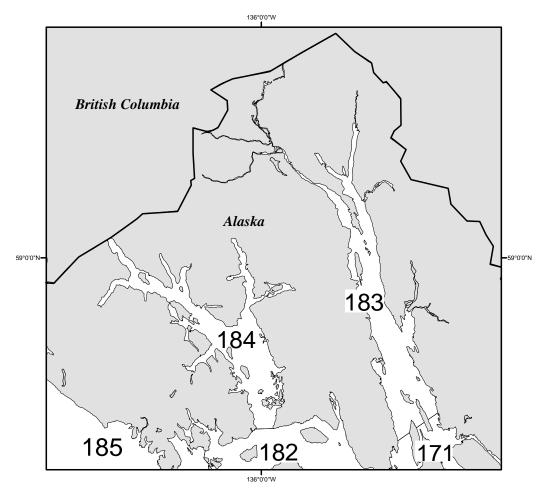


Figure 23. IPHC Statistical Areas 183 and 184 represent the Lynn Canal and Glacier Bay regions, respectively.

light; and

• East of a line bearing 224°/44° true that passes though 58°37'N, 137°43'W

Area 190

Area 190 encompasses all waters between the historical 180-190 baseline and the 190-200 baseline, which intersects the Alaskan coast between Akwe River and Dangerous River.

- All contiguous waters west of a line bearing 224°/44° true that passes though 58°37'N, 137°43'W; and
- East of a line bearing 213°/33° true that passes though 59°13'N, 139°10'W

Area 200

Area 200 includes all waters between the 190-200 baseline and the 200-210 baseline, which meets the Alaskan coast just west of Sitkagi Bluffs. It also includes all of Yakutat Bay and the adjacent fjords.

- All contiguous waters west of a line bearing 213°/33° true that passes though 59°13'N, 139°10'W; and
- East of a line bearing 200°/20° true that passes though 59°42'N, 140°55'W

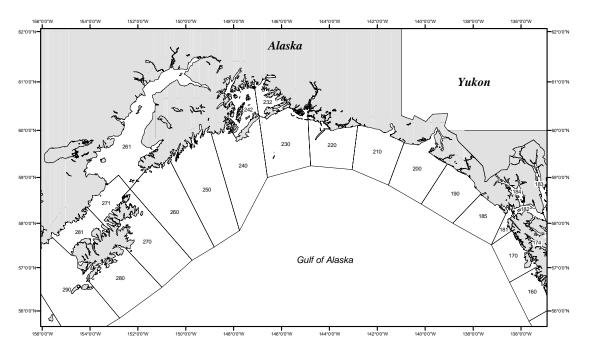


Figure 24. IPHC statistical areas of Regulatory Area 3A, which extends from Cape Spencer to the western end of Kodiak Island.

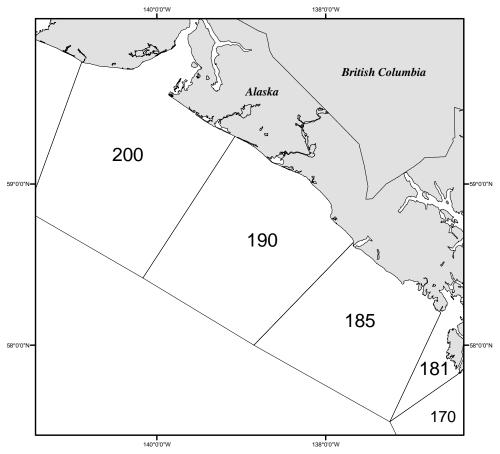


Figure 25. IPHC statistical areas in Regulatory Area 3A, whose eastern boundary coincides with the dividing line between Statistical Areas 181 and 185.

For a visual representation of Areas 210 and 220, refer to Figure 24.

Area 210

Area 210 encompasses all waters between the 200-210 baseline and the 210-220 baseline, which meets the Alaskan coast just west of Kaliakh River. It includes Icy Bay and the adjacent fjords.

- All contiguous waters west of a line bearing 200°/20° true that passes though 59°42'N, 140°55'W; and
- East of a line bearing 187°/07° true that passes though 59°56'N, 142°52'W

Area 220

Area 220 includes all waters between the 210-220 baseline and the 220-230 baseline at Cottonwood Point.

- All contiguous waters west of a line bearing 187°/07° true that passes though 59°56'N, 142°52'W; and
- East of a line bearing 177°/357° true that passes though 59°58'N, 144°52'W

For a visual representation of Areas 230 through 242, refer to Figure 26.

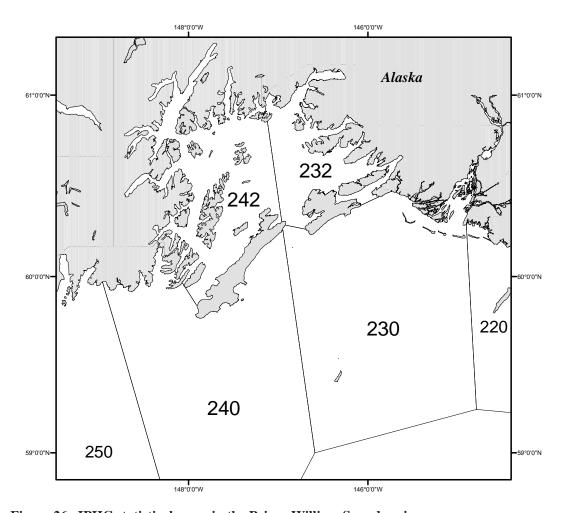


Figure 26. IPHC statistical areas in the Prince William Sound region.

Area 230 includes all waters between the 220-230 baseline and the 230-240 baseline at northeast Montague Island, excluding the waters of Prince William Sound.

- All contiguous waters west of a line bearing 177°/357° true that passes though 59°58'N, 144°52'W; and
- East of a line bearing 172°/352° true that passes though 59°52'N, 146°50'W; and
- South of
 - Montague Island; and
 - a line from 60°17.25'N, 146°55.25'W to 60°15.85'N, 146°41.55'W; and
 - Hinchinbrook Island; and
 - a line from Point Bentinck (60°23.65'N, 146°05.2'W) to Point Whitshed (60°26.65'N, 145°52.25'W)

Area 232

Area 232 includes the waters of Prince William Sound, and its adjacent inlets and ports, that are east of the 230-240 baseline.

