

Report of the 93rd Session of the IPHC Interim Meeting (IM093)

Seattle, Washington, United States of America, 28-29 November 2017

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ACRONYMS

ABM Abundance-Based Management (of Prohibited Species Catch limits)

CB Conference Board

DFO Department of Fisheries and Ocean (Canada)

DMR Discard Mortality Rate EEZ Exclusive Economic Zone

FCEY Fishery Constant Exploitation Yield

IFQ Individual Fishing Quota

IPHC International Pacific Halibut Commission

MSL Minimum Size Limit

NMFS National Marine Fisheries Services, of NOAA NOAA National Oceanic and Atmospheric Administration NPFMC North Pacific Fishery Management Council

NPUE Number Per Unit Effort

PFMC Pacific Fisheries Management Council

RAB Research Advisory Board
SB Spawning Biomass
SRB Scientific Review Board
SPR Spawning Potential Ratio

TCEY Total Constant Exploitation Yield

WPUE Weight Per Unit Effort

HOW TO INTERPRET TERMINOLOGY CONTAINED IN THIS REPORT

The IM093 Report has been written using the following terms and associated definitions so as to remove ambiguity surrounding how particular paragraphs should be interpreted.

- **Level 1: RECOMMENDED**; **RECOMMENDATION** (formal); **REQUESTED** (informal): A conclusion for an action to be undertaken, by a Contracting Party, a subsidiary (advisory) body of the Commission and/or the IPHC Secretariat.
- **Level 2: AGREED**: Any point of discussion from a meeting which the Commission considers to be an agreed course of action covered by its mandate, which has not already been dealt with under Level 1 above; a general point of agreement among delegations/participants of a meeting which does not need to be elevated in the Commission's reporting structure.
- Level 3: NOTED/NOTING; CONSIDERED; URGED; ACKNOWLEDGED: General terms to be used for consistency. Any point of discussion from a meeting which the Commission considers to be important enough to record in a meeting report for future reference. Any other term may be used to highlight to the reader of an IPHC report, the importance of the relevant paragraph. Other terms may be used but will be considered for explanatory/informational purposes only and shall have no higher rating within the reporting terminology hierarchy than Level 3.

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EXECUTIVE SUMMARY

The 93rd Session of the International Pacific Halibut Commission (IPHC) Interim Meeting (IM093) was held in Seattle, Washington, U.S.A. from 28-29 November 2017. A total of 14 members (6 Commissioners; 8 advisors/experts) attended the Session from the two (2) Contracting Parties, as well as 55 members of the public and 74 via the webcast. The meeting was opened by the Chairperson, Dr Jim Balsiger (United States of America) and Vice-Chairperson, Mr Paul Ryall (Canada) and who welcomed participants to Seattle.

The following are a subset of the complete recommendations and requests for action from the IM093, which are provided at Appendix V.

RECOMMENDATIONS

Report of the IPHC Secretariat (2017)

- IM093–Rec.01 (para. 6) The Commission **RECOMMENDED** that the IPHC Secretariat develop a working paper for consideration at the 94th Annual Meeting, containing the following:
 - a) A detailed description of how the Regulatory Area 2A commercial fishery (derby) is managed, including roles and responsibilities of agencies, the PFMC and the IPHC; and
 - b) An update to the analysis of various fishing periods and fishing period limits provided to the PFMC in September 2017, including the addition of 2- and 5-day fishing periods.

Review of fishery goals and objectives: Commission directive

IM093–Rec.02 (<u>para. 38</u>) **NOTING** the goals and objectives related to distributing the TCEY presented during the meeting by the U.S.A. (<u>Table 3</u>), the Commission **RECOMMENDED** that they be considered at the 94th Annual Meeting in January 2018 after soliciting input from stakeholders.

REOUESTS

Data overview and preliminary stock assessment (2017), and draft harvest decision table (2017)

- IM093–Req.03 (para. 28) The Commission **REQUESTED** that the IPHC Secretariat provide columns in the decision table, three-year graphical projections, and catch tables for SPR values of 42%, 44%, 48%, and 50% in addition to the 46% SPR that was presented in documents IPHC-2017-IM093-08 and IPHC-2017-IM093-09.
- IM093–Req.04 (para. 29) **NOTING** questions arising regarding the specific fisheries contributing to projected bycatch reductions from 2010 to 2017, the Commission **REQUESTED** that the IPHC Secretariat work with NMFS staff to facilitate a report for consideration at the 94th Annual Meeting in January 2018.

Report of the 10th Session of the IPHC Management Strategy Advisory Board (MSAB10)

IM093–Req.05 (para. 36) The Commission **REQUESTED** that the MSAB look at SPR values consistent with recent estimated SPR values from the assessment model and lower. This would mean expanding the lower range of SPR values to below 40%.

