

IPHC-2019-FISS-BID01

2019 IPHC Fishery-Independent Setline Surveys (FISS) Vessel Bid Specifications

PREPARED BY: IPHC SECRETARIAT (28 DECEMBER 2018)

The International Pacific Halibut Commission (IPHC) is requesting bids from commercial fishing and research vessels to perform fishery-independent setline survey (FISS) charters during the summer of 2019 to collect information required as part of the IPHC's annual stock assessment. This information is used to study aspects of the Pacific halibut stock, such as growth, distribution, area-wide biomass, age composition, sexual maturity, and relative abundance of associated bycatch species.

The 2019 FISS will cover 29 charter regions within the IPHC Regulatory Areas from Oregon to the northern Bering Sea including the Aleutian Islands (Figure 1). Individual region charts are included with this package. All areas are open for single-year contracts. Vessels will fish seven (7) skates of gear at each station (except eight (8) skates in IPHC Regulatory Areas 2A and parts of 4CDE) following standard FISS protocols. A maximum of four (4) stations will be permitted per day. Generally, each charter region will require between seven (7) and 35 actual fishing days to complete. The total charter duration including port, offload, weather and run days is expected to take 20 to 25 days in IPHC Regulatory Areas 2B and 2C, and between 25 to 40 days in Areas 2A, 3A, 3B and 4 (Table 1).

The IPHC has added additional expansion stations to the FISS in IPHC Regulatory Areas 3A and 3B for 2019. Additional stations will range in depth from 10 fm - 400 fm (~18-730 m), extending beyond the standardized FISS depth range of 20-275 fm (~36-503 m). These additional FISS stations will expand the geographic range in the Gulf of Alaska out to Sanak Island. Details on this work can be found in Appendix I.

The IPHC will also be undertaking a gear comparison experiment in IPHC Regulatory Area 2C during the FISS to compare the performance of fixed-hook gear and snap gear in use by the directed commercial fleet. The comparison is required to evaluate whether data from both gear types in use by the directed commercial fleet, can be used in the IPHC stock assessment process, and to inform comparisons between the FISS and the directed commercial fleet. Details on this work and how to bid with a vessel running snap gear can be found in <u>Appendix II</u>.

Vessels can be awarded up to four (4) charter regions at the discretion of the IPHC Secretariat, based on demonstrated fishing history and scheduling considerations. All fishing operations must be completed between 26 May and 31 August 2019. The IPHC **will actively schedule** vessels to meet FISS and personnel needs.

It is essential that you clearly indicate your available timeframe in your bid(s), as preference may be given to vessels with greater scheduling flexibility and ability to take two (2) to three (3) IPHC Secretariat staff.

Legal-sized (O32) Pacific halibut and some bycatch will be retained from FISS operations and become the property of the IPHC. Fish are sold to offset the expenses incurred during FISS operations. Typically, vessels receive a lump sum payment upon the completion of each charter region, as well as 10% of the net Pacific halibut sales, and 50% of the net bycatch sales.

Vessels are reminded to carefully consider all costs associated with performing the work over the time frame of the bid, and to budget these costs into their proposal(s). Please be aware of the changes to the FISS description for 2019 (Section A) when comparing past bid prices.

Bids must be emailed (pdf) to the IPHC Secretariat at secretariat@iphc.int no 15 February 2019.

NOTE this year's deadline is earlier than previous deadlines

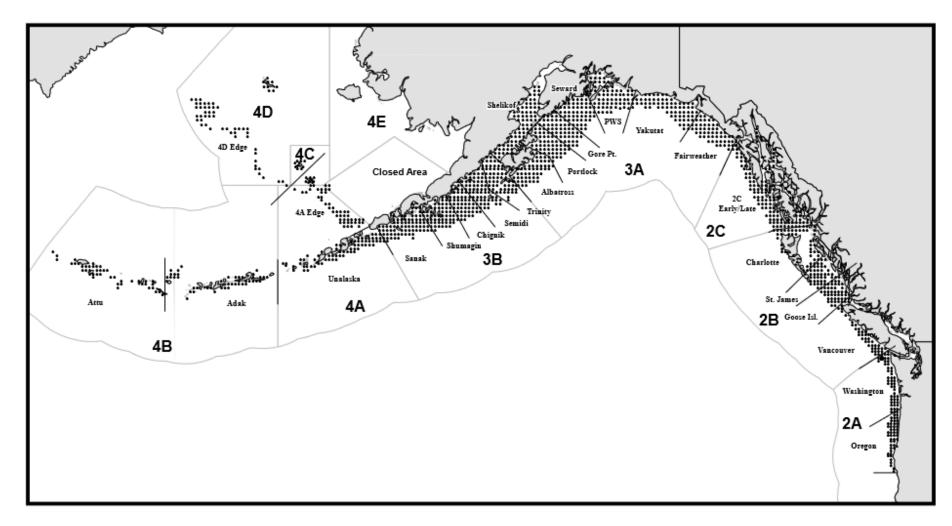


Figure 1. 2019 FISS stations by charter region and IPHC Regulatory Area.]

A. IMPORTANT for 2019

Several substantial changes in the scope of the FISS work will occur in 2019.

General Operations

- 1. The IPHC is requesting bids for single-year contracts for all charter regions.
- 2. IPHC Regulatory Area 2C work will require BOTH fixed-hook and snap gear to satisfy project requirements.
- 3. Bids are to be based on seven (7) **skates** of gear per FISS station in all charter regions except:
 - a. IPHC Regulatory Area 2A FISS stations require eight (8) skates
 - b. IPHC Regulatory Area 4D edge charter region FISS stations require eight (8) skates.
- 4. A maximum of four (4) stations fished per day is permitted.
- 5. Customs and brokerage requirements and fees are listed in Appendix III.
- 6. Codified procedures regarding protected species interaction avoidance and mitigation (see Appendix IV).

Special Projects

Multiple Areas:

- 1. **Some charter regions:** (**TBA**) Approximately 150 Pacific halibut will be tagged and released coastwide with a combination of electronic archival tags and pop-up archival transmitting (PAT) tags. All of the archival tagged Pacific halibut will be sublegal (U32, < 83 cm) and would otherwise be tagged and released with wire tags as per Item #4 (below), and therefore will not affect revenue share or vessel operations. Status: Ongoing.
- 2. **All charter regions:** The first five (5) spiny dogfish shark (*Squalus suckleyi*) in IPHC Regulatory Areas 2A, 2B, 2C, 3A, 3B, and all dogfish in IPHC Regulatory Area 4 will be brought aboard for length and sex data collection prior to live release. Partner agency: National Oceanic and Atmospheric Association (NOAA) Fisheries. Status: Ongoing.
- 3. **All charter regions:** FISS vessel is required to carry a motion compensating scale (2 ft x 2 ft) capable of weighing Pacific halibut as large as 200 lbs. A subsample of Pacific halibut to be weighed round, freshly gutted, and again during the offload event. The vessel working in Portlock (and any other areas completed by that vessel) will also be required to carry a third sampler to assist in the collection of samples to assess Pacific halibut condition including blood and tissue that will require refrigerator or freezer space. Vessel crews are expected to help facilitate the equipment set up and possibly help with moving large Pacific halibut for sampling. Status: Ongoing.
- 4. Charter regions in IPHC Regulatory Areas 2B, 2C, 3A, 3B, and 4A: A subsample of U32 Pacific halibut will be wire tagged and released. The tagging rate will be low enough that a third sampler will not be necessary. The goal is 500 tags per IPHC Regulatory Area. Status: Ongoing.
- 5. **IPHC Regulatory Area 2C early/late and Fairweather charter regions:** Some FISS vessels operating in these charter regions will be asked to deploy and tow a hydrophone array for marine mammal monitoring at regular transit speeds (6-8 knots) while traveling between

survey stations. A typical towed hydrophone array consists of two (2) or more pairs of hydrophones within a streamlined housing that are towed on a strengthened cable of 100 m in length. The cable can be deployed and retrieved by hand by a crew member, and is stored in a bucket when the vessel is not in transit. A control computer and Iridium modem will need to be pigtailed into the vessel's 12V power supply. Vessels will need to be available in Sitka, AK for one (1) day prior to FISS start up or possibly midseason for equipment installation, and in a nearby Southeast Alaska port for removal. More information can be found in <u>Appendix V</u>. Status: New.

- 6. Charter regions in IPHC Regulatory Areas 3 and 4: Vessels will be required to bring the first 15 Pacific cod (*Gadus macrocephalus*) from each skate aboard the vessel for measuring by the IPHC Secretariat staff. Status: Ongoing
- 7. Charter regions in IPHC Regulatory Area 2C, 3 and 4 (TBA): To test the Alaskan electronic monitoring (EM) camera system, vessels need to have a davit at the haul rail to position a traditional EM camera and a set of stereoscopic cameras outboard of the hauling station. Therefore, preference will be given to vessels with the davits installed and capable of carrying an additional sampler who will be tasked with collecting 100% whole haul species identification. Vessels will need to be available for one (1) day prior to FISS start up for equipment installation. More information can be found in Appendix VI. Status: Ongoing.
- 8. Yakutat, Portlock, and Seward charter regions: As part of a collaborative project with the Alaska Department of Environmental Conservation (ADEC), flesh samples (approx. 2 to 3 lb from behind the head) will be taken from 90 Pacific halibut to be tested for environmental contaminants. Vessels will not be compensated for any lost value resulting from this sampling. Generally, these fish are still marketable (as #2 quality). Partner agency: ADEC. Status: Ongoing.
- 9. Charter regions in IPHC Regulatory Area 2B:
 - a. Vessels are required to have space for a third IPHC sampler. For more details see Section D-4. Status: Ongoing.
 - b. Federal law in Canada requires retention of <u>all</u> bycatch species including **and not limited to** rockfish (*Sebastes* spp.) and Pacific cod (*Gadus macrocephalus*). The proceeds from bycatch revenue are to be returned to the Government of Canada. To compensate for the work involved in processing (gilling, gutting) and handling (icing, offloading) of these species, submit a lump sum bycatch processing fee. The share of bycatch revenue applied to vessel processing costs in 2017 (non-expansion year) (USD) were: Vancouver (\$2,500), Goose Is. (\$2,500), St. James (\$4,000) and Charlotte (\$1,500). Status: Ongoing.
 - c. There is potential for restrictions on stations to be fished due to permitting and/or limits on protected species and habitat. Unfished stations will be deducted on a prorated basis from the final lump sum payment (i.e. Lump Sum Bid Dollar Value divided by Total Number of Stations fished).
- 10. Charter regions in IPHC Regulatory Area 2C (previously Ketchikan, Sitka and Ommaney): To compare fixed-hook and snap gear, IPHC Regulatory Area 2C has been divided into early and late charter regions instead of the traditional charter regions of Ketchikan, Sitka and Ommaney. Vessels bidding on a total of 127 stations will have 10 options for bidding with station counts ranging from 30 to 65. Vessels fishing with a single gear type will not be able to fish the same station twice (early then late). See Appendix II for more detail and station layout.

Single region:

- 1. Washington charter region: The IPHC is working on a cooperative research project with the Washington Department of Fish and Wildlife (WDFW) to fish eight (8) rockfish index stations within the Washington charter region. Bids on this region are to be based on eight (8) skates of gear per standard survey station, and four (4) skates of gear per rockfish index station (station numbers 1527-1534 located in a 2.5 nm spacing around station 1082) in the Washington charter region). Further details can be found in Appendix VII. Please note that new in 2019, Pacific halibut will be retained from rockfish index stations. Partner agency: WDFW. Status: Ongoing.
- 2. **Portlock charter region:** An additional sampler on one (1) trip, preferably prior to 30 June 2019 to sample gonads and draw blood samples from thirty (30) female Pacific halibut > 90 cm and thirty (30) male Pacific halibut > 80 cm. Sampling restricted to the greater Portlock Bank area, bounded between the following points (58°03'N, 152°44'W); (58°55'N, 151°58'W), (57°45'N, 148°41'W), and (56°59'N, 150°04'W). Status: Ongoing.

B. Fishery-independent Setline Survey (FISS) description

The FISS is divided into 28 separate charter regions (Figure 1). The FISS has been designed to maximize coverage over the charter regions and consist of a regular distribution of stations on a 10 nm by 10 nm grid. The center of each station is within the depth range of 20 to 275 fm (~36-503 m). The end of some sets may extend shallower or deeper than this range. An example of the basic station pattern is shown in Figure 2. Charts of each charter region and exact coordinates of the station locations are available with this package.

The FISS design requires considerable running distance each day, both to set and retrieve the gear.

One (1) string of seven (7) standard skates must be set at each station (eight (8) skates in IPHC Regulatory Areas 2A and 4CDE). Vessels are restricted to a maximum of four (4) stations fished per day, if deemed feasible by the vessel captain and IPHC Secretariat staff. To ensure safety and data integrity, the IPHC Secretariat staff reserve the right to reduce the maximum stations per day, dependent on vessel captain and crew efficiency with the FISS design. Typically, a vessel with a running speed of eight (8) knots is just able to complete four (4) stations and transit to the next day's fishing location in a timely fashion. Vessels with a running speed

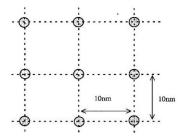


Figure 2. Station Pattern

less than eight (8) knots may find it difficult to complete four (4) stations a day. The requirements of gear maintenance and catch processing demand an experienced and professional crew capable of working long hours, day after day (typically 14-16 hour days). Therefore, it is of utmost importance that the Vessel Tender Form accurately reflects both the vessel's running speed and the capabilities of the crew.

Charter regions generally contain 30 to 72 predetermined stations, which will take approximately seven (7) to 35 <u>fishing days</u> to complete. This does not include additional days required for loading, offloading, running, foul weather, resetting stations, etc. The total number of days projected to complete each charter region ranges from 12 to 36 (<u>Table 1</u>). If the vessel takes longer than

projected, the charter must be extended and the number of days increased until all stations in the chartered region are complete.