- All contiguous waters of Prince William Sound that are east of a line bearing 172°/352° true that passes though 59°52'N, 146°50'W; and
- North of
 - Montague Island; and
 - a line from 60°17.25'N, 146°55.25'W to 60°15.85'N, 146°41.55'W; and
 - Hinchinbrook Island; and
 - a line from Point Bentinck (60°23.65'N, 146°05.2'W) to Point Whitshed (60°26.65'N, 145°52.25'W)

Area 240

Area 240 includes the waters between the 230-240 baseline and the 240-250 baseline at Whidbey Bay, excluding Prince William Sound.

- All contiguous waters west of a line bearing 172°/352° true that passes though 59°52'N, 146°50'W; and
- East of a line bearing 164°/344° true that passes though 59°40'N, 148°47'W; and
- South of
 - the Alaska mainland; and
 - a line from 60°07.3'N, 148°16'W to 59°50.45'N, 147°54.55'W, including Hogg Bay; and
 - Montague Island

Area 242

Area 242 includes the waters of Prince William Sound that are west of the 230-240 baseline.

- All contiguous waters of Prince William Sound that are west of a line bearing 172°/352° true that passes though 59°52'N, 146°50'W; and
- North of
 - a line from 60°07.3'N, 148°16'W to 59°50.45'N, 147°54.55'W, excluding Hogg Bay; and
 - Montague Island

Area 250

Area 250 encompasses the waters between the 240-250 baseline and the 250-260 baseline at Nuka Island, including all of Resurrection Bay and Nuka Bay (Fig. 24).

- All contiguous waters west of a line bearing 164°/344° true that passes though 59°40'N, 148°47'W; and
- East of a line bearing 153°/333° true that passes though 59°20'N, 150°38'W

For a visual representation of Areas 260 and 261, refer to Figure 27.

Area 260

Area 260 includes the waters south of the Kenai Peninsula between the 250-260 baseline and the 260-270 baseline in Stevenson Entrance. It includes Portlock Bank.

- All contiguous waters west of a line bearing 153°/333° true that passes though 59°20'N, 150°38'W; and
- East of a line bearing 139°/319° true that passes though 58°45'N, 152°20'W; and
- South of line connecting 58°45'N, 152°20'W to 59°09.9'N, 151°39.05'W

Area 261

Area 261 includes the waters of Cook Inlet, Kamishak Bay, and Kachemak Bay.

- All contiguous waters of Cook Inlet north of a line formed by connecting the following waypoints:
 - 58°50.95'N, 153°15.4'W (Cape Douglas)
 - 59°02.8'N, 152°48.7'W

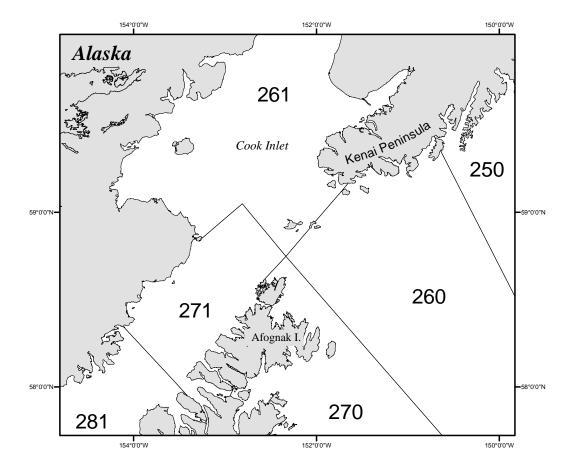


Figure 27. IPHC statistical areas in the vicinity of Cook Inlet, north of Afognak Island.

- 58°45'N, 152°20'W
- 59°09.9'N, 151°39.05'W

For a visual representation of Areas 270 through 281, refer to Figure 28.

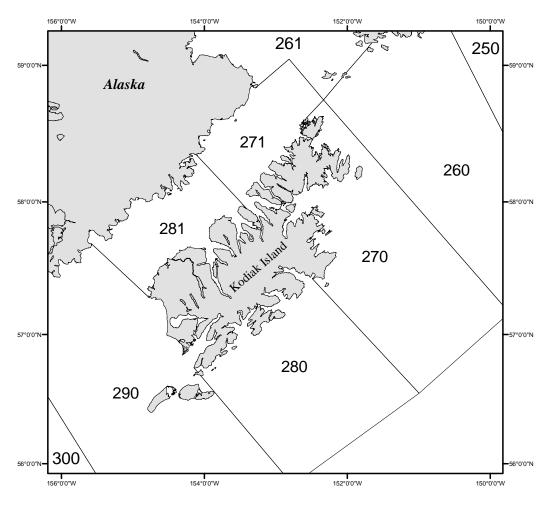


Figure 28. IPHC statistical areas around Kodiak Island. The boundary between Areas 280/281 and Area 290 coincides with the Regulatory Area 3A-3B boundary.

Area 270

Area 270 includes all waters between the 260-270 and 270-280 baselines bounded on the northwest by Shuyak Island, Afognak Island, and Kodiak Island. It includes Perenosa Bay, Marmot Bay, and Chiniak Bay.

- All contiguous waters west of a line bearing 139°/319° true that passes though 58°45'N, 152°20'W; and
- East of a line bearing 137°/317° true that passes though 58°03'N, 153°35'W; and
- South of
 - a line connecting 58°45'N, 152°20'W to 58°37.2'W, 152°34'W; and
 - Shuyak Island; and
 - a line connecting 58°28.3'N, 152°30'W to 58°27.9'W, 152°30'W across Shuyak

- Strait: and
- Afognak Island; and
- a line connecting 58°00.4'N, 152°53.5'W to 57°56.9'N, 152°56.75 across Kupreanof Strait; and
- Kodiak Island

Area 271 includes the portion of Shelikof Strait and adjacent waters that are west of the 260-270 baseline and east of the 270-280 baseline, which runs from the northern side of the entrance to Kukak Bay to Uganik Island. It includes all of Viekoda Bay and Terror Bay.

- All contiguous waters west of a line bearing 139°/319° true that passes though 58°45'N, 152°20'W; and
- East of a line bearing 137°/317° true that passes though 58°03'N, 153°35'W; and
- North of
 - a line connecting 58°45'N, 152°20'W to 58°37.2'W, 152°34'W; and
 - Shuyak Island; and
 - a line connecting 58°28.3'N, 152°30'W to 58°27.9'W, 152°30'W across Shuyak Strait; and
 - Afognak Island; and
 - a line connecting 58°00.4'N, 152°53.5'W to 57°56.9'N, 152°56.75 across Kupreanof Strait; and
 - Kodiak Island; and
- South of
 - the Alaska mainland; and
 - a line from Cape Douglas (58°50.95'N, 153°15.4'W) to 59°02.8'N, 152°48.7'W

Area 280

Area 280 includes the waters south of Kodiak Island, between the 270-280 baseline at Pasagshak Point and the 3A/3B dividing line, which meets Kodiak Island at Cape Trinity. It includes a large portion of Albatross Bank.

- All contiguous waters west of a line bearing 137°/317° true that passes though 58°03'N, 153°35'W; and
- East of a line bearing 140° true from Cape Trinity (56°44'50"N, 154°08'44"); and
- South of Kodiak Island

Area 281

Area 281 includes the portion of Shelikof Strait west of the 270-280 baseline and east of the 3A/3B dividing line, which is drawn between Cape Aklek and Cape Ikolik. It includes all of Uyak Bay and Uganik Bay.

- All contiguous waters west of a line bearing 137°/317° true that passes though 58°03'N, 153°35'W; and
- East of a line from Cape Aklek (57°41'15"N, 155°35'00"W) to Cape Ikolik (57°17'17"N, 154°47'18"W); and
- North of Kodiak Island

Alaska Peninsula: Regulatory Area 3B (Statistical Areas 290-340)

For a visual representation of Areas 290 through 310, refer to Figure 29.

Area 290

Area 290 encompasses the waters between the 3A/3B dividing line and the 290-300 baseline at Chiginagak Bay. It includes all of Alitak Bay, Olga Bay, Deadman Bay, and Portage Bay.

- All contiguous waters west of a line extending from the most northerly point on Cape Aklek (57°41'15"N, 155°35'00"W) to Cape Ikolik (57°17'17"N, 154°47'18"W), then along the Kodiak Island coastline to Cape Trinity (56°44'50"N, 154°08'44"), then 140° true; and
- East of a line bearing 148°/328° true that passes through 56°45'N, 156°27'W

Area 300

Area 300 includes all waters in the vicinity of the Semidi Islands, west of the 290-300 baseline, and east of the 300-310 baseline.

- All contiguous waters west of a line bearing 148°/328° true that passes though 56°45'N, 156°27'W: and
- East of a line bearing 151°/331° true that passes though 56°12'N, 158°01'W; and
- South of the Alaska Peninsula

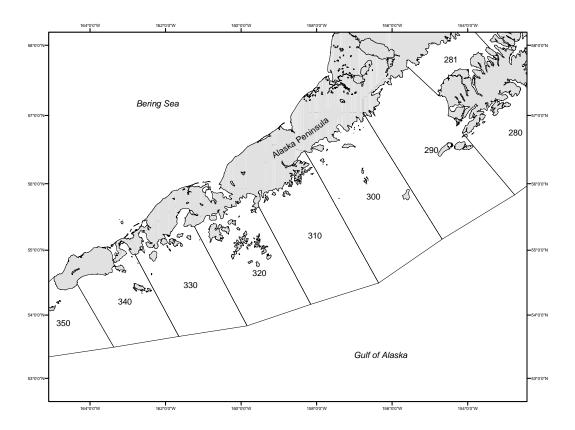


Figure 29. IPHC statistical areas in Regulatory Area 3B, which extends from western Kodiak Island to Unimak Island.

Area 310 includes all waters between Chignik Bay and Fox Cape, west of the 300-310 baseline and east of the 310-320 baseline.

- All contiguous waters west of a line bearing 151°/331° true that passes though 56°12'N, 158°01'W; and
- East of a line bearing 152°/332° true that passes though 55°43'N, 159°35'W; and
- South of the Alaska Peninsula

For a visual representation of Areas 320 through 340, refer to Figure 30.

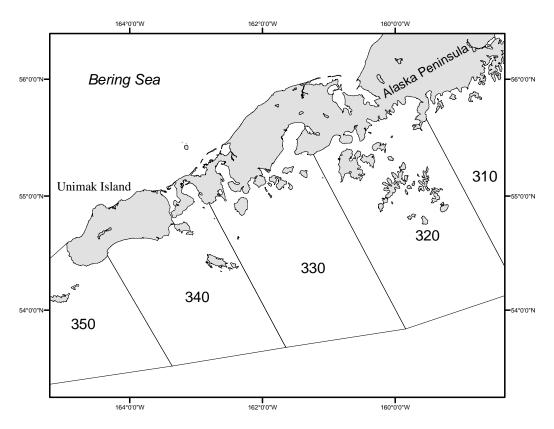


Figure 30. IPHC Statistical areas at the western end Regulatory Area 3B, whose boundary with Area 4A coincides with the 340-350 boundary line.

Area 320

Area 320 includes all waters west of the 310-320 baseline and east of the 320-330 baseline, between Fox Cape and a point just east of Seal Cape. It contains the Shumagin Islands.

- All contiguous waters west of a line bearing 152°/332° true that passes though 55°43'N, 159°35'W; and
- east of a line bearing 152°/332° true that passes though 55°15'N, 161°08'W; and
- South of the Alaska Peninsula

Area 330

Area 330 encompasses all waters west of the 320-330 baseline and east of the 330-340 baseline, between a point just east of Seal Cape and Sandy Cove. It includes all of Cold Bay and Pavlof Bay.

- All contiguous waters west of a line bearing 152°/332° true that passes though 55°15'N, 161°08'W: and
- East of a line bearing 152°/332° true that passes though 54°47'N, 162°40'W; and
- South of the Alaska Peninsula

Area 340 encompasses the waters between the 330-340 baseline, at Sandy Cove on the Alaskan Peninsula, and the 3B/4A dividing line at Cape Lutke. It is bounded on the north by the Alaskan Peninsula and Unimak Island. A line connecting the two islands is drawn across Isanotski Strait at 54°49'N.