General fishing plans may depend on bait storage locations, personnel needs, or fish sale considerations. The choice of where to begin and the number of stations to fish each day (≤ four (4) stations/day) is generally agreed upon by the vessel captain and the lead sea sampler on board, taking into account setting and hauling logistics, weather and tide conditions, and the distances among sets. A single coordinate indicating the center of the set is given for each station location. The gear should be set through this position in either a North-to-South (N-S) or East-to-West (E-W) direction. All stations within a FISS charter region do not have to be set in the same direction. If physical obstacles, weather, or tides do not permit setting directly N-S or E-W, the vessel captain may set in the direction necessary. When deviating from the N-S, E-W orientation, the vessel captain must describe, on the vessel captain set form, why the N-S or E-W orientation was not possible and why the chosen orientation was selected. Under no circumstances should the gear be set to purposefully increase or decrease the catch.

If any gear soaks longer than 24 hours, the set will be considered ineffective and the gear must be reset (Section C). "Foul weather days," when work is not possible, are anticipated. As a guideline, sampling will not occur in seas above 15 feet and winds above 30 knots. The lead sea sampler and vessel captain will suspend fishing operations if it is determined that the weather is substantially affecting the catch (fish falling off the line), the ability to conduct sampling, or for safety reasons.

Setting will begin at approximately 05:00 hrs **local time** (not earlier) or at first light each morning, whichever is later. Setting must be immediately preceded by a 15-minute observation period as required by national law of Canada and the USA, and intended to avoid interactions with federally designated protected species. When all stations for the day are set, the vessel will return to the first station and begin hauling once the set has soaked at least five (5) hours.

During hauling, all Pacific halibut will be brought aboard. Lengths, weights, sex determination, and other information will be collected for all O32 Pacific halibut and a random sample of the U32 Pacific halibut. Otoliths (ear bone for aging) are also collected. U32 fish that are not sacrificed will be measured, wire tagged and returned to the water in accordance with the IPHC's best-practice handling guidelines (<u>Appendix IX</u>). All O32 Pacific halibut and some bycatch (Pacific cod and rockfish) will be retained and sold to offset FISS costs, except as noted in Section L.

The working day for the vessel crew finishes when all the fish have been dressed, examined by the sea sampler(s), iced, and all gear is baited and ready for the next day's stations. While the FISS design calls for finishing on deck between 19:00 hrs and 21:00 hrs, a vessel which started setting at 05:00 hrs may not finish on deck until well after 22:00 hrs. For vessels with satisfactory running speed and an efficient crew, the working day is expected to be approximately 16 hours or less. However, the duration of the working day will vary.

Vessels may be awarded up to four (4) charter regions at the discretion of the IPHC Secretariat. All FISS operations must be completed between 26 May and 31 August 2019. The IPHC will actively schedule vessels to meet FISS program and personnel needs and the vessel's availability may affect bid results. It is therefore essential to indicate what times throughout the FISS season

the vessel is available to perform the work, and preference may be given to vessels with the greatest flexibility in their schedule. IPHC may stagger the start date of the different vessels doing FISS work to more effectively and efficiently schedule personnel and assignments.

C. Resetting previously fished stations

FISS chartered vessels are responsible for "successfully" completing all stations in their assigned charter region. Stations will be considered successful when the vessel properly sets the standardized gear within three (3) nm of the station coordinates, soaks it for a minimum of five (5) hours and hauls back within 24 hours. If gear is set greater than three (3) nm from the station coordinates, soaked more than 24 hours (or less than five (5) hours) or if there are setting errors such as missing tubs (fixed hooked gear or snap gear hooks), or unsecured anchors, the vessel will be required to bear the cost of resetting the station. The lead sea sampler will use established criteria to determine whether or not the station is successful.

Situations resulting in the data from a set being deemed ineffective for stock assessment include lost gear, snarls, depredation, and excessive sand flea activity. In these cases, the vessel will not be required to reset the station unless special arrangements have been made with the IPHC Secretariat's Seattle office.

D. Vessel requirements

Prior to bid acceptance, the IPHC Secretariat staff may need to inspect the vessel and determine the adequacy of deck space, accommodations, and confirm that the vessel meets all minimum requirements.

- 1. The vessel must be mechanically sound in all respects, seaworthy for fishing in the designated charter region(s), and suitably equipped for fishing Pacific halibut with conventional longline gear (or snap gear in IPHC Regulatory Area 2C only).
- 2. The vessel must have a well-insulated fish hold capable of packing all retained species in ice. Vessels will not be permitted to use RSW or slush ice.
- 3. The vessel must have adequate deck space to allow the IPHC Secretariat staff to carry out their duties. This requires space to mount a recording shack (approximately 36" by 38" by 74" high) with an attached measuring cradle (48" x 24" x 8"). The location of the shack must not obstruct fishing or processing operations and must be close to the dressing table. The ideal setup is to have the cradle attached to the shack directly below one (1) of the shack windows. This allows for optimal communication among IPHC Secretariat staff. Please provide a deck diagram with proposed shack and cradle position indicated with your application. Additionally, there must be adequate storage space for a water column profiler (dimensions 45" x 16" x 16" and 100 lbs.), and its buoys and anchors.
- 4. Accommodations shall be clean and sanitary. The vessel shall have adequate accommodations for the vessel crew and at least two (2) or three (3) IPHC Secretariat staff members, including women. Vessels asked to take additional staff will be provided with a \$50 per day food stipend for any days the third IPHC Secretariat staff is aboard the vessel. The vessel must be equipped with clean, sanitary, dry, and comfortable mattresses, but no bedding, for IPHC Secretariat-assigned personnel. Below are staffing specifics for identified charter regions:

Oregon and Washington charter regions: Due to low catch rates in IPHC Regulatory Area 2A, the IPHC may consider chartering vessels with limited bunk and/or deck space as the work may be completed by **one** (1) sea sampler. Preference will be given to vessels capable of taking a **second** sea sampler for multiple trips in northern Washington for rockfish index work.

Vancouver, Goose Islands, St. James and Charlotte charter regions: Due to the collaborative work the IPHC does with Fisheries and Ocean Canada in IPHC Regulatory Area 2B, vessels bidding on these charter regions are required to have space for a third sea sampler. This project requires the IPHC to conduct 100% hook counts and sample rockfish after every haul. Experience has shown that these sampling requirements delay the dressing and icing of the bycatch and result in significantly longer deck times for the vessel crew. This will affect the crew's availability to bait new gear, clean the deck, etc. Please take this into consideration when submitting your bid.

Portlock, Adak and Attu charter regions: The vessel will be required to carry a motion compensating scale capable of weighing Pacific halibut as large as 200 lbs. A subsample of Pacific halibut will be weighed round, freshly gutted, and again during the offload event. This requirement may also extend to other charter regions.

- 5. The vessel must have a functioning marine head, which can be used in privacy.
- 6. The vessel must have a galley reasonably equipped with a cook stove, refrigerator for food storage, and a sink.
- 7. The vessel must have a sink or shower for personal hygiene.

E. Electronic equipment minimum requirements

- 1. Two (2) VHF radios and one (1) single side-band unit.
- 2. A satellite communication system capable of reliably communicating with the IPHC Secretariat's Seattle office.
- 3. Reliable email system with the following capabilities:
 - a. Accept files (.txt and .csv) up to 200KB as attachments
 - b. The computer with the email must have a USB port that can be used for transferring files from an IPHC-supplied removable USB storage device to the email system computer so the files can be attached to the email. Note that any security settings preventing transfer of these files must be deactivated during FISS work.
 - c. If email is supported on the VMS system it has to have an ability to allow for transfer of small data files for emailing the IPHC Secretariat's Seattle office hail/trip information. Some VMS systems need to be updated to allow this. FISS data (small files <100 kilobytes) stored on a USB device must be sent to the IPHC Secretariat's Seattle office from the vessel's computer.
- 4. Two (2) GPS (Global Positioning Systems) units.
- 5. Bottom sounder that can output depth by nmea 0183, nmea 2000, or network.
- 6. GPS integrated into computer.

- 7. Commercial software to record (e.g. Olex, maxsea, ecc globe, Nobeltec v9.3, Nobeltec Timezero)
- 8. Equipment to track bathymetric and benthic composition data with vessel's having the ability to download and parse the bottom hardness and backscatter data for FISS use will be given preference in the bid process.
- 9. Two (2) radar units. One (1) must have a range of at least 24 nm.
- 10. Two (2) depth sounders.
- 11. An intercom from the fishing deck to the bridge is desirable.
- 12. Reliable 110V AC power to the sampling shack for powering a light, tablet, and a small computer. The ability to provide 110V AC <u>during</u> hauling operations is required (power draw of 5 amps). For those vessels without a constant AC supply during hauling, the power supply requirements can likely be met with a simple inverter.

F. Gear requirements

The owner shall provide and replace, as needed, all gear and associated equipment necessary for commercial longline fishing (except as noted in <u>Section K</u>). At least 21 skates of gear must be prepared before the charter begins when fishing three (3) stations a day and 28 if four (4) stations a day are planned.

Fixed-hook gear: (all charter regions)

- 1. All skates will be 1,800 feet long (300 fm or ~549 m) with 100 hooks per skate. Gear may be provided as full or partial skates coiled either in tubs or on skate bottoms. Gear must be flagged at the half skate so samplers can identify where in the individual skates, each fish is caught.
- 2. Skates shall be uniformly rigged with circle hooks (#3 (16/0) Mustad or equivalent) in average or better condition spaced along the groundline at 18-foot intervals (100 per skate). Spacing and hook counts will be monitored and verified by IPHC Secretariat staff.
- 3. Gangions shall be 72-thread count, hard lay material between 24 and 48 inches after tying. **Swivels are not allowed on the gear.** Hooks must be oriented on the gangions by inserting the gangion through the <u>front</u> of the hook eye (<u>Figure 3</u>).

Snap gear: (charter regions in IPHC Regulatory Area 2C only)

- 1. All skates will be 1,800 feet long (300 fm or \sim 549 m marked on the groundline) with 100 hooks per skate.
- 2. IPHC Secretariat staff need to record where the fish is caught within a string of seven (7) skates. Therefore, skate junctions on the drum, must be flagged to track where in the individual skates each fish is caught.
- 3. Skates shall be uniformly rigged with circle hooks (#3 (16/0) Mustad or equivalent) in average or better condition spaced along the groundline at 18-foot intervals (100 per skate). Spacing and hook counts will be monitored and verified by IPHC Secretariat staff.
- 4. Gangions shall be 72-thread count, hard lay material between 24 and 48 inches after tying. Perlon® gangions are not allowed.
- 5. Swivels must be present on the hook end of the snap gear.
- 6. Hooks must be oriented on the gangions by inserting the gangion through the <u>front</u> of the hook eye (<u>Figure 3</u>).

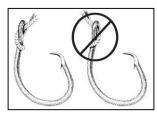


Figure 3. Proper gangion orientation to hook

For all gear:

- 1. A weight of approximately 7 to 10 pounds must be snapped on or tied to the groundline at each skate junction.
- 2. Fishing gear shall be maintained <u>strictly</u> in accordance with the specifications outlined in this document. If it is found that the gear is not being maintained to standards, the IPHC Secretariat may halt fishing operations and the owner or his/her representatives will be required to bring it up to standard. No additional payment will be made for the time required to meet or maintain gear standards.
- 3. Automated hook strippers, or '*crucifiers*', shall **not** be permitted...
- 4. All vessels must use an approved seabird deterrent device (e.g. tori line) while setting the gear, as required by state and/or federal agencies. See <u>Appendix IV</u> for seabird deterrent requirements.

G. Bait

Most of the bait required to complete each charter region has been purchased and stored at certain ports where offloads are anticipated. Some freshly frozen bait may need to be purchased by the IPHC Secretariat staff during the FISS period.

- 1. The IPHC will bear the cost of all ice and bait purchased for the FISS. The IPHC shall also arrange for bait to be available in the intended ports of sale.
- 2. Bait shall be frozen chum salmon, number 2 semi-bright or better.
- 3. The crew will be responsible for cutting the salmon into individual pieces weighing approximately 1/4 to 1/3 pound. The IPHC requires that the bait **not be salted**, rather kept on ice or frozen until used. IPHC Secretariat staff will monitor and verify bait size to ensure compliance to FISS standards.
- 4. Auto-baiting machines are <u>not</u> permitted for use on the IPHC FISS.

H. Crew requirements

The crew number required to maintain and bait the hooks of longline gear, as well as to process the Pacific halibut as it is caught, depends on the skill and professionalism of the crew as a whole. Experience has shown us that these qualifications vary widely, and that the labor-intensive nature of using hand-baited longline gear wears heavily on all but the most durable and experienced. It is of the utmost importance that all crew working on the FISS adhere strictly to the gear maintenance and fish quality standards expected by the IPHC. Bidders are cautioned to consider the ability of crew assigned to gear maintenance, baiting, fish cleaning, and icing duties, and to select crewmembers with the best possible skill and motivation levels.

1. The owner will be solely responsible for providing at all times during the FISS a fully qualified and experienced crew. The normal daily workload for fishing, icing the catch, and

the strict gear maintenance required by the IPHC have shown us that the necessary crew must consist of at least a vessel captain plus three (3) to five (5) additional crew members (except when fishing in IPHC Regulatory Area 2A). Bidding with less than this complement of crew may result in your operation being excluded from consideration.

- 2. The vessel captain must possess any required Canadian/U.S.A. Coast Guard or maritime licenses or certifications applicable to the vessel and charter region of operation.
- 3. The vessel captain shall have a minimum of three (3) years of longline fishing experience as a master of a comparable-sized vessel and be competent in the use of modern navigational and fish-detecting equipment.
- 4. The vessel captain is responsible for being knowledgeable and adhering to all state, provincial, federal and international laws pertaining to commercial fishing. This includes fishing regulations, area closures (rockfish, sea lion rookeries, etc.), state or federal No Discharge Zones (sewage/blackwater), MARPOL (International Convention for the Prevention of Pollution from Ships) and the COLREGs (International Regulations for Preventing Collisions at Sea).
- 5. At least two (2) crew shall have a minimum of three (3) years of Pacific halibut longline fishing experience and be competent in longline construction and repair, hand-baiting methods, and Pacific halibut dressing and icing techniques. The remaining crew must be capable in longline repair, hand-baiting methods, and Pacific halibut dressing and icing.
- 6. The vessel captain and crew will be responsible for all phases of gear maintenance and the daily setting and hauling of the fishing gear.
- 7. The crew will be responsible for loading and unloading all vessel supplies prior to, during and after the charter.
- 8. The crew will be responsible for offloading any fish sold during the FISS.
- 9. During the FISS, the vessel captain will ensure that the vessel remains in port for a 24-hour period after the offload is complete to ensure the exchange of all necessary data with the IPHC Secretariat's Seattle office, to maintain consistent communications, and provide troubleshooting support. If there is a legitimate need for a quick turn-around (e.g. weather window, offload window between salmon openings, mechanical breakdown, etc.), clearance from the Seattle Secretariat staff needs to be obtained on the day that the fish sale is conducted. Deficiencies in the vessel or problems with the crew's performance must be resolved prior to departing, which could result in port stays in excess of the 24-hour window.
- 10. At the completion of the FISS, the vessel captain will ensure that the vessel remains in port at least 12 hours after the offload finishes or until the IPHC Secretariat staff are safely able to complete their end of charter tasks and remove all gear and equipment.
- 11. <u>All</u> bycatch not retained <u>must</u> be carefully released from the hook. This includes all <u>shark</u> and <u>skate</u> species. Vessels encountering tail-wrapped shark specimens shall make every effort to release the animal unharmed.
- 12. The vessel captain and crew will be responsible for the dressing and icing of all fish. Crewmember(s) must be available (as required) for dressing Pacific halibut while the gear is being hauled.
- 13. The vessel crew will be required to assist in the deployment and recovery of a water column profiler (supplied by the IPHC) at each station. A water column profiler is an oceanographic

device that records depth, temperature, salinity, disolved oxygen, pH, and chlorophyll levels as it descends through the water column. The units are approximately $3\frac{1}{2}$ feet tall and weigh 55 pounds each. The weighted unit is lowered on an anchor line until it hits bottom, then retrieved by gurdy, prior to hauling the gear. Typically, each cast adds 10 to 15 minutes of time to the start of each hauling event. Between casts, the unit, along with the accompanying floats and anchor configuration, must be safely secured on deck.

- 14. All vessel personnel are expected to conduct themselves in a professional manner at all times. Physical relationships with IPHC Secretariat staff are prohibited during the FISS, and vessel personnel must disclose any past or present activities or relationships that are in conflict with this policy. If a conflict arises, the IPHC Seattle Secretariat staff will reevaluate staffing options and work with the vessel owner, vessel captain, and crew to resolve.
- 15. Fishing plans must be mutually agreeable to the lead IPHC sea sampler and the vessel captain. The vessel captain will communicate to the lead sea sampler on a daily basis all changes to fishing plans and contingencies as they develop.
- 16. The vessel captain and crew shall create a working environment that is free from intimidation and harassment (verbal, physical, or sexual). Please refer to <u>Appendix VIII</u> for further information regarding harassment and professional work environments.
- 17. All vessel captains and crewmembers must be found acceptable to the IPHC Secretariat. The IPHC may require the replacement of any crewmember during the FISS if found unacceptable in skill, experience, or behavior.

I. Safety

The vessel captain is responsible for all matters relating to safety of personnel, the vessel, and equipment operation. The vessel captain will adhere at all times to navigational rules whether it be during fishing operations, running, drifting, or when at anchor. He/she (or vessel captain's representative) shall review safety procedures and equipment with the IPHC Secretariat at the beginning of each FISS and after any crew change.

- 1. Vessels licensed in the U.S.A. must possess a current U.S. Coast Guard inspection sticker. The vessel shall be mechanically sound in all respects, completely seaworthy, and comply with all applicable safety regulations.
- 2. Vessels licensed in Canada must possess a current Ministry of Transportation certificate (Canada Steamship Inspection Certificate) for the purposes for which the vessel is to be used. The vessel shall be mechanically sound in all respects, completely seaworthy, and comply with all federal Transport Canada regulations.
 - All vessels shall adhere to the regulations for power driven vessels underway in International Waters. In relation to the practice of drifting at night, the operator must maintain a proper lookout and ensure that his/her vessel is properly lighted as per the regulations (specifically 1972 International Regulations for Prevention of Collisions at Sea (72 COLREGS): Rule 2, 5 and 23. These regulations are available online at: https://www.navcen.uscg.gov/pdf/navRules/CG_NRHB_20151231.pdf
- 3. All safety equipment (such as life rafts) must have passed inspection requirements and be of sufficient capacity for the vessel captain, crew, and all IPHC Secretariat staff aboard.
- 4. The IPHC will provide immersion suits, personal EPIRBs, and personal floatation devices for its employees.

5. No alcohol consumption or illegal drug use is allowed aboard IPHC chartered FISS vessels, including days at sea, anchor days, or when the vessel is at the dock.

The IPHC has a <u>zero tolerance policy</u> which will be in effect at all times, and violation of this policy is sufficient cause for immediate contract termination, and shall result in a five (5) year exclusion from future contract eligibility for the vessel and the vessel captain.

6. While shore excursions are not prohibited while under IPHC contract, vessels are reminded that such activities fall outside of the mandates of the FISS work, and that the vessel is responsible for the safety of all concerned during such activities and may not be fully protected by insurance policies during non-contracted activities. It is required that float plans be completed before making shore excursions, that all participants wear approved floatation devices, skiffs be fully stocked with a boat kit (emergency oars, bailer, sea anchor, rope etc.), and that the group carry a fully stocked shore kit, hand held radio, and first aid kit.

J. Vessel owner's responsibilities

- 1. The vessel owner will be responsible at his/her own expense to maintain the vessel, its engine(s), machinery, equipment, and fishing gear in good and seaworthy condition.
- 2. The vessel owner will be responsible to provide lube oil, grease, filters, other engine-room supplies, and all other vessel operating supplies normally required for commercial fishing operations.
- 3. The vessel owner will be responsible for the purchase of all fuel required for operating the vessel for the duration of the FISS, except as stated in <u>Section L</u>.
- 4. The vessel owner will be responsible for providing a working environment that is free from intimidation and harassment (verbal, physical, or sexual). Please refer to <u>Appendix VIII</u> for further information regarding harassment and professional work environments.
- 5. The vessel owner agrees to indemnify, defend and hold harmless the IPHC from any and all claims by whosoever brought for loss, damage or personal injury from any cause arising out of the charter of the vessel, including but not limited to, claims arising out of the negligence of the IPHC, its agents or employees.
- 6. As part of the bid, the vessel owner shall submit a disclosure statement specifying any conviction for the violation of any fishing regulations pertaining to the Pacific halibut fishery within the past five (5) years by the vessel's owner, vessel captain or crew.
- 7. The vessel owner will provide adequate and wholesome meals for the crew and all IPHC representatives. This includes days when the vessel is in port between trips, weather days and any time the IPHC Secretariat staff are sleeping on board the vessel.
- 8. The vessel owner shall be responsible for the payment of all crew salaries, including any bonuses, and for the payment of all payroll taxes on salaries, such as income tax, unemployment, workers' compensation, and other taxes as applicable. With respect to vessels operating in the waters of foreign countries, the owner is responsible for ensuring that all crew have adequate health insurance coverage.
- 9. The vessel owner shall be responsible for all fees incurred arising out of the operation of the vessel including, but not limited to, harbour dues, moorage, watchman costs and environmental fees.

- 10. The vessel owner will be responsible for all vessel and crew related customs and immigration requirements and fees. A summary of requirements and fees for vessels licensed in Canada and conducting FISS work in the U.S.A. can be found in Appendix III. The vessel owner will be responsible for all delay expenses incurred by the IPHC arising out of the owner's failure to fulfill conditions necessary to permit entry of the vessel and/or crew into the U.S.A. for prompt fulfillment of the owner's FISS obligations (see Appendix III).
- 11. The vessel owner will be responsible for all customs requirements and fees related to fish sales in a foreign port. The IPHC will organize the customs brokering for any foreign offloaded fish and the associated fees will be deducted from the vessel payments. See Appendix III for a summary of the requirements and estimate of fees for vessels licensed in Canada landing in the U.S.A. and for any vessel landing fish caught in U.S.A. waters in Canadian ports.
- 12. Prior to commencement of the FISS, owners of vessels licensed in the U.S.A. shall provide the IPHC a copy of the insurance policy verifying that all IPHC Secretariat staff are included on the vessel's P&I insurance policy as either a crewman or business invitee, and that the IPHC is listed as an additional insured or co-insured on the P&I policy for the term of the FISS agreement. The policy must provide protection with minimum limits of \$5,000,000 USD. Owners of vessels licensed in Canada are strongly encouraged to acquire similar coverage. The IPHC will reimburse the owner for any additional premiums incurred to meet their obligations under this paragraph (Section K-7).
- 13. The vessel owner agrees to maintain at its sole cost and expense throughout the period of the FISS hull and machinery insurance to the full market value of the vessel with trading warranties appropriate to the FISS, said policy to include a waiver of subrogation against the IPHC. The vessel owner will provide proof that the above coverage and subrogation is in place prior to the commencement of the FISS.
- 14. The vessel owner agrees to maintain at its sole cost and expense throughout the period of this FISS pollution/environmental hazard insurance with minimum limits of \$5,000,000 USD, said insurance to name the IPHC as an additional insured. The vessel owner will provide proof that the above coverage is in place prior to the commencement of the FISS.
- 15. The data collected on the FISS is essential to the IPHC's stock assessment. The IPHC's policy is to release the FISS data to the public only after all data checks have been made so that all data can be released at once. Provision of this information to the public in an equitable manner requires that no advance release occur and is based on the personal integrity of the vessel captain, vessel crew and the IPHC Secretariat staff. The owner agrees that the catch information collected during the FISS is confidential until released by the IPHC Secretariat to the public.

The vessel owner will take steps to ensure the vessel captain and crew understand and abide by this policy and do not discuss the catch information until the release of that information by the IPHC Secretariat to the public.

Violation of this policy is sufficient cause for contract termination, and shall result in a five (5) year exclusion from future contract eligibility for the vessel and the vessel captain.

K. IPHC responsibilities

- 1. The IPHC will replace all fishing gear lost in the course of the gear being put into the sea for fishing. This includes lost buoys, flags, buoy line, anchors, and physical components of skates including lost or replacement hooks, gangions and snaps required for normal gear maintenance. As well, the IPHC will bear the cost of purchasing the physical components (i.e., labor is not included) of one (1) new skate based upon every 100 skates of gear fished as compensation for normal wear and tear. Replacement groundline, hooks, snaps (where applicable) and gangions will be the equivalent to gear lost or condemned. To this end, the vessel captain must provide a vendor contact to facilitate the processing of gear claims.
- The IPHC will reimburse the individual costs and fees associated with sending and receiving
 electronic communications (satellite phone, email) pertaining to IPHC business. Costs for
 service connection are not included and should be covered in the bid price.
- 3. The IPHC will pay for any extra fuel used by the vessel due to special travel requests that are above and beyond the requirements of the FISS design.
- 4. The IPHC will arrange and pay for all ice and bait necessary to complete the FISS.
- 5. The IPHC Secretariat will determine that the FISS operation is ready to leave the port after the offload and commence the next fishing trip.
- The IPHC may terminate the FISS at the nearest port if for any reason the owner fails to render the required services or the vessel or crew do not meet the specifications as stated on the Vessel Tender Form.
- 7. The IPHC will reimburse owners of vessels licensed in the U.S.A. for any additional premiums required to cover IPHC personnel under the vessels Protection and Indemnity (P&I) insurance policy. The IPHC will purchase individual insurance for IPHC Secretariat staff serving aboard vessels licensed in Canada.
- 8. In Canada where offload validation fees are billed to the vessel, the IPHC will reimburse the vessel for a portion of those fees based on the Pacific halibut sharing agreement as listed in the vessel contract (i.e. if the vessel receives 10% of the Pacific halibut and the IPHC 90%, the IPHC will pay 90% of the offload fees as invoiced by the service provider and the vessel will be responsible for the rest). These monies will be paid to the vessel, and the vessel will be responsible for paying the service provider as invoiced.

L. Fish caught during the FISS

O32 Pacific halibut and some bycatch (rockfish, and Pacific cod) are retained and sold to offset the costs of the FISS operations. All fish caught (with the exception of sablefish retention if licensed and permitted to do so in IPHC Regulatory Areas 2A and 2B) become the property of the IPHC and are sold through an auction or direct sale process by IPHC Secretariat staff in Seattle. The IPHC makes no guarantee as to the amount of fish caught or to the prices received. Landing and price information for Pacific halibut caught in 2018 is included in Table 2 along with bid results in Table 3. The lead IPHC Secretariat staff member will work with the vessel captain to maintain contact with the IPHC Secretariat Seattle office and arrange offloads as well as ice and bait for successive trips.