- All contiguous waters west of a line bearing 152°/332° true that passes though 54°47'N, 162°40'W; and
- East of a line bearing 150° true from Cape Lutke (54°29'N, 164°20'W); and
- South of
 - the Alaska Peninsula; and
 - 54°49'N latitude in Isanotski Strait; and
 - Unimak Island

Aleutian-South: Regulatory Area 4A (Statistical Areas 350-395)

For a visual representation of Areas 350 through 370, refer to Figure 31.

Area 350

Area 350 includes the waters between Cape Lutke on Unimak Island and Battery Point on Akutan Island, west of the 340-350 baseline and east of the 350-360 baseline. The northern boundary is defined by lines connecting Cape Sarichef light to north Akun Island and southwest Akun Island to east Akutan Island.

- All contiguous waters west of a line bearing 150° true from Cape Lutke (54°29'N, 164°20'W); and
- East of a line bearing 152°/332° true that passes through 53°52'N, 165°43'W; and
- South of
 - a line from the Cape Sarichef light (54°35'57"N, 164°55'49"W) to 54°17.8'N, 165°30.1'W; and
 - Akun Island; and
 - a line from 58°08.4'N, 165°38.4'W to 54°07.65'N, 165°39.8'W across Akun Strait;
 - Akutan Island

Area 360

Area 360 includes the waters west of the 350-360 baseline and east of the 360-370 baseline, between Battery Point on Akutan Island and Tower Point on Unalaska Island. Akutan and Unalaska Islands define the northern boundary. A line that connects the south end of the former to Brundage Head on the latter represents the boundary between the Pacific Ocean and the Bering Sea.

- All contiguous waters west of a line bearing 152°/332° true that passes through 53°52'N, 165°43'W; and
- East of a line bearing 152°/332° true that passes through 53°23'N, 167°12'W; and
- South of
 - Akutan Island; and

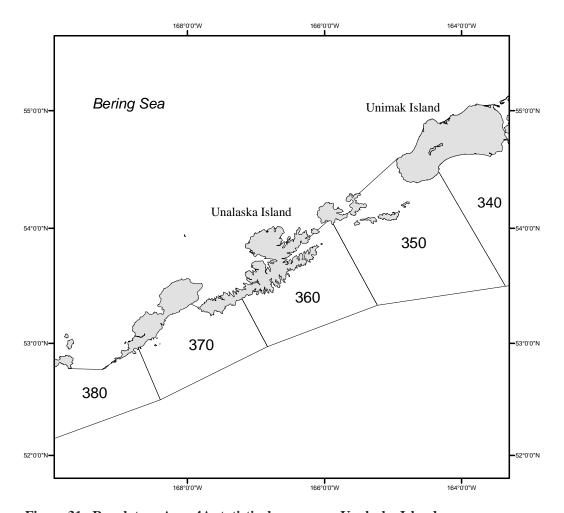


Figure 31. Regulatory Area 4A statistical areas near Unalaska Island.

- a line from 54°05.5'N, 164°54'W to 53°55.9'N, 166°12.3'W across Akutan Pass;
 and
- Unalaska Island

Area 370 includes the waters west of the 360-370 baseline and east of the the 370-380 baseline, between Tower Point on Unalaska Island and Traders Cove on Umnak Island. Unalaska and Umnak Islands define the northern boundary. The Bering Sea boundary lies within Umnak Pass.

- All contiguous waters west of a line bearing 152°/332° true that passes through 53°23'N, 167°12'W; and
- East of a line bearing 157°/337° true that passes through 52°56'N, 168°42'W; and
- South of
 - Unalaska Island; and
 - a line from 53°20.7'N, 167°57.2'W to 53°19.1'N, 167°51.2'W across Umnak Pass;
 and
 - Umnak Island

Areas 380 – 400

The northern boundaries of these four areas are at least partially defined by a line drawn from

Chuginadak Island to Finch Point on Seguam Island. This line, defined as being a loxodrome passing through 52°51.5'N, 169°43.5'W and 52°44.8'N, 170°22.3'W, will be referred to here as the CI-SI line (Fig 32).

Area 380

Area 380 includes the waters west of the 370-380 baseline and east of the the 380-390 baseline, between Traders Cove on Umnak Island and a point between Yunaska and Herbert Islands. The northern boundary runs along the coastline from southwest Umnak Island to southwest Samalga Island and across Samalga Pass to Concord Point on Chuginadak Island along the CI-SI line.

- All contiguous waters west of a line bearing 157°/337° true that passes through 52°56'N, 168°42'W; and
- East of a line bearing 161°/341° true that passes through 52°32'N, 170°15'W; and
- South of
 - Umnak Island; and
 - a line from Cape Sagak (52°49.3'N, 169°7.1'W) to Samalga Island (52°48.2'N, 169°9.8'W
 - Samalga Island; and
 - a line from SW Samalga Island 52°46.2'N, 169°15'W Concord Point (52°46.5'N, 169°43.5'W) across Samalga Pass; and

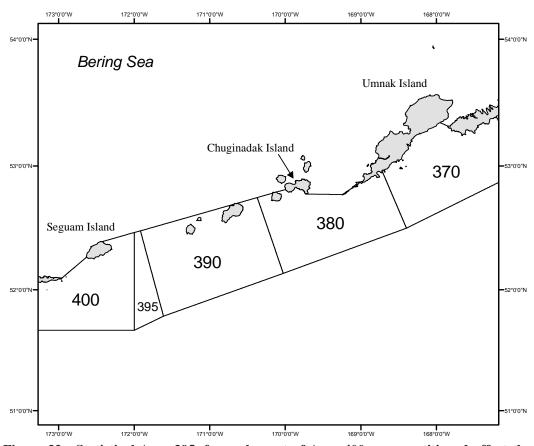


Figure 32. Statistical Area 395, formerly part of Area 400, was partitioned off at the Regulatory 4A/4B boundary at 172°W longitude. Also illustrated is the Chuginadak Island-Seguam Island (CI-SI) boundary at the northern side of Areas 380 through 400.

- Chuginadak Island; and
- a line that passes through both 52°51.5'N, 169°43.5'W and 52°44.8'N, 170°22.3'W

Area 390 includes the waters west of the 380-390 baseline and east of the the 390-400 baseline, from a point between Yunaska and Herbert Islands to the middle of Amukta Pass. The northern boundary is completely defined by the CI-SI line.