1. Ports of sale for each charter region are listed in <u>Table 1</u>. Vessels are advised to calculate their bids based on the longest run for the ports listed. If the IPHC requires a vessel to offload in a port that is a substantial distance from the listed offload ports, the vessel may be paid a running

- bonus. Vessels licensed in Canada and fishing in Alaska may negotiate to deliver their final trip into Prince Rupert, BC on the return to a Canadian port; however, they will <u>not</u> be paid a running bonus.
- 2. When delivering to ports where the fish may go to the fresh market (typically in Homer, Seward, Southeast Alaska, British Columbia, Washington and Oregon ports) fish should be no more than five (5) days old (five (5) fishing days and one (1) run day). Therefore, vessels must expect to perform at least three (3) to four (4) trips per charter region. Longer trips may be allowed when delivering to the frozen market or in charter regions where more transit time is required such as the Western Aleutians (Adak and Attu charter regions)) and the Bering Sea (4A and 4D Edge charter regions). Vessels bidding on charter regions in IPHC Regulatory Area 4B should plan on delivering one (1) large trip to Dutch Harbor from each of these charter regions.
- 3. The crew is responsible for the dressing, icing, and unloading of all retained fish and maintaining a quality product throughout the process. Ten percent (10%) of the net proceeds from Pacific halibut sales will be paid to the vessel unless otherwise agreed upon (for IPHC Regulatory Areas 2A and 4 see exception in Section N-3).
- 4. The vessel may retain bycatch only if all applicable state (U.S.A.) and federal (U.S.A. and Canada) regulations are met for the retention of that species (See possible exemption in Section N-2). FISS contracted vessels are only allowed to retain Pacific cod and rockfish. In no instance will the retention of species other than Pacific halibut be allowed to restrict or otherwise interfere with achieving the scientific objectives of the FISS. These fish become the property of the IPHC, with the vessel receiving 50% of the net sale proceeds (for IPHC Regulatory Area 2B, see exception in Section N-2).
- 5. Vessels making deliveries to St. Paul or Adak, AK should note that the plants there historically have not accepted Pacific cod as part of IPHC deliveries.
- 6. Vessels making deliveries to Sand Point, AK should note that the plant there may not be accepting rockfish if there is an active closure to commercial landings.
- 7. Vessels fishing in the Washington and Oregon charter regions will be required to retain 100% of their rockfish, and will have their rockfish tagged prior to being placed in the hold. This will require the vessel to keep rockfish separate by skate during hauling. Tagged rockfish will be sampled by state biologists at the offload event which will likely increase the time to complete the offload. Pacific halibut caught on the rockfish stations will now be included in the IPHC stock assessment data and thus sampled.
- 8. Vessels fishing in the 4A Edge and 4D Edge and all charter regions in IPHC Regulatory Area 3A will be required to bring the first 15 Pacific cod from each skate aboard the vessel for measuring by the IPHC Secretariat sea sampler. This may slow the haul back event considerably in these areas compared to previous years. Vessels may choose to retain or discard the Pacific cod after the measurements are taken, depending on the number of days remaining in the trip.
- 9. As part of a collaborative project with ADEC, flesh samples (approx. three (3) to five (5) pounds from behind the head) will be taken from 70 Pacific halibut in three (3) charter regions (Yakutat, Portlock, and Seward.) to be tested for environmental contaminants. Vessels will **not** be compensated for any lost value resulting from this sampling. Generally, these fish are still marketable (as #2 quality).

10. The IPHC is committed to selling only fish of the highest possible quality. To this end, all fish caught on IPHC FISS and intended for sale must be handled in a manner which meets or exceeds the industry standards. Prior to the FISS and after any offload, the hold must be thoroughly cleaned and sanitized. Fish retained for sale must not be gaffed in any area other than the head and should be stunned and bled immediately after landing and prior to dressing. All traces of blood, gills, viscera, gonads, kidney and sweetmeats must be completely removed. Pacific halibut must be wet-scraped or the body cavities rinsed before icing. All fish must be layer iced and the pokes and gill cavities of all retained Pacific halibut, large and small, must be filled with ice. It shall be the vessel captain's responsibility to see that the aforementioned procedures are carried out. Following each sale, the offloader will be required to complete Fish Quality Forms which will note fish appearance and temperature for all Pacific halibut and bycatch offloaded. The vessel captain will be required to initial the Fish Quality Forms to acknowledge that the contents have been read.

M. Post-award and post-FISS meetings

- 1. Upon the award of a contract and prior to the start of the FISS, a post-award meeting will be held at a mutually agreeable location to discuss issues relating to the FISS, and to sign contracts. The IPHC FISS manager will schedule the date and time of the meeting. The meeting shall include the vessel owner and vessel captain. A follow-up phone meeting will occur in the two (2) weeks prior to the FISS start, to confirm final details and requirements.
- 2. After completion of the FISS, a post-survey debriefing may be held in person, over the phone, or by mail with the vessel owner and vessel captain. The purpose of the debriefing is to provide the vessel captain with a vessel performance evaluation. The vessel captain will also have the opportunity to assess and evaluate the IPHC Secretariat staff and FISS methods.

N. Bidding procedure

- 1. The IPHC will consider bids based upon a lump sum for the completion of each charter region regardless of the number of days within the allowable period (26 May to 31 Aug) that are required. In addition to this lump sum, the vessel will receive 10% of the net sales of Pacific halibut and 50% of the net sales of bycatch (see exceptions in N-2, and N-3). The IPHC cannot guarantee the amount of fish caught on FISS or prices received from the sale of the fish. For most regions, the IPHC will pay 50% of the bid price after half of the stations are completed and the remaining 50% upon the completion of each charter region (for operations in the 4A Edge and Unalaska charter regions, payments will be paid out on a 25% completion trigger). The vessel's share of Pacific halibut and bycatch revenues will be paid once the offload payment monies are received by the IPHC Secretariat office in Seattle.
- 2. Federal law in Canada requires <u>all</u> bycatch, including, **but not limited to**, rockfish (*Sebastes* spp.) and Pacific cod (*Gadus macrocephalus*), proceeds to be returned to the Crown (depending on agreements in the annual permitting process). To compensate for the work involved in processing (gilling, gutting) and handling (icing, offloading) of these species, the IPHC requires submission of a lump sum bycatch processing fee for any IPHC Regulatory Area 2B charter region. The share of bycatch revenue applied to vessel processing costs in the comparable non-expansion year of 2017 (USD) were: Vancouver (\$2,500), Goose Is. (\$2,500), St. James (\$4,000) and Charlotte (\$1,500).

- 3. Due to either low relative catch rates or the remote nature of IPHC Regulatory Areas 2A and 4, the IPHC encourages alternative funding proposals in the following charter regions: Oregon, Washington, 4A Edge, 4D Edge, Attu and Adak. The IPHC cannot budget sufficient funds to survey these charter regions under the standard revenue arrangement, but can contribute revenue from fish sales as well as ice and bait. Vessels interested in these regions are encouraged to creatively structure their bids. Proposals that combine IFQ fishing with FISS work will not be considered.
- 4. All bids must be submitted on the appropriate VESSEL TENDER FORM provided by the IPHC. You may submit a bid for a specific charter region, separate bids for multiple regions, or a single bid applicable to any region. Vessels can be awarded up to four (4) charter regions at discretion of the IPHC based on demonstrated history and scheduling considerations. You must specify on the bid, the minimum and maximum number of charter regions.
- 5. The IPHC is not restricted as to the nationality of the vessels it contracts for operation in any charter region and will contract according to its own best interests. Also, vessels need not be licensed for Pacific halibut fishing in Canada or the U.S.A. to be eligible.
- 6. The IPHC will not be obligated to accept the lowest bid or any bid received and will contract according to its best interests. Vessels will be rated using the following criteria: seaworthiness and general condition of the vessel and its equipment, the vessel's availability, the vessel captain's experience and fishing record, the qualifications of the selected crew, and IPHC operating costs. Previous experience with the IPHC FISS, scheduling flexibility, and ability to take a third sampler are possible factors in the decision making process.
- Bids must be emailed (pdf format) in time to arrive in the IPHC Secretariat's Seattle office by 17:00 hrs on 15 February 2019. Please note: "FISS BID" in the subject line of the email. Emails should be sent to Secretariat@iphc.int.
- 8. If we can be of assistance in filling out the Vessel Tender Form or answer any questions, please contact the Secretariat's Seattle office at the number below.

INTERNATIONAL PACIFIC HALIBUT COMMISSION

2320 West Commodore Way – Suite 300 Seattle, WA, USA 98199-1287 Telephone: (206) 634-1838 Fax: (206) 632-2983

Table 1: 2019 Projected landing ports and days by charter region

Reg.	Charter	Number of	Number of	Charter	Ports of Sale ^{2,3}
Area	Region	Stations	Skates	Days 1	
2A	Oregon	47	8	28	Brookings, Charleston, Astoria, Newport
2A	Washington	49 8	8 4	30	Bellingham, Neah Bay, Westport, Newport or Astoria
2B	Vancouver	41	7	22	Vancouver, Tofino, Ucluelet or Port Hardy
2B	Goose Is.	43	7	21	Port Hardy, Prince Rupert
2B	St. James	39	7	21	Prince Rupert, Port Hardy
2B	Charlotte	43	7	21	Prince Rupert, Port Hardy
2C	Early period north	30	7	12	Juneau, Ketchikan, Sitka, Petersburg, Misc 2C ports
2C	Early period south	32	7	13	Juneau, Ketchikan, Sitka, other 2C ports, Prince Rupert, BC
2C	Late period north	32	7	12	Juneau, Ketchikan, Sitka, Petersburg, Misc 2C ports
2C	Late period south	33	7	13	Juneau, Ketchikan, Sitka, other 2C ports, Prince Rupert, BC
3A	Fairweather	51	7	23	Yakutat, Sitka, Juneau, other ports in 2C
3A	Yakutat	70	7	36	Yakutat, Seward, Cordova, Valdez
3A	PWS	68	7	35	Seward, Valdez, Cordova, other 3A ports
3A	Seward	52	7	23	Seward, Valdez, Cordova, Kodiak, other 3A ports
3A	Gore Point	48	7	24	Seward, Homer, Kodiak, other 3A ports
3A	Portlock	50	7	24	Kodiak, Homer, Seward, other 3A ports
3A	Albatross	52	7	23	Kodiak, Homer, Seward, other 3A ports
3A	Shelikof	72	7	40	Homer, Kodiak, Alitak, other 3A ports
3B	Trinity	58	7	30	Kodiak, Alitak, Homer, other 3A ports
3B	Semidi	60	7	30	Kodiak, Alitak, Homer, other 3A ports
3B	Chignik	49	7	24	Kodiak, Alitak, Sand Point, King Cove
3B	Shumagin	55	7	25	King Cove, Kodiak, Sand Point
3B	Sanak	75	7	40	Dutch Harbor, King Cove, Akutan, Sand Pt, Kodiak
4A	Unalaska	66	7	36	Dutch Harbor, King Cove, Akutan
4A	4A Edge	57	7	25	Dutch Harbor, St. Paul ⁴ , Akutan, other ports in Reg. Area 4
4B	Adak	44	7	32	Adak ⁴ , Dutch Harbor, Atka
4B	Attu	45	7	32	Adak ⁴ , Dutch Harbor, Atka
4D	4D Edge	68	8	35	Dutch Harbor, St. Paul ⁴ , other ports in Reg. Area 4
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¹ These are only projected numbers using number of skates fished per station and three (3) to four (4) stations fished per day. The actual may vary considerably depending on weather, mechanical failures, etc. Projections include running and port days. Vessel is responsible for completing all stations in their region.

² If the IPHC requires a vessel to offload in a port which is a substantial distance from the listed offload ports, the vessel may be paid a running bonus.

³ Alternate ports may be considered on the last trip for vessels returning home with no running bonus being paid.

⁴ St. Paul and Adak processors will **not** be accepting Pacific cod as part of our deliveries.

Table 2: 2018 FISS catch and effort summary by charter region

IPHC Regulatory Area	Charter Region	Vessel	ADF&G or VRN¹	Charter Days ²	Planned Stations	Effective Stations ³	Pacific halibut Sold (lb) ⁴	Pacific halibut Sold (t)	Average Price USD/Ib ⁵	Average Price USD/kg
2A	Oregon	Pacific Surveyor	-	34	47	46	7,902	4	\$8.08	\$17.82
2A	Washington	Pacific Surveyor	-	35	83	83 ⁶	12,975	6	\$6.07	\$13.39
2A	Puget Sound	Pacific Surveyor	-	12	14	13	392	<1	\$5.00	\$11.02
2B	Charlotte	Free to Wander	29155	21	48	46	25,953	12	\$6.46	\$14.24
2B	Inside Charlotte North	Free to Wander	29155	23	40	38	31,076	14	\$6.46	\$14.25
2B	Goose Is.	Bold Pursuit	20875	25	58	57	21,005	10	\$6.59	\$14.53
2B	St. James	Pender Isle	27282	27	57	57	47,841	22	\$6.02	\$13.26
2B	Vancouver	Vanisle	21912	26	41	41	1,357	1	\$6.61	\$14.58
2B	Inside Vancouver Outside	Vanisle	21912	29	58	57	17,428	8	\$6.48	\$14.29
2C	Ketchikan	Vanisle	21912	29	51	49	43,829	20	\$6.38	\$14.06
2C	Ommaney	Predator	33133	31	55	50	102,603	47	\$5.89	\$12.99
2C	Sitka	Predator	33133	33	59	58	52,892	24	\$6.12	\$13.49
3A	Albatross	Saint Nicholas	45399	25	45	44	24,502	11	\$4.75	\$10.48
3A	Fairweather	Vanisle	21912	24	49	47	33,955	15	\$5.31	\$11.71
3A	Gore Pt.	Clyde	55803	21	45	45	24,686	11	\$5.67	\$12.50
3A	Portlock	Predator	33133	22	46	44	28,721	13	\$5.60	\$12.34
3A	PWS	Vansee	19307	21	45	45	60,398	27	\$6.57	\$14.50
3A	Seward	Clyde	55803	23	48	47	30,433	14	\$5.60	\$12.36
3A	Shelikof	Saint Nicholas	45399	32	45	42	24,695	11	\$6.20	\$13.68
3A	Yakutat	Seymour	17530	24	51	48	69,303	31	\$6.33	\$13.95
3B	Chignik	Polaris	19266	19	45	45	13,799	6	\$4.53	\$9.99
3B	Sanak	Kema Sue	41033	29	48	47	7,888	4	\$4.31	\$9.50
3B	Semidi	Clyde	55803	22	47	47	16,744	8	\$5.26	\$11.61
3B	Shumagin	Polaris	19266	18	44	44	17,259	8	\$4.21	\$9.28
3B	Trinity	Saint Nicholas	45399	39	47	45	18,614	8	\$5.64	\$12.43
4A, Closed	4A Edge	Norcoaster	38173	36	57	57	9,160	4	\$4.15	\$9.14
4A. 4C	Unalaska	Kema Sue	41033	30	66	62	24,977	11	\$4.08	\$9.00
4D, 4C	4D Edge	Kema Sue	41033	37	68	65	20,462	9	\$4.47	\$9.86
4B	Adak	Norcoaster	38173	32	45	45	15,810	7	\$4.28	\$9.43
4B	Attu	Norcoaster	38173	27	44	44	11,587	5	\$1.54	\$3.39
Total		13 Vessels		806	1496	1458	818,246	371	\$5.75	\$12.68

¹ Alaska Department of Fish and Game vessel number for vessels licensed in U.S.A. or Vessel Registration Number for vessels licensed in Canada.

² Days are estimated - some vessels fished two (2) charter regions in one (1) day.

³ Stations that did not meet setting parameters or deemed ineffective are excluded.

⁴ Net weight (head-off, dressed, washed). Poundage may not sum to correct total because of rounding.

⁵ Gross price.

⁶ Includes eight (8) Rockfish Index stations.

Table 3: 2018 contract award prices by FISS charter region.

			Lump Sum	Station	Share of Pacific	Share of
Area	Vessel	Region	(USD)	Count	halibut	Bycatch
2A	Pacific Surveyor	Oregon	\$110,450	47	0%	0%
$2A^2$	Pacific Surveyor	Washington	\$185,650	83	0%	0%
$2A^2$	Pacific Surveyor	Puget Sound	\$35,000	14	0%	0%
$2B^3$	Free to Wander	Vancouver Outside	\$106,271	57	10%	\$5,000 ¹
$2B^3$	Van Isle	Vancouver Inside	\$96,400	43	10%	\$2,500 ¹
$2B^3$	Bold Pursuit	Goose Is.	106,138	57	10%	\$5,000 ¹
$2B^3$	Pender Isle	St. James	108,103	57	10%	\$5,000 ¹
$2B^3$	Free to Wander	Charlotte North	\$62,932	39	10%	\$4,000 ¹
$2B^3$	Free to Wander	Charlotte Inside	\$76,571	46	10%	\$3,000 ¹
2C ⁵	Van Isle	Ketchikan	\$100,7254	51	10%	50%
2C ⁵	Predator	Ommaney	\$83,455 ⁴	54	10%	50%
2C ⁶	Predator	Sitka	\$85,0004	62	10%	50%
3A	Van Isle	Fairweather	\$95,000	49	10%	50%
$3A^6$	Seymour	Yakutat	\$96,000	51	10%	50%
$3A^6$	Vansee	PWS	\$88,000	45	10%	50%
$3A^6$	Clyde	Seward	\$80,000	48	10%	50%
$3A^6$	Clyde	Gore Pt.	\$80,000	45	10%	50%
$3A^6$	Predator	Portlock	\$79,000	46	10%	50%
$3A^6$	St. Nicholas	Albatross	\$79,000	45	10%	50%
$3A^6$	St. Nicholas	Shelikof	\$79,000	45	10%	50%
$3B^6$	St. Nicholas	Trinity	\$89,000	47	10%	50%
$3B^6$	Clyde	Semidi	\$90,000	47	10%	50%
$3B^6$	Polaris	Chignik	\$101,000	45	10%	50%
$3B^6$	Polaris	Shumagin	\$101,000	44	10%	50%
$3B^6$	Kema Sue	Sanak	\$102,000	48	10%	50%
4A	Kema Sue	Unalaska	\$142,900	66	10%	50%
4A	Norcoaster	4A Edge	\$120,000	57	10%	50%
4B	Norcoaster	Adak	\$125,000	44	10%	50%
4B	Norcoaster	Attu	\$145,000	45	10%	50%
4D	Kema Sue	4D Edge	\$163,700	68	10%	50%

Note:

¹ Bycatch processing lump sum payments.

² IPHC Regulatory Area 2A included 14 Puget Sound expansion stations and 26 densified grid stations in the Washington charter region that will not be included the 2019 survey.

³ IPHC Regulatory Area 2B was divided into 6 charter regions and had 136 expansion stations added in 2018.

⁴ FISS costs in IPHC Regulatory Area 2C will not be comparable because the charter regions have been modified for the Fixed-Snap Gear Comparison.

⁵ IPHC Regulatory Area 2C had 44 expansion stations added in 2018.

⁶ Charter regions in IPHC Regulatory Areas 3A and 3B will not be comparable because of added expansion stations in 2019.

Appendix I: FISS Expansion Stations

The IPHC is expanding its FISS coverage in IPHC Regulatory Areas 3A and 3B both in the number and depth range of stations fished in an effort to cover gaps in the current standard depth range and to improve estimation of weight per unit effort (WPUE) in these areas. Some stations will be within our traditional depth coverage (20-275 fm (~37-503 m)) and others will be shallower (10-20 fm (~18-37 m)) or deeper (275-400 fm (~503-732 m)).

The same standards for gear apply to all expansion stations. We expect that there will be several stations which may be unfishable due to tides, currents, proximity to rocks, depths etc.

There is still potential for restrictions on stations to be fished due to permitting or limits on protected species and habitat. Unfished stations will be deducted on a pro-rated basis from the final lump sum payment (e.g. Lump Sum Bid Dollar Value divided by Total Number of Stations bid upon).

Please factor in costs for prospecting stations when considering bids for the expansion stations.

Expansion station considerations:

- As some of the station locations are new to the FISS, the vessel captain will be provided some discretion (within predefined limits listed below) in station positioning to maximize successful station completion.
 - o Prospect all new stations to ensure they are within the expanded depth parameters (>10 fm (~18 m) and <400 fm (~732 m)). If shallower (<10 fm or ~18 m) or deeper (>400 fm or ~732 m) at the designated coordinate, then forego (don't fish) that station.
 - o A single coordinate indicating the center of the set is given for each station location. The gear should be set through this position in either the N-S or E-W orientation.
 - If a set cannot be fished N-S or E-W at the station location, but can be fished in a
 different orientation with the station positioned at the center of the set, use the
 heading that is closest to N-S or E-W orientation. Record why the selected heading
 was chosen.
 - o If the station depth is within the parameters, but bottom topography or other constraints (land, rocks, drop offs, traffic lanes, etc.) preclude setting the center of the gear through that location, move the station no more than three (3) nm from the original coordinate while striving to keep it within the depth band of the original coordinate (>10 fm (~18 m) and < 20 fm (~37 m), 20 275 fm (~37–503 m), or >275 (~503 m) and <400 fm (~732 m)). Record why that heading was chosen.
 - A number of the new stations (in addition to several of the traditional stations) may be sensitive to suitable current and tidal phases such that not all proposed stations may be fishable with limited 'suitable tide window' availability.

IPHC Regulatory Area 3A expanded stations

There are 463 stations planned in IPHC Regulatory Area 3A (89 new expansion stations) that will be divided into the eight (8) charter regions for bidding and fishing purposes (Figures 4-11).

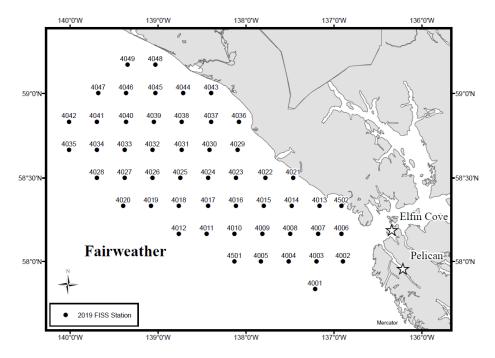


Figure 4. Fairweather

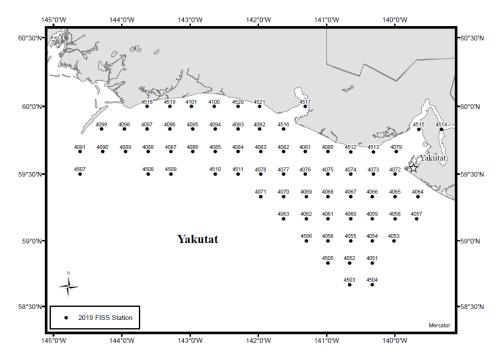


Figure 5. Yakutat

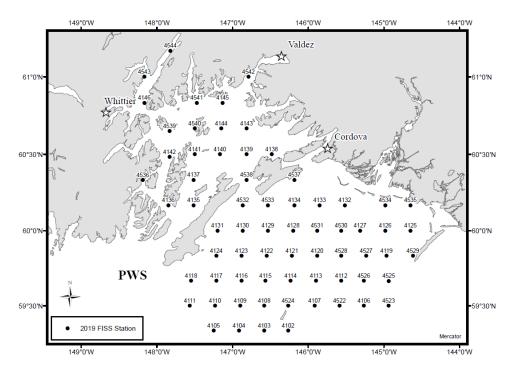


Figure 6. Prince William Sound

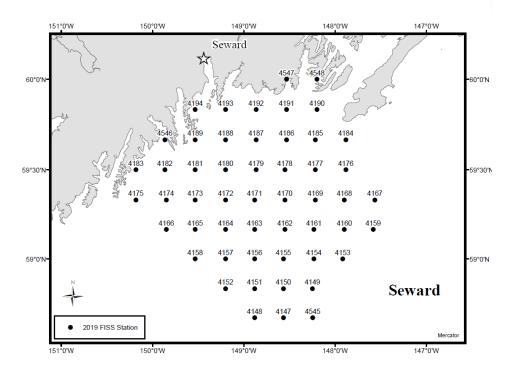


Figure 7. Seward

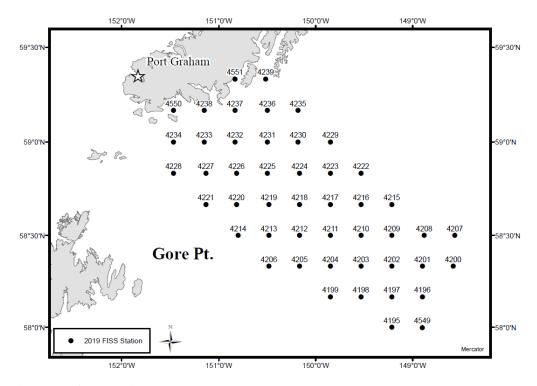


Figure 8. Gore Point

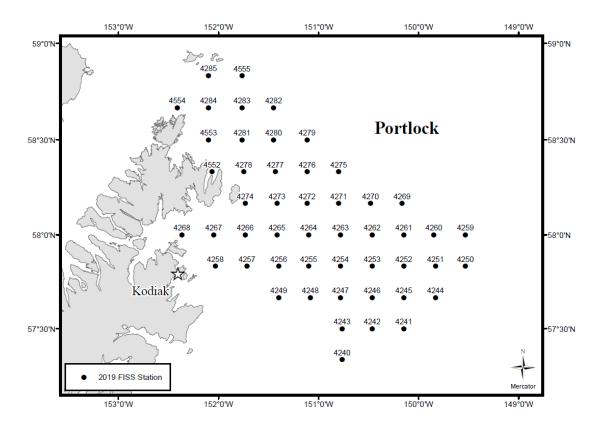


Figure 9. Portlock

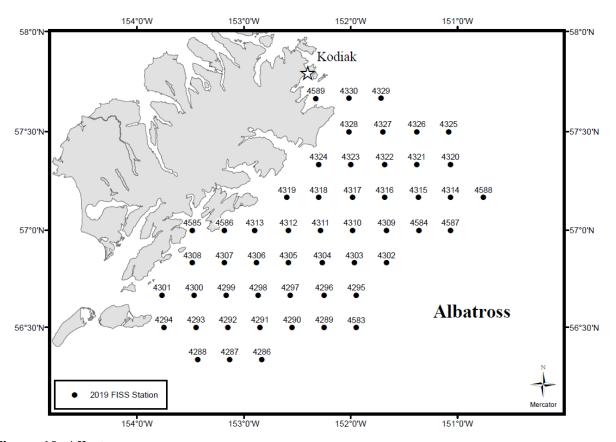


Figure 10. Albatross

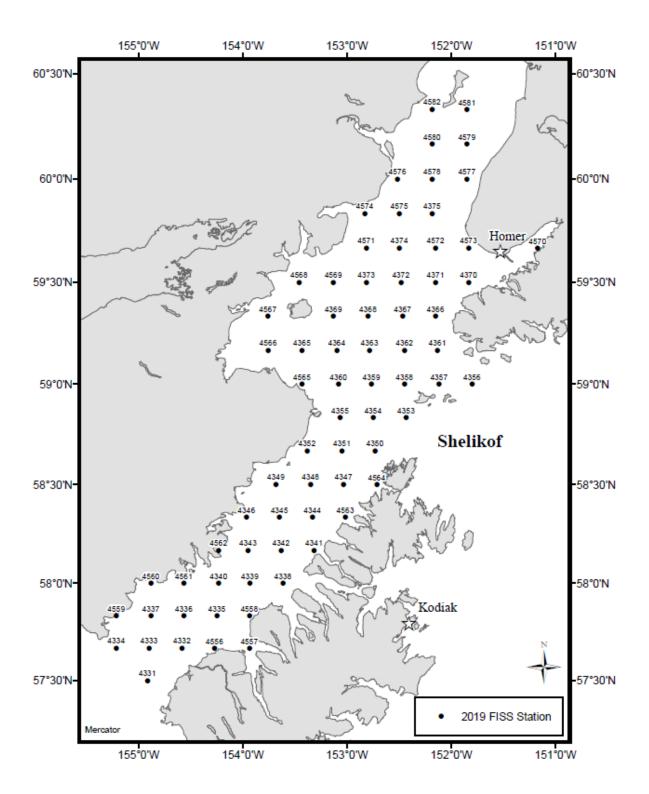


Figure 11. Shelikof

IPHC Regulatory Area 3B expanded stations

There are 298 stations planned in IPHC Regulatory Area 3B (67 new expansion stations) that will be added to the five (5) charter regions (Figures 12-16).