- All contiguous waters west of a line bearing 161°/341° true that passes through 52°32'N, 170°15'W; and
- East of a line bearing 165°/345° true that passes through 52°15'N, 171°49'W; and
- South of a line that passes through 52°48.8'N, 170°22.3'W and 52°28.7'N, 171°55'W

Area 395

Area 395 includes waters west of the 390-400 baseline, east of the Regulatory Area 4A/4B boundary, and south of the CI-SI line. The previous definition of Statistical Area 400 straddled the Regulatory Area 4A/4B line. In order to provide more accurate data summaries by regulatory area, the Area 4A portion of Statistical Area 400 was separated from the Area 4B portion. The 4A portion was classified as Area 395, while the 4B portion remained Area 400. Area 395 was introduced in 2003.

- All contiguous waters west of a line bearing 165°/345° true that passes through 52°15'N, 171°49'W; and
- East of 172°00'W longitude; and
- South of a line that passes through 52°28.7'N, 171°55'W and 52°27.9'N, 172°00'W

Aleutian-South: Regulatory Area 4B (Statistical Areas 400-510)

For a visual representation of Areas 400 through 420, refer to Figure 33.

Area 400

Area 400 includes the waters west of the Regulatory Area 4A/4B boundary at 172°W-longitude and east of the 400-410 baseline, between the middle of Amukta Pass and Sviechnikof Harbor on Amlia Island. The northern boundary is defined by the CI-SI line and by a line from southwest Seguam Island to east Amlia Island..

- All contiguous waters west of 172°00'W longitude; and
- East of a line bearing 169°/349° true that passes through 52°02'N, 173°23'W; and
- South of
 - a line from 52°27.9'N, 172°00'W to 52°23.3'N, 172°26.25'W; and
 - Seguam Island; and
 - a line from 52°15.8'N, 172°38'W to 52°05.8'N, 172°57.2'W across Seguam Pass;
 and
 - Amlia Island

Area 410

Area 410 includes the waters west of the 400-410 baseline and east of the 410-420 baseline, between Sviechnikof Harbor on Amlia Island and a point just west of Sergief Bay on Atka Island. The northern boundary is defined by Amlia and Atka Islands, and by a line drawn from the western end of the former to the south-eastern tip of the latter.

• All contiguous waters west of a line bearing 169°/349° true that passes through 52°02'N, 173°23'W; and

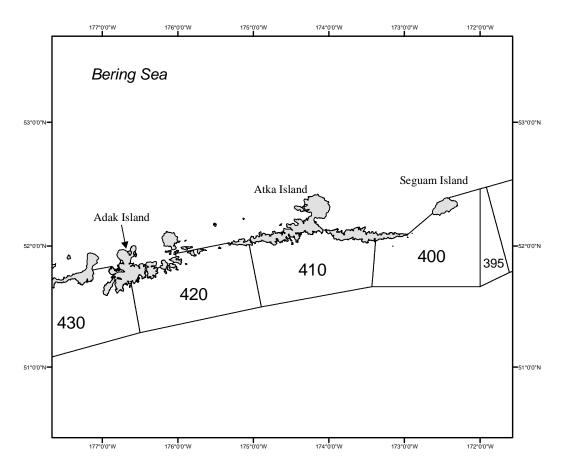


Figure 33. IPHC statistical areas at the eastern extent of Regulatory 4B.

- East of a line bearing 169°/349° true that passes through 51°50'N, 175°00'W; and
- South of
 - Amlia Island; and
 - a line connecting 52°07.9'N, 174°03'W to 52°07.8'N, 174°05'W across Amlia Pass; and
 - Atka Island

Area 420 includes the waters west of the 410-420 baseline and east of the 420-430 baseline, between a point just west of Sergief Bay on Atka Island and the center of Adak Island. The northern boundary is defined by lines connecting Cape Kigun, on the western end of Atka Island; Kanu Island; Umak Island; Little Tanaga Island; Kagalaska Island and east Adak Island.

- All contiguous waters west of a line bearing 169°/349° true that passes through 51°50'N, 175°00'W; and
- East of a line bearing 170°/350° true that passes through 51°38'N, 176°36'W; and
- South of
 - Atka Island; and
 - a line connecting Cape Kigun (52°01.4'N, 175°20.5'W) to Kanu Island (51°56.3'N, 176°01.9'W) to Umak Island (51°54.75'N, 176°01.25'W); and
 - Umak Island: and
 - a line connecting 51°51.8'N, 176°03.5'W to 51°51.3'N, 176°04.25'W; and

- Little Tanaga Island; and
- a line connecting 51°49.6'N, 176°14.2'W to 51°49.2'N, 176°16'W; and
- Kagalaska Island; and
- a line connecting 51°47.8'N, 176°24.8'W to 51°47.65'N, 176°25.3'W; and
- Adak Island

Areas 430 – 450

The northern boundaries of these three areas are partially or wholly defined by a line drawn from Cape Amagalik on Tanaga Island to Aleut Point on Amchitka Island. Referred to here as the CA-AP line, the boundary is defined as a loxodrome that passes through both 51°40.7'N, 178°07.25'W and 51°40.5'N, 178°14.75'W (Fig. 34).

Area 430

Area 430 includes the waters west of the 420-430 baseline and east of the 430-440 baseline, between the central coast of Adak Island and Tanaga Pass. The northern boundary is partially formed by the southern coastlines of Adak Island, Kanaga Island, and Tanaga Island and by the CA-AP line.

- All contiguous waters west of a line bearing 170°/350° true that passes through 51°38'N, 176°36'W; and
- East of a line bearing 175°/355° true that passes through 51°28'N, 178°13'W; and
- South of

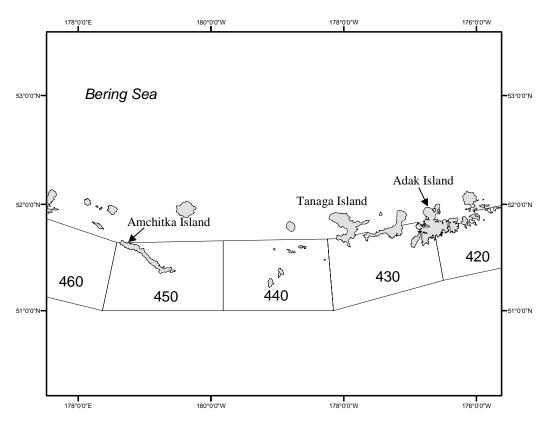


Figure 34. The shared Cape Amagalik-Aleut Point (CA-AP) line between Tanaga Island and Amchitka Island, which partially or wholly defines the northern boundary of Areas 430, 440, and 450, is illustrated.