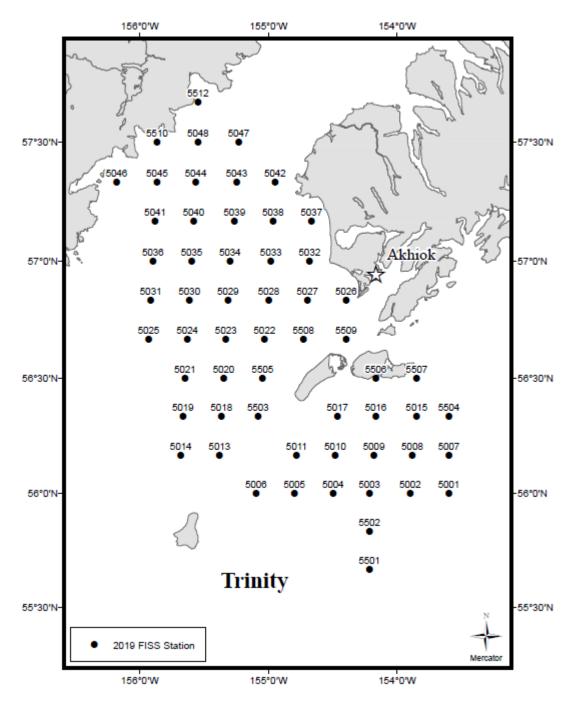


Figure 12. Trinity

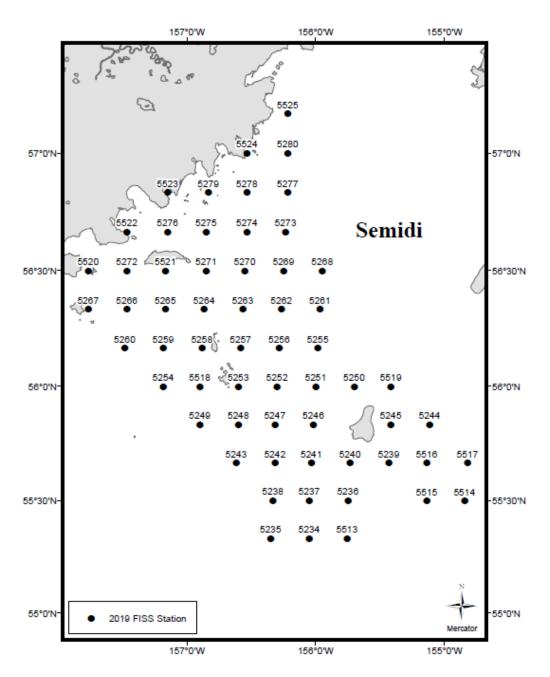


Figure 13. Semidi

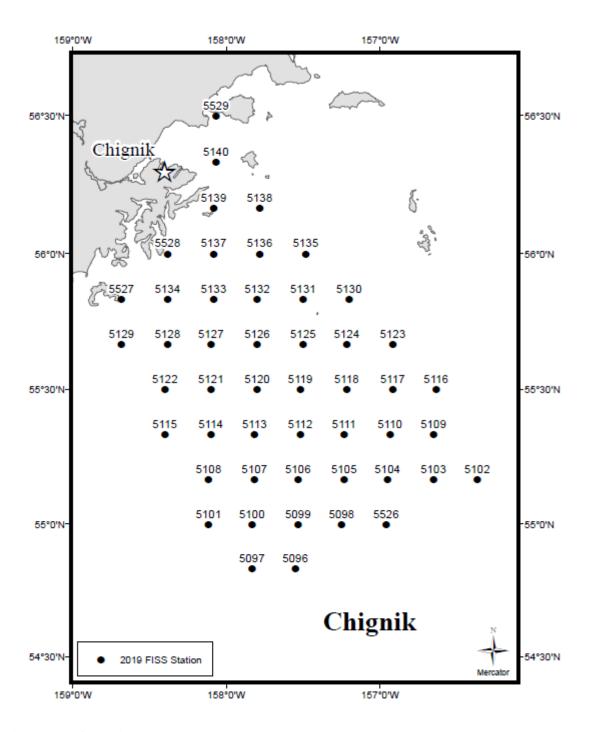


Figure 14. Chignik

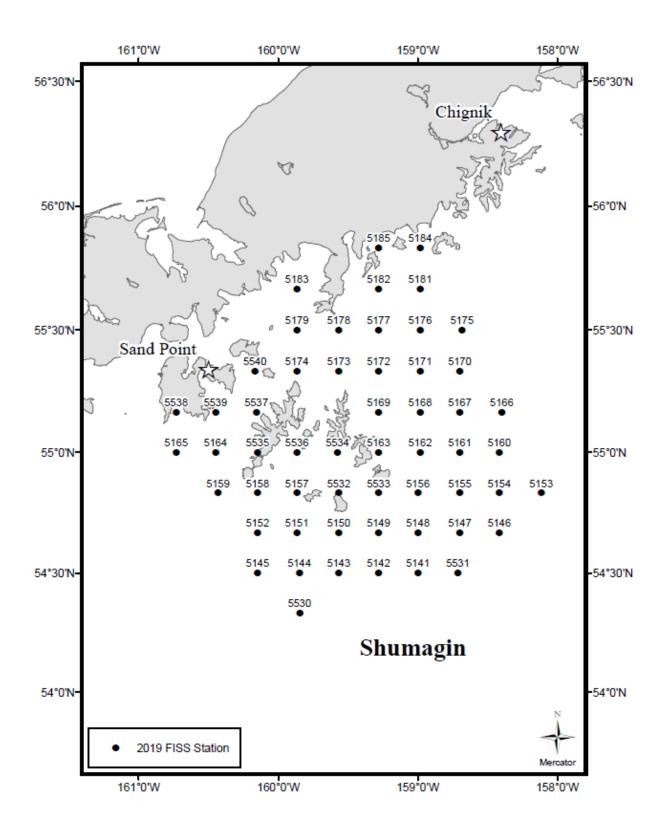


Figure 15. Shumagin

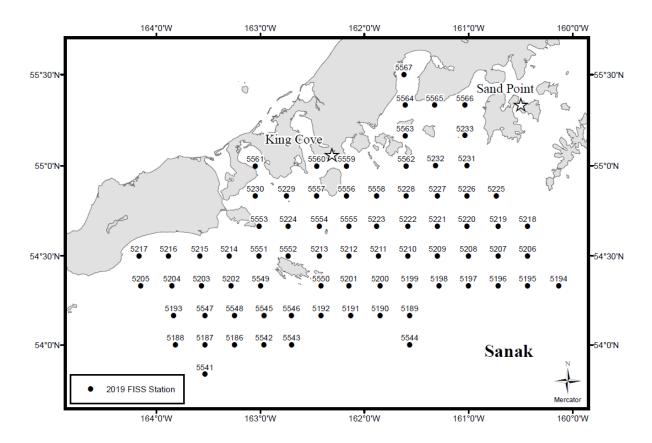


Figure 16. Sanak

Appendix II: Gear comparison: Fixed hook - Snap

The IPHC will be undertaking a gear comparison during the 2019 FISS to compare the performance of fixed-gear and snap-gear in use by the directed commercial fleet. The comparison is required to evaluate whether data from both gear types may be used in the IPHC stock assessment process, and more importantly to allow the FISS to be more aligned with current commercial fishing practices. All stations in IPHC Regulatory Area 2C will be fished twice, early or late with fixed-hook gear and with by snap gear.

To accomplish this work, IPHC Regulatory Area 2C was divided into early and late (north and south) charter regions instead of by the traditional three (3) charter regions of Ketchikan, Sitka and Ommaney. Vessels with snap or fixed hook gear interested in bidding on IPHC Regulatory Area 2C should refer to Table 4 for the fishing periods and Table 5 for the bidding options. Vessels with any single gear type will not be able to fish more than half the stations in all of IPHC Regulatory Area 2C in 2019. There are 10 options for each gear type, and these bids can be combined (fixed hook vessels only) with charter regions outside of IPHC Regulatory Area 2C. Figures 17 -20 show the stations for each charter region by gear type.

Table 4. Charter regions with time period.

Regions	Time period
Early North	May 26 th to July 15 th
Early South	May 26 th to July 15 th
Late North	July 16th to August 31st
Late South	July 16th to August 31st

Table 5. Bid options for charter regions in IPHC Regulatory Area 2C with the corresponding station count.

Bid options	Region combinations	Stations	
1	Early period north and south	64	
2	Early period north	30	
3	Early period south	32	
4	Late period north and south	65	
5	Late period north	32	
6	Late period south	33	
7	Early & late period north	62	
8	Early & late period south	65	
9	Early period south and late period north	64	
10	Early period north and late period south	63	

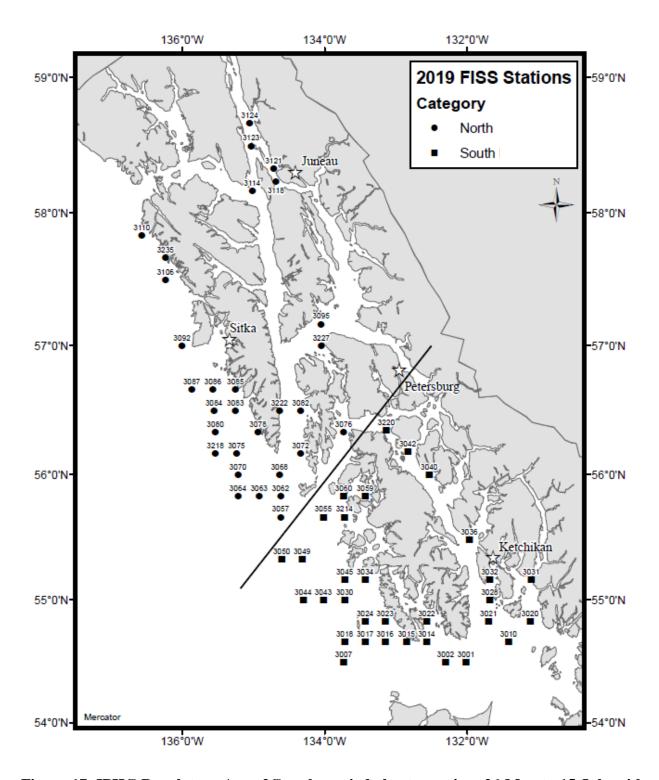


Figure 17. IPHC Regulatory Area 2C early period charter region, 26 May to 15 July with fixed-hook gear.

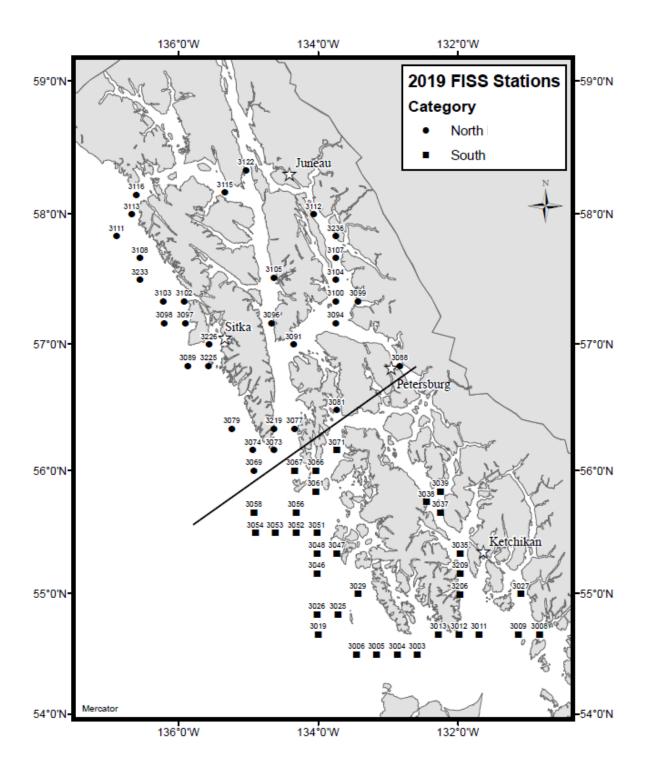


Figure 18. IPHC Regulatory Area 2C late period charter region, 16 July to 31 August with fixed-hook gear.

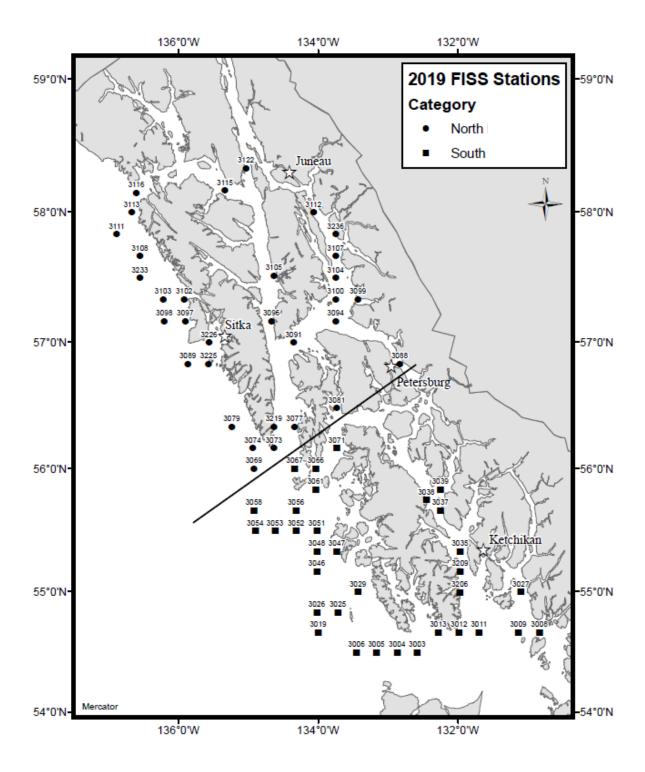


Figure 19. IPHC Regulatory Area 2C early period charter region, 26 May to 15 July with snap gear.