- Adak Island; and
- a line connecting 51°49.25'N, 176°52.05'W to 51°50'N, 176°52.3'W to 51°48.2'N, 177°07.9'W; and
- Kanaga Island; and
- a line connecting 51°44.3'N, 177°38.6'W to 51°42.8'N, 177°49.9'W; and
- Tanaga Island; and
- a line which passes through 51°40.7'N, 178°07.25'W and 51°40.5'N, 178°14.75'W

Area 440 includes the waters west of the 430-440 baseline and east of the 440-450 baseline, between Tanaga Pass and the center of Amchitka Pass. The northern boundary is completely defined by the CA-AP line.

- All contiguous waters west of a line bearing 175°/355° true that passes through 51°28'N, 178°13'W; and
- East of a line bearing 180°/00° true that passes through 51°25'N, 179°49'W; and
- South of a line passing through 51°40.5'N, 178°14.75'W and 51°39.5'N, 179°49'W

Areas 450 – 490

The northern boundaries of these five areas are partially or wholly defined by a loxodrome connecting Aleut Point on Amchitka Island (51°38.25'N, 178°37.1'E) to Krasni Point on Attu Island (52°46.85'N, 173°07'E). This boundary will be referred to here as the AP-KP line.

For a visual representation of Areas 450 through 490, refer to Figure 35.

Area 450

Area 450 includes the waters west of the 440-450 baseline and east of the 450-460 baseline, between the center of Amchitka Pass and the western tip of Amchitka Island. The northern boundary is defined by the CA-AP, AP-KP lines.

- All contiguous waters west of a line bearing 180°/00° true that passes through 51°25'N, 179°49'W; and
- East of a line bearing 192°/12° true that passes through 51°33'N, 178°33'E; and
- South of a line connecting 51°39.5'N, 179°49'W to 51°38.25'N, 178°37.1'E to 52°46.85'N, 173°07'E

Area 460

Area 460 includes the waters west of the 450-460 baseline and east of the 460-470 baseline, between the western tip of Amchitka Island and a location just west of Kiska Island. The northern boundary is completely defined by the AP-KP line.

- All contiguous waters west of a line bearing 192°/12° true that passes through 51°33'N, 178°33'E; and
- East of a line bearing 197°/17° true that passes through 51°47'N, 177°00'E; and
- South of a line connecting 51°38.25'N, 178°37.1'E to 52°46.85'N, 173°07'E

Area 470

Area 470 includes the waters west of the 460-470 baseline and east of the 470-480 baseline, between a location just west of Kiska Island and one southwest of Buldir Island. The northern boundary is completely defined by the AP-KP line.

• All contiguous waters west of a line bearing 197°/17° true that passes through 51°47'N,

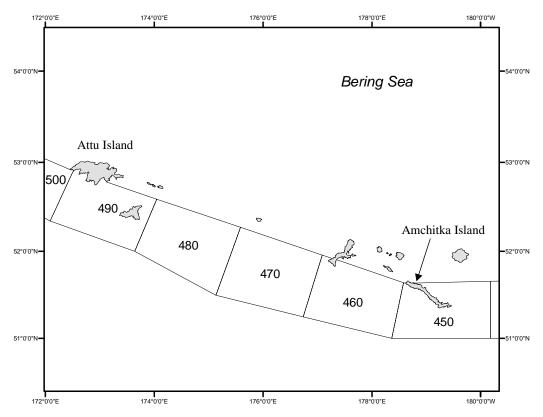


Figure 35. The Aleut Point-Krasni Point (AP-KP) boundary line from Amchitka Island to Attu Island shared by Statistical Areas 450 through 490 is illustrated.

177°00'E; and

- East of a line bearing 200°/20° true that passes through 52°06'N, 175°29'E; and
- South of a line connecting 51°38.25'N, 178°37.1'E to 52°46.85'N, 173°07'E

Area 480

Area 480 includes the waters west of the 470-480 baseline and east of the 480-490 baseline, between a location southwest of Buldir Island and one south of the Semichi Islands. The northern boundary is completely defined by the AP-KP line.

- All contiguous waters west of a line bearing 200°/20° true that passes through 52°06'N, 175°29'E; and
- East of a line bearing 203°/23° true that passes through 52°27'N, 173°57'E; and
- South of a line connecting 51°38.25'N, 178°37.1'E to 52°46.85'N, 173°07'E

For a visual representation of Areas 490 through 510, refer to Figure 36.

Area 490

Area 490 includes the waters west of the 480-490 baseline and east of the 490-500 baseline, between the Semichi Islands and Etienne Head on Attu Island. The northern boundary is defined by the AP-KP line and Attu Island.

- All contiguous waters west of a line bearing 203°/23° true that passes through 52°27'N, 173°57'E; and
- East of a line bearing 205°/25° true that passes through 52°52'N, 172°29'E; and
- South of

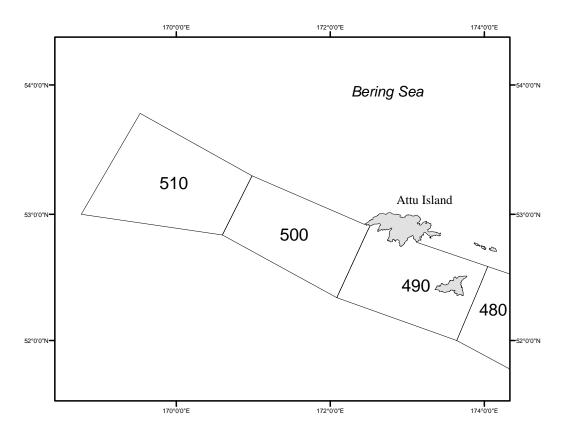


Figure 36. IPHC statistical areas near Attu Island and Russian territorial waters.

- a line connecting 51°38.25'N, 178°37.1'E to 52°46.85'N, 173°07'E to 52°47.05'N, 173°07'E; and
- Attu Island

Area 500 includes the waters west of the 490-500 baseline and east of the 500-510 baseline, between Attu Island and Stalemate Bank. The northern boundary is defined by a line drawn from Cape Wrangell to the 500-510 basepoint.

- All contiguous waters west of a line bearing 205°/25° true that passes through 52°52'N, 172°29'E; and
- East of a line bearing 207°/27° true that passes through 53°18'N, 170°59'E; and
- South of
 - · Attu Island; and
 - a line from Cape Wrangell 52°55.25'N, 172°26.6'E to 53°18'N, 170°59'E

Area 510

Area 510 includes the waters west of the 500-510 baseline and east of the 510-520 baseline, from Stalemate Bank to the eastern extent of Russian territorial waters. The northern boundary is defined by a line drawn from the 500-510 basepoint to the 510-520 basepoint.

- All contiguous waters west of a line bearing 207°/27° true that passes through 53°18'N, 170°59'E; and
- East of a line bearing 210°/30 true that passes through 53°47'N, 169°32'E; and
- South of a line connecting 52°18'N, 170°59'E to 53°47'N, 169°32'E

Bering Sea: Regulatory Areas 4A, 4B, 4C, 4D, and 4E

All waters north of the Alaska Peninsula and north of the Aleutian Islands that are subject to the Halibut Convention of 1923 and its subsequent revisions (Bell 1966, McCaughran and Hoag, 1992) are categorised as Bering Sea statistical areas. These statistical areas are grid-based. With one exception, each statistical area measures one degree of longitude in the east-west direction, and thirty minutes in the north-south direction and is assigned a six-digit designation (Fig. 37). The exception to this rule lies between latitudes 56°00'N and 57°00'N, outside the Bering Sea Closed Area, at the northern boundary of Regulatory Areas 4A and 4B (southern boundary of Areas 4C and 4D). To facilitate the aggregation of statistical area data into regulatory area groupings, the statistical area boundary was made to coincide with the regulatory area boundary. The grid line boundary, therefore, is 56°20'N rather than 56°30'N.

The six-digit naming convention is based on the location of the area. The first two digits represent degrees of latitude; the third digit represents a 30-minute interval of latitude (0 if the statistical area is the 00'-29'N interval, 3 if it is the 30'-59'N interval); and the last three digits represent degrees of longitude. In the case of the exception, the third digit of the statistical area designation represents an unequal interval of latitude: 0 for 56°00'N-56°19'N, 3 for 56°20'N-56°59'N.

The degrees of longitude in the western hemisphere are distinguished from those in the eastern hemisphere by adding 100 to the degree value west of 180°W (e.g. 176°00'E-176°59'E is represented by 276 in the six-digit code). Figure 37 gives an example of the six-digit statistical area.

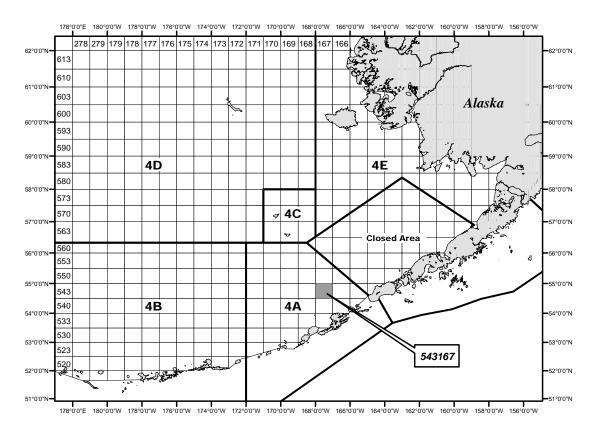


Figure 37. The six-digit Bering Sea statistical area grid with Regulatory Area 4 boundaries superimposed.

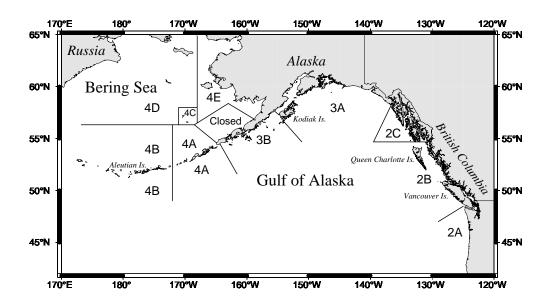
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Appendix I. International Pacific Halibut Commission regulatory areas, 1999-2004.



Appendix II.Comparison of IPHC I/O statistical areas to all IPHC statistical areas excluding Regulatory Area 4.

Regulatory Area	I/O statistical areas and historical numbering	Statistical areas prior to 1992	Current statistical area numbering
2A	00	00	009,008,007,006,
	01	010	010
	02	020	020
	03	030	030
	04	040	040
	05	050, 051	050
2B	06	060	060, 061
	07	070	070, 071
	08	080, 081	080, 081
	09-O	090	090
	09-I	091, 092	091, 092
	10-O	100	100
	10-I	101, 102, 103	102, 103
	11-0	110	110
	11-I	111, 112,113, 114	112, 114
	12-O	120	120
	12-I	121, 122	121, 122
	13-O	130, 131	130, 131
	13-I	132, 133, 134, 135 ¹	132, 133, 134, 135 ¹
2C	14-0	140	140
	14-I	141, 142, 143, 144	141, 142, 143, 144
	15-O	150	150
	15-I	151, 152,153	151, 152,153
	16-O	160	160
	16-I	161, 162, 163	161, 162, 163
	17-O	170	170
	17-G	171,172, 173, 174	171, 173, 174
	18S-O	181	181
	18S-I	182, 183	182, 183, 184
3A	18W	185	185
SA	19 19	190	190
	20		200
		200	
	21	210	210
	22	220	220
	23	230, 231, 232	230, 232
	24	240, 241, 242	240, 242
	25	250, 251	250
	26	260, 261	260, 261
	27 ²	270, 271, 272	270, 271
	28	280, 281	280, 281
3B	29	290, 291	290
	30	300	300
	31	310	310
	32	320	320
	33	330	330
	34 ea 135, previously Statistical Area 142	340	340

¹ in 1999, Statistical Area 135, previously Statistical Area 142 and Nation 2

Appendix III.Common names of fishing grounds with a general description of locations and the current IPHC statistical area.