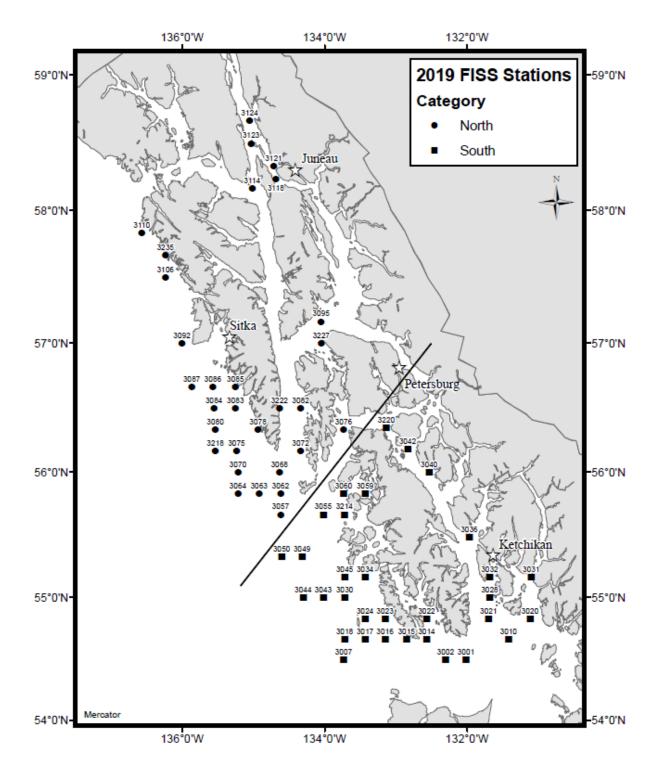


Figure 20. IPHC Regulatory Area 2C late period charter region, 16 July to 31 August with snap gear.

Appendix III: Customs, Brokerage and Tracking Fees for International Operations and Landings

Vessel owners are advised that border agents (U.S.A. or Canada) may deny entrance to individuals with prior criminal convictions or immigration violations into their respective countries. This includes but is not limited to convictions for DUI/DWI (driving under the influence of drugs or alcohol, driving while intoxicated), break and enter, assault (no matter how minor), drugs, and theft (includes shoplifting). We have witnessed increased vigilance in this area, especially with respect to the U.S.A. Bureau of Customs and Border Protection (CBP). It is the owner's responsibility to ensure that all crew meet the necessary security requirements to enter a foreign country. The vessel captain and crew are required to possess a valid passport upon entry.

Customs and Fish Brokerage Fees:

Vessels landing in foreign ports will be required to meet all Immigration and Customs requirements of that country. These fees are divided into those dealing with the vessel itself and its crew, and those dealing with offloading fish or product. Entrance requirements are essentially triggered any time the vessel docks for any reason in the foreign country.

The vessel owner will be responsible for all charges levied in this process, and should budget this into their bids. Please keep in mind that the prices listed here are possibly subject to a slight increase in 2019.

A. Vessel licensed in Canada and Canadian Crew in U.S. waters (Custom Issues).

Vessels licensed in Canada fishing and landing catch from U.S.A. waters must make a formal entry with a U.S.A. Customs Office for the vessel and crew into the first U.S.A. port of call. After a formal entry is made, the vessel must obtain a 'permit-to-proceed'. Upon arrival at the next U.S.A. port, a formal entry and clearance are once again required. **These requirements apply for every visit to a port, without regard to the interval between port visits or whether fish are delivered during the visit.** This process is continued until the vessel clears to a foreign port and leaves U.S.A. waters. Although it is possible for a vessel to post an international carrier bond and complete all paperwork themselves, the IPHC strongly recommends the vessel secure the services of an experienced maritime agent.

Summaries of the 2018 fees (USD) are as follows and apply to any port visit:

- 1. Brokerage fee to process the vessel's entrances/clearances with CBP per occasion will be \$695 for any Alaskan port.
- 2. CBP fees for entry and clearance \$40 USD for vessels under 100 gross tonnes.
- 3. Automated Cargo Entry (ACE) manifest input is an automated requirement to declare the vessel's manifest (items on board) prior to each entry. The IPHC Secretariat will arrange for a customs brokerage firm to handle this requirement and will post the necessary bonds. An AMS entry will be required for every port entry and the customs brokerage fee for this service is \$135 USD.

- 4. Advance Passenger Information System (APIS) electronic Advanced Notice of Arrival (eANOA) must be filed, **online**, by each vessel at least 24 hours in advance of arrival into the U.S.A. The charge for this is \$310 USD.
- 5. The vessels must also file an APIS electronic Advanced Notice of Departure (eANOD) no less than 15 minutes prior to departure from their last U.S.A. port before departing to foreign waters. The charge for this \$310 USD.
- 6. Brokerage communications fee per port call is \$55 USD.
- 7. Yakutat Entry Agent Travel Expense is \$70 USD.

Therefore, vessels licensed in Canada can expect to pay \$925 to \$1,215 USD per port entry (plus an additional \$70 USD if landing in Yakutat) in Alaska. Example invoices for combinations of the above can be obtained by contacting the IPHC Secretariat. The IPHC Secretariat works with Alaska Maritime Agencies (907-562-8808) for its brokerage services.

B. Vessels licensed in Canada selling fish in a U.S.A. port. (Fish Brokerage Fees)

The IPHC Secretariat will arrange for a customs broker to handle the required paperwork for selling U.S.A. fish in a U.S.A. port from a vessel licensed in Canada. The lead sea sampler on the vessel will work closely with the IPHC Secretariat's Seattle office and/or customs broker to ensure that all entry requirements are fulfilled. This requires the vessel to provide at least 24-hours' notice before entering port and providing a copy of the fish ticket and any other required information after the offload and prior to departure.

Our fish sales broker in Alaskan ports is Perman Stoler Customs Brokers (907-243-3313). Their fees per landing in 2018 were as follows:

Basic brokerage fees will range from \$306 to \$320 USD per landing depending on the species delivered (Pacific halibut, rockfish, Pacific cod). In 2018 there was a \$50 USD charge for filing a Food and Drug Administration (FDA) prior notice of landing, and a \$50 USD electronic invoice processing charge per landing. In addition to this, U.S.A. Customs levies a Harbor Maintenance Fee in Haines, Juneau, Ketchikan, Kodiak, Petersburg, Sand Point and Sitka, Alaska. This fee is calculated at 0.125% of the landed value (fish sales).

Vessels can expect to pay a fish landing brokerage fee ranging from \$406-\$494 USD per landing.

C. Selling fish caught in U.S.A waters in a Canadian port.

The IPHC Secretariat will arrange for a customs broker to handle the required paperwork for selling fish caught in U.S.A. waters in a Canadian port. Vessel owners will be responsible for any fees associated with this and should budget this into their bids.

Vessels will be responsible for clearing out with U.S.A. Customs (usually in Ketchikan) with permission to proceed to a foreign port. Upon arrival in Prince Rupert, the vessel must clear in with Canadian Customs prior to the offload.

Our fish sales broker in British Columbia (Prince Rupert, Port Edward) is E.T.S Moore Customs Brokers (1-778-884-3684). (email: mcbroker@citywest.ca)

Basic brokerage fees seen for 2017 were: Vessel arrivals between 0800 Hrs. and 1700 Hrs. Monday to Friday was \$520 CND. Vessel arrivals between 1700 Hrs. and 0800 Hrs. Monday to Friday, plus all day Saturday, Sunday and Holidays was \$550 CND. Vessel arrivals with no cargo on board between 0800 Hrs. and 1700 Hrs. Monday to Friday was \$420 CND. Vessel arrivals with no cargo on board between 1700 Hrs. and 0800 Hrs. Monday to Friday, plus all day Saturday, Sunday and Holidays is \$450 CND. These fees are the same regardless of where the vessel is licensed.

Vessels licensed in U.S.A. may be assessed a Canadian Customs charge as well.

D. Tracking Vessels Licensed in Canada in U.S.A. Waters:

The IPHC Secretariat's office in Seattle will arrange for the Marine Exchange of Alaska (www.mxak.org) to provide Vessel Monitoring Systems (VMS) satellite tracking services. Vessel owners will be responsible for any fees associated with this and should budget this into their bids.

The Marine Exchange of Alaska (MXAK) will provide one (1), self-contained satellite transponder capable of being temporarily adhered to the exterior of each vessel employed by the IPHC. The transponder will be programmed for one (1) position report per hour throughout the vessels' trips. The MXAK will provide the vessels' position data to the IPHC and USCG 17th District command center via a secure web-based display (Automated Secure Vessel Tracking System –ASVTS). The units are self-contained, requiring no external power, there is no electrical installation required. The Marine Exchange will deliver the transmitters to North Pacific Maritime, or any other agent being used by IPHC in Ketchikan, AK to be installed by the vessel crews prior to their voyage.

Per Vessel Costs:

- 1. Transmitter activation fee (per unit) \$100 (US)
- 2. Transmitter equipment rental \$35 (US) per week
- 3. Satellite and ASVTS Access Fee, 1 position report/hr \$50 (US) per week.
- 4. Delivery and Return Shipping \$75 (US) per unit (unless dropping off in Ketchikan)

Tracking fees in 2017 ranged from \$434 (US) for 5 weeks to \$805 (US) for 11 weeks of work.

Appendix IV: Protected Species information

A. Marine Mammal Interactions

As part of receiving a Letter of Authorization from NOAA Fisheries for IPHC FISS operations, the vessel requirements and procedures for avoiding marine mammals and reducing interactions are detailed in the vessel contract and summarized in part below.

Monitoring Measures

The vessel captain or any crew on watch, or the IPHC Secretariat Staff onboard will be required to visually monitor the area of operation for marine mammals and other protected species during all longline operations. The objective is to avoid transecting or operating in areas with significant concentrations of animals.

Operational Procedures

The "move-on" protocol will be implemented if protected species are present near the vessel and appear to be at risk of interactions with the longline gear; longline sets are not initiated if marine mammals are detected and represent a potential interaction with the longline gear, as determined by the professional judgment of the lead sea sampler and vessel captain. The location of the sampling station may not be altered to avoid potentially adverse interactions; however, the fishing plan can be adjusted to return to the area at a later time or date.

To reduce depredation and habituation of whales, if whales begin to depredate, IPHC FISS vessels are instructed to sink the line back down and travel to and haul gear on a different station set, returning to the station where the whales were later the same day. IPHC FISS protocols specifically prohibit chumming before or during the longline setting operations (i.e. releasing additional bait to attract target species to the gear).

Reporting

The vessel captain and crew should work with the IPHC Secretariat staff to record any marine mammal sightings and depredation events. Incidentally captured marine mammals that are still alive should be released from longline gear to the water as soon as possible with no gear or as little gear remaining on the animal as possible. Animals are released without removing them from the water, if possible. Any data collection should not delay the animal's release.

In the event that the animal can safely be brought aboard or near enough for closer inspection, the sea sampler will collect as much data as possible from captured animals considering the disposition of the animal; i.e., if it is in imminent danger of drowning, it is released as quickly as possible. If the safety of the crew and captured animal will not be compromised, the scientific party will attempt to collect biological information from captured, marine mammals before they are released, including species identification, sex identification, estimated length, and photographs. Photos of dead marine mammals (and live if possible), should include an image of the left and right side of the dorsal fin to help determine stock ID and a picture of the nature of gear entanglement. Information should also describe whether the animal was seen prior to the entanglement, a description of its behavior, and any mitigation measures used and discretionary decisions made by the lead IPHC Secretariat field staff, including a rationale for those decisions. This information

will be recorded in the FISS cruise logbook and conveyed to NOAA Fisheries within 24 hours of capture or as soon as ship to shore communication allows.

In the event of any incidental capture or entanglement of marine mammals in any gear or any collisions with marine mammals with the vessel, the scientific personnel will contact the IPHC Secretariat with the encounter and condition information as soon as possible and within 24 hours.

B. Seabird Regulations

The current regulations are as follows, but may change prior to the FISS season. All IPHC FISS vessels must comply with seabird deterrent measures as required by federal management authorities. Check current regulations prior to the FISS.

Canada: Vessels fishing in Canadian waters will be required to meet Fisheries and Oceans Canada requirements as set out for the Pacific halibut (L tab) fleet.

- (1) Subject to subsections (2) and (3), vessel masters fishing:
 - a. Vessels more than 16.8 m in overall length fishing shall deploy paired streamer lines when setting longline gear.
- (2) Vessel masters fishing vessels that have no masts, poles or rigging shall deploy at least one (1) towed buoy when setting longline gear.
- (3) Vessels masters shall deploy gear described in subsection (1) at all times when setting longline gear except:
 - a. during the period between 30 minutes after sunset and 30 minutes before sunrise; or
 - b. when the current wind speeds, at the nearest marine weather station, are reported as greater than 35 knots; and
 - c. when current wind speeds, at the nearest marine weather station, are reported as between 25 and 35 knots the vessel master shall deploy only a single streamer line or for vessels less than 9 m, either a single streamer line or a single towed buoy.
- (4) Vessel masters shall ensure that streamer lines are deployed so that:
 - a. the streamers are in the air at least 30 m beyond the point at which the groundline enters the water; and
 - b. towed as close to the groundline as is practical under the prevailing conditions of wind and sea.
- (5) Vessel masters shall ensure that towed buoys are deployed so that the buoy is towed further astern than the point at which the groundline enters the water.
- (6) When setting longline gear, vessel masters shall:
 - a. use baited hooks that sink to the bottom as soon as they are put in the water, e.g. use sinking groundlines, thawed bait, additional weight on the groundline;
 - b. discharge old bait and offal so as not to attract seabirds to the longline gear; and

- c. use bait fish that do not retain air in their swim bladders or puncture the swim bladder.
- (7) All birds caught shall be recorded by species in Integrated Groundfish Fishing Log.
- (8) Birds shall be released in the least harmful manner.

U.S.A.: For vessels fishing in USA waters, all vessels over 55-ft must comply with the following seabird regulations:

Requirements:

The operator of a vessel must conduct fishing operations in the following manner:

- (i) Use hooks that when baited, sink as soon as they are put in the water.
- (ii) Must not discharge offal while gear is being set.
- (iii) Make every reasonable effort to ensure that birds brought on board alive are released alive and that wherever possible, hooks are removed without jeopardizing the life of the birds.

The operator of that vessel must employ one (1) or more of the following seabird avoidance measures:

- (i) For inside waters (Prince William Sound, Southeast Inside District, and state waters of Cook Inlet), all vessels must tow a <u>single</u> streamer line to prevent birds from taking hooks:
- (ii) All other waters all vessels must tow a <u>paired</u> streamer line while gear is being set to prevent birds from taking hooks

Single Streamer Standard:

- (i) A single streamer line must be deployed in such a way that streamers are in the air for a minimum of 40 m aft of the stern and within 2 m horizontally of the point where the main groundline enters the water.
- (ii) <u>Material Standard:</u> The minimum streamer line specifications are as follows:

Length 300 feet (91.4 m)

Spacing of streamers: Every 5 meters until performance standard is achieved.

Streamer material: Brightly colored, UV protected plastic tubing or 3/8 inch polyester line or material of equivalent density. An individual streamer must hang from the mainline to 0.25 meters of the water in the absence of wind.

Double Streamer Standard:

(i) Deploy a minimum of two (2) streamer lines while setting hook-and-line gear. If both streamer lines cannot be deployed prior to the first hook, at least one (1) streamer line must be deployed before the first hook and both streamers must be fully deployed within 90 seconds

- (ii) Exceptions: In conditions of wind speeds exceeding 30 knots, it is acceptable to fly a single streamer from the windward side of the vessel. In winds exceeding 45 knots, the safety of the crew supersedes deployment of the streamer lines.
- (iii) Paired streamer lines must be deployed in such a way that streamers are in the air for a minimum of 40 m aft of the stern for vessels under 100 ft and 60 m aft for vessels over 100 ft. The paired streamer lines must be deployed on each side of the main groundline.
- (iv) <u>Material Standard:</u> The minimum streamer line specifications are as follows: Length 300 feet (91.4 m)

Spacing of streamers: Every 5 meters until performance standard is achieved. **Streamer material**: Brightly colored, UV protected plastic tubing or 3/8 inch polyester line or material of equivalent density. An individual streamer must hang from the mainline to 0.25 meters of the water in the absence of wind.

FOR MORE INFORMATION:

http://www.fakr.noaa.gov/protectedresources/seabirds/bycatchregs.htm http://www.fakr.noaa.gov/protectedresources/seabirds/guide.htm http://www.fakr.noaa.gov/protectedresources/seabirds/newsitems.htm http://alaskafisheries.noaa.gov/protectedresources/seabirds.htm

The following link has a great video demonstration of Tori Line Deployment technique. Clip #3 specifically:

http://www.wsg.washington.edu/mas/resources/seabirdvideo.html

Appendix V: Sperm Whale detection testing

In 2016, the Southeast Alaska Sperm Whale Avoidance Project (SEASWAP) pilot-tested a simple towed array hydrophone system deployed and retrieved from fishing vessels operating at normal transit speeds. A typical towed hydrophone array for marine mammal monitoring consists of one (1) or more pairs of matched hydrophones within a streamlined housing that are towed on a strengthened cable of 100 to 200 meters in length (Figure 21). Onboard the vessel, signals are amplified and filtered before being digitized to a computer running real-time detection and localization routines. The software then sends out a text file two (2) times per day to the network with latitudes and longitudes of any whale detections. The ability of the towed array to detect sperm whales up to eight (8) miles distant is significant.

The IPHC is a collaborating partner under a NOAA Fisheries bycatch reduction and engineering program (BREP) funded project testing a new iteration of this equipment and approach. During the 2019 FISS, vessel(s) in the charter regions in IPHC Regulatory Area 2C and Fairweather will be asked to deploy a unit while running between stations on the outer coast. Installation will take roughly a half a day, and involves installation of a computer control unit (requires tying ["pigtailing"] into the vessel's 12V power system) and Iridium modem, and will occur in the port of Sitka, Alaska either prior to FISS operations commencing, or opportunistically during an offload in Sitka. During operations, a crew member will need to turn the unit on/off, and deploy and retrieve the 100m cable, which will be towed during transit between stations. Between deployments, the cable is stored in a longline tub (Figure 22.) in a convenient and safe location. Removal of the unit will need to occur in Sitka, Alaska or a nearby Southeast Alaskan port.

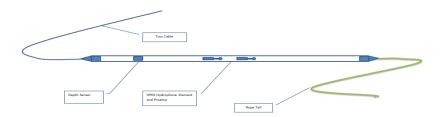


Figure 21. Schematic of towed array cable components.

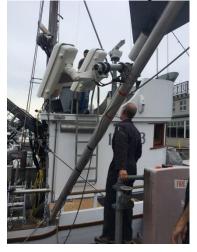


Figure 22. Towed array stowed in longline tub.

Appendix VI: EM stereoscopic camera

As part of the NOAA Fisheries and North Pacific Fishery Management Council's overall efforts to improve and optimize observer data in directed fisheries in Alaska, the IPHC assists with some of the background testing of new electronic monitoring (EM) techniques. The overall goal of this research project is to assess the efficacy of EM software algorithms that are in development (in combination with other tools) for catch accounting of retained and discarded catch. The software and hardware being tested aims to identify catch events, species, and fish length directly from the images and sensor collections. The goal is to reduce or eliminate the need for human review of EM data collections.

The NOAA Fisheries EM prototype system includes the follow components; A controlling computer, GPS, hydraulic sensors, proximity sensor (vessel dependent), drum rotation sensor(vessel dependent), RFID reader and tags for the anchors (vessel dependent), compliance camera at setting station aimed at tori lines (vessel dependent), deck compliance camera, Image collection computer, and one (1) set of stereo cameras capturing images of the roller installed on the vessels' stabilizer poles or comparable existing davit (Figures 23a, b and c).



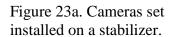




Figure 23b. The system.



Figure 23c. The GPS unit

Vessels will need to carry an additional sampler who will be recording 100% hook by hook observations for the entire set (i.e. three (3) samplers in total).

Vessels will be required to have clean provision of 120v AC power with a maximum power consumption of 230 w, or a 20 amp circuit breaker on available leads to a 12 volt battery bank. The entire system runs on 12 volts direct, pulling 15-18 amps max.

Vessels will need to install a ½ inch national pipe thread (NPT) female gauge port in the high pressure delivery side of the hydraulic line in a location away from fishing activity (e.g., engine room), and a Hydraulic pressure switch (Figures 24a-b) *unless* they are a vessel licensed in Canada with an existing Archipelago Marine Research Hydraulic Pressure Sensor installed, *with* leads

available (<u>Figure 24a</u>.). The prototype needs a Hydro switch, if there's an AMR one aboard, it will work. If the AMR sensor is unavailable NOAA Fisheries can provide one and would need it installed by the vessel crew (<u>Figure 24b</u>).

NOAA Fisheries staff will be responsible to work with the vessel operator(s) to install the system. Installations usually take 8-12 hours. Vessels licensed in Canada familiar with EM gear will have less installation decision making needs as the sensors and camera placement are very similar.





Figure 24a. Image of AMR leads from Hydro sensor 24b. NOAA Fisheries hydro switch sensor installed

Appendix VII: Rockfish Index Station Considerations (Area 2A)

In addition to the depth and spatial expansion of the setline survey, the IPHC is cooperating with the WDFW to complete additional survey stations to aid in the development of a rockfish relative abundance index. The main species of focus for this work is yelloweye rockfish, (however all rockfish caught on either station configuration in Area 2A will be retained and sampled dockside). A total of eight (8) stations have been placed in rockfish habitats and areas that are not usually accessible by coast-wide trawl surveys conducted by the NMFS. To minimize the impact on the yelloweye rockfish resource (and its respective users) while collecting sufficient data, only four (4) skates of gear will be fished on the rockfish stations.

Rockfish Indexing Considerations:

- Eight (8) rockfish stations positioned systematically at 2.5 nm intervals within the standard grid arrangement of 10 nm (Figure 25).
- Four (4) skates of standardized gear are to be fished at each station.
- A single coordinate indicating the center of the set is given for each station location. The gear should be set through this position in either a N-S or E-W orientation.
- Vessels may fish up to a maximum of 5 stations per day when fishing includes at least one (1) of the rockfish stations, provided that no rockfish station that is within 3.75 nm of an IPHC standard grid station, is fished on the same day as the IPHC standard grid station. (i.e., stations 1528, 1530, 1531, and 1533 must be fished on a later date than IPHC station 1082).
- The extra stations are expected to take two (2) extra fishing days.
- All Pacific halibut on these stations will be sampled as per normal protocols and retained for sale.
- All rockfish on these stations (as well as the standard stations) will be tagged aboard the
 vessel to associate fish with station data, and retained for subsequent dockside sampling
 and sale.
- Collect 100% hook-by-hook occupancy data for the eight (8) rockfish index stations and IPHC standard grid station 1082.
- WDFW may request one (1) additional skate of experimental gear be set on the rockfish index stations to test different hook and bait.
 - 1. Halibut on these skates are to be measured and released and not included in the survey collection.
 - 2. Experimental gear should be set on the south end of each rockfish station set with an unbaited 'spacer' skate positioned between the IPHC standard gear and the WDFW experimental gear.
 - 3. WDFW experimental gear consists of IPHC standard gear modified with 14/0 circle hooks baited with American squid. Ten pound led weights are to be attached at the end of each skate and at skate midpoints.

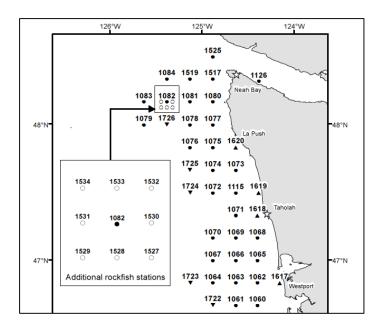


Figure 25. Rockfish Index stations.

Appendix VIII: Harassment in the Workplace

A. What is harassment?

Federal regulations (U.S.A. Civil Rights Act, U.S.A. Equal Employment Opportunity Commission, and Canadian Human Rights Commission) protect employees from harassment in the workplace based on race, color, ancestry, place of origin, political belief, religion, marital status, family status, physical or mental disability, sex, sexual orientation, age and criminal convictions. The IPHC and vessels contracting to them adhere to these laws. Harassment is any behavior that demeans, humiliates, or embarrasses a person, and that a reasonable person should have known would be unwelcome. It includes actions (e.g., touching, pushing), comments (e.g., jokes, name-calling), or displays (e.g. magazines, posters, cartoons). Speech (including swearing and offensive jokes) can also be considered workplace harassment if someone feels that the language used is severe or pervasive enough to create a hostile or abusive work environment.

Some examples of harassment include:

- unwelcome remarks, slurs, jokes, taunts, or suggestions about a person's body, clothing, race, colour, place of origin, religion, age, marital status, family status, physical or mental disability, sex, sexual orientation, political belief, or criminal or summary conviction offence unrelated to employment;
- unwelcome sexual remarks, invitations, or requests (including persistent, unwanted contact after the end of a sexual relationship);
- displays of sexually explicit, sexist, racist, or other offensive or derogatory material:
- written or verbal abuse or threats:
- practical jokes that embarrass or insult someone;
- leering (suggestive staring) or other offensive gestures;
- unwelcome physical contact, such as patting, touching, pinching, hitting;
- patronizing or condescending behavior;
- humiliating an employee in front of co-workers;
- vandalism of personal property;
- and/or physical or sexual assault.

Whether or not behavior is harassment depends on the individual's tolerance or sensitivity to it. The law supports this interpretation.

Consensual Banter

Two (2) or more employees bantering back and forth is not harassment if everyone involved is in agreement. However, such banter is harassment if any employee feels uncomfortable with this behavior, and the behavior continues even after that person has expressed their discomfort, or if the others involved should have known the person was uncomfortable. This type of harassment can create what is known as a "poisoned work environment," where employees do not feel safe and feel consistently humiliated.

B. All IPHC Secretariat staff, the FISS vessel captain and crew should abide by the following:

i. Respect others

Each employee has the right to be treated fairly and respectfully in the workplace. Each employee also has the responsibility to treat others in a way that respects individual differences. No matter what your opinion, or that of the people with whom you interact at work, showing mutual respect and consideration will make everyone's work and life aboard the boat easier. If you have doubts about whether a joke, comment, coarse language, or other behavior will embarrass, humiliate, degrade, or otherwise bother someone, then don't say or do it.

ii. Speak up and report harassment

If someone behaves in a manner that offends, harms, humiliates, or degrades you, do not put up with it. First, if you feel that you can speak to that person, do so. Let them know how you feel. Tell them the behavior is inappropriate. If they continue the behavior, or if you do not feel you can speak directly to the person, you have several options, from speaking to the vessel captain, the IPHC lead sea sampler, or the IPHC Secretariat's Seattle office.

C. FISS vessel captain and IPHC Secretariat staff responsibilities

i. Put a stop to harassment

The vessel (owner/captain) and the IPHC have full responsibility for making sure the work environment is free from harassment. If you become aware of harassment in your work environment, you must do everything you can to stop it, whether or not a complaint has been made. Not knowing that one's actions are perceived as harassing, is not an excuse. It is important for you to be aware of the behavior of those around you and how it affects a professional working environment. If a reasonable person should have known that harassment was going on, you will still be held responsible if you let the situation continue. Harassment will not be tolerated and necessary actions will be taken to stop it.

Appendix IX: Careful Release of Pacific Halibut – Best Practices

A portion of the U32 Pacific halibut that are caught on the FISS are tagged and released. A small percentage of released Pacific halibut succumb to injury or stress. In order to reduce the potential mortality of the released fish the IPHC Secretariat Staff and the vessel captain and crew must follow the practices listed below:

- Treat Pacific halibut (any fish) gently.
- Minimize handling and release carefully.
- When possible, unhook the fish in the water.
- If the Pacific halibut must be brought aboard, cradle it to protect the spine and internal organs, and slip it head-first back into the sea.
 - o Handle the fish in a designated area and protect it from injury if it is flailing
- If the fish is hooked firmly such that the hook cannot be removed without further injury, cut the hook from the gangion as close to the hook as possible.

These steps must be taken to ensure the survival of released Pacific halibut.