Fishing Area	Location	Current IPHC Statistical Area
Alaska Spot	36 mi. NE, ¼ N of Ramsay I.	112
American Spot	Cape Scott Flats	091
Anchor Flats	12 mi. off Haycock I.	133
Anna J Spot	Pt. Marsh and NW end of Long I.	142
Art's Spot	7 mi. S x W Zayas I.	133
Albatross Bank	Between Scudder Pt. and Ramsay I.	112
Albatross Gully (approximate)	70 mi. east of Spruce I., Marmot Bay	260
Big Creek	SE of Cape Fanshaw	162
Black Rock	Near Cape St. James	112
Bluenose Spot	13 mi. NW of Tow Hill	132
Bob's Spot	Freeman Pass	121
Bohunk Spot	8 mi. S x W of Cape Swain	102
Brandy Spot	Bonilla I. NE ½ E	121
Bravo Spot	15 mi. off Redfish Cape	160
Bumpas Spot	22 mi. WSW of Bonilla I.	121
Bumper Spot	S x W of White Rocks	121
Burns Spot	5 mi. SW of Bonilla I.	121
Brandy Spot	14 mi. SW of Bonilla	121
Cape Flattery Spot	44 mi. SW x S 3/4 S of Cape Flattery	050
Cape Spear Spot	9 mi. S 1/2 W Seal Rocks	133
Chancellor Spot	34 mi. NE of Reef I.	112
Chicken Patch	Goose I., inside of Gravel Ground	102
Church Pt.		113
Condor Spot	4 mi. E of West Devil Rocks	135/142
Compass Spot	7 mi. SW of Cape Spencer	185
Deep Hole	6 mi. E of Brothers	163
Deep Hole	Portlock	260
Dog Cove	20 mi. from White Rocks	121
Dolphin Spot	3 mi. off Bonilla I.	121
Dry Bay	Stephens Passage	173
Ducher I.	Otter Pass	114
Dust Hole	Inside Cape Bartolome	141
Edith Harbor	Dundas I.	133
Eidsvold Spot	16 mi. N x E 1/2 E of Garcin Rocks	112
Fairweather Peak	Loran 6-3380 – 7-5910	190
Fairweather Channel Ground	32 mi. WSW of Lituya Bay	190
40 (Forty) Mile Bank	Same as La Perouse Bank	060

Appendix III. continued

France Bay	Near Inskip Channel	120
Freya Ground	NE corner of Goose I.	102
Gibson Spot	Near Celestial Reef	133
Graveyard	5 mi. E of Turnabout I.	162
Graveyard	48 mi. E of Cape Barnabas	280
Gravel Ground	37 mi SW 3/4 S of S end of Goose I.	102
Hog Bank	14 mi. off Hippa I.	130
Hog Bristles	Off Rennell Sound	130
Hogsback	7 mi. SW of Hippa I.	130
Horseshoe	28 mi. SSE of Bonilla I.	112
Kincolith Spot	Near La Perouse Rock	130
Kodiak Spot	24 mi. NE ½ E of Reef I.	112
Lancing Spot	SW of Timbered I. Edge	150
Last Chance Harbor	Frederick Sound	162
Lindy Hole	35 mi. SE of Gore Pt.	260
Lumen Spot		135/142
Manhattan Ground (approximate)	Loran-A 1L7-2100 – 1L6-3120	260
Mary's Spot	25 mi. SSE of Destruction I.	050
Mexico Spot	30 mi. SSW of Coronation I.	150
Middle Ground	43 mi. SW of Day Pt.	102
Middle Ground	Cape Fanshaw	162
Mike Meagher's Spot	2 mi. off Shrub I.	112
Mingo Spot	Off Naden Harbour	132
M.M. Christopher	8 mi. NWN of Tow Hill	132
Muscle Ground	9 mi. SW of Seal Rocks	133
North Bank	Close to Swiftsure Lightship	060
North Pass	North side of Inian I.	182
Ole Spot	Cumshewa Head NE x NE 23 mi.	121
Onah Spot	Off Pt. Marsh	142
Orbit Spot	Goose I.	102
Prairie	Off Cape Flattery	060
Race Track	W side of Horseshoe Ground	112
Rock Pile	32 mi. SWx S ½ S of S end of Goose I.	102
Rocky Spit	S x E ¼ E 43 mi. of Cape Yakataga	210
Schooner Ground	22 mi. WNW of Cape Scott	091
Schooner I.	Frederick Sound	162
Seven Mile Pt.	Wiah Pt	132
72 Spot	Goose I.	102
Shark Ridge	Off Cape Chacon	142
Shell Ground	Goose I.	102

Appendix III. continued

Sitka Spot	7 mi. WNW of Rose Spit	132
Slide Ground	18 mi. SW x S of S end of Goose I.	102
South Bank	32 mi. SSW of Cape Flattery	050
South Pass	South side of Inian I.	182
Steamboat Ground	27 mi. WNW of Cape Scott	091
Swart Olson Spot	S of Biorka I.	160
Sylvia Spot	16 mi. E ¾ N of Cape St. James	102
Tundra Spot	Lynn Sisters	183
Thelma Spot	Goose I.	102
Thelma Spot	12 mi. W of Cape Spencer	180
Toodie Spot	Off Zayas I.	133
Tillikum Spot	NE Bight of Gravel Ground	102
Tundra Spot	Lynn Sisters	183
Uranus Spot	18 mi. NE ¼ N of Ramsay I.	112
Venus Ground	S x W 20 mi. of Oval Hill	133
Wilson Spot	29 mi. E x N of Cape St. James	102
Whaleback	22 mi. SW of North I.	131
W Ground	45 mi. E x N ½ N of Cape St. James	220
Woodland	Tow Hill	132
Yankee Ground	Off Cape Scott	091

Appendix IV: Geographic and Geodatabase Sources

(US border definitions) Federal Register, Vol. 60, No. 163, August 23, 1995. http://www.gpo.gov/su_docs/aces/aces140.html

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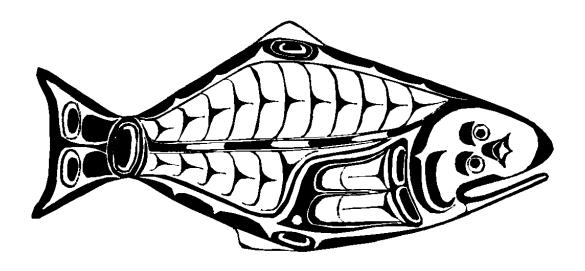
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http://www.maproom.psu.edu/dcw/



Halibut Crest - adapted from designs used by Tlingit, Tsimshian, and Haida Indians