Review of fishery goals and objectives: Commission directive

IM093–Req.06 (para. 39) The Commission **REQUESTED** the IPHC Secretariat to consolidate the objectives related to TCEY distribution (Table 3) with the current goals, objectives and performance metrics provided as Appendix IV of the MSAB10 Report, for presentation at the 94th Annual Meeting in January 2018.

1. OPENING OF THE SESSION

1. The 93rd Session of the International Pacific Halibut Commission (IPHC) Interim Meeting (IM093) was held in Seattle, Washington, U.S.A. from 28-29 November 2017. A total of 14 members (6 Commissioners; 8 advisors/experts) attended the Session from the two (2) Contracting Parties, as well as 55 members of the public in person and 74 via the webcast. The list of participants is provided at Appendix I. The meeting was opened by the Chairperson, Dr Jim Balsiger (United States of America) and Vice-Chairperson, Mr Paul Ryall (Canada), who welcomed participants to Seattle.

2. ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION

2. The Commission **ADOPTED** the Agenda as provided at <u>Appendix II</u>. The documents provided to the IM093 are listed in <u>Appendix III</u>.

3. UPDATE ON ACTIONS ARISING FROM THE 93RD ANNUAL MEETING

- 3. The Commission **NOTED** paper IPHC-2017-IM093-03 which provided an opportunity to consider the progress made during the inter-sessional period, in relation to the recommendations and requests of the 93rd Session of the IPHC Annual Meeting (AM093) in 2017.
- 4. The Commission **AGREED** to consider and revise as necessary, the actions arising, and for these to be combined with any new actions arising from the IM093.

4. REPORT OF THE IPHC SECRETARIAT (2017)

- 5. The Commission **NOTED** paper IPHC-2017-IM093-04 which provided the Commission with a draft update on the activities of the IPHC Secretariat in 2017.
- 6. The Commission **RECOMMENDED** that the IPHC Secretariat develop a working paper for consideration at the 94th Annual Meeting, containing the following:
 - a) A detailed description of how the Regulatory Area 2A commercial fishery (derby) is managed, including roles and responsibilities of agencies, the PFMC and the IPHC; and
 - b) An update to the analysis of various fishing periods and fishing period limits provided to the PFMC in September 2017, including the addition of 2- and 5-day fishing periods.

5. FISHERY STATISTICS (2017)

- 7. The Commission **NOTED** paper IPHC-2017-IM093-05 Rev_1 which provided an overview of the key fishery statistics from fisheries catching Pacific halibut during 2017, including the status of landings compared to catch limits adopted by the Commission.
- 8. **NOTING** Appendix I of paper IPHC-2017-IM093-05 Rev_1 was provided the evening prior to the Interim Meeting, and detailed information available on bycatch levels among all gears/sectors, as requested by the Commission at its 93rd Annual Meeting (AM093-Rec.09), the Commission **REQUESTED** that the IPHC Secretariat facilitate consideration of the information inter-sessionally, so that the Commission may provide further guidance on the type of information it requires, for consideration at the 94th Annual Meeting in January 2018.
- 9. The Commission **NOTED** that fish in the Regulatory Area 2B Recreational Fishery could be landed after the 6 September 2017 closure date for the Regulatory Area 2B Recreational Fishery if the harvesters acquired quota as part of Regulatory Area 2B's Experimental Recreational Pacific halibut fishery.
- 10. The Commission **NOTED** that there has been confusion among vessels in the 26' to 60' size category fishing with pot gear in the Gulf of Alaska because they previously were only required to maintain an IPHC logbook. At present, while fishing under the IFQ sablefish fishery with pot gear, the captains of vessels in this size category are required to maintain a NMFS logbook. As a result, training for these vessels has been requested from NOAA Enforcement.

6. STOCK STATUS OF PACIFIC HALIBUT (2017) AND HARVEST DECISION TABLE

6.1 Fishery Independent Setline Survey (FISS) design and implementation in 2017, including current and future expansions

- 11. The Commission **NOTED** paper IPHC-2017-IM093-06 which provided an overview of the IPHC's fishery-independent setline survey (FISS) design and implementation in 2017, including current and future expansions.
- 12. The Commission **NOTED** that the Fishery-Independent Setline Survey (FISS) program has specific parameters that trigger a requirement to complete a marine mammal depredation form. In 2017, the presence of marine mammals near FISS stations during haul-back, did not result in any of those stations being determined as ineffective due to depredation. In other words, there was not enough damage to the gear or missing baits to classify the station as ineffective. Comparatively, for the commercial fleet, anecdotal information on marine mammal sightings, as recorded in commercial vessel logbooks, suggests a higher presence of marine mammals.
- 13. The Commission **NOTED** that factors such as the presence of marine protected areas and tidal movement may affect the feasibility of surveying a particular proposed expansion station. The IPHC Secretariat engages with Contracting Parties annually to vett potential expansion stations.

6.2 Space-time modelling of survey data (WPUE; survey expansion results, etc.)

- 14. The Commission **NOTED** paper IPHC-2017-IM093-07 which provided the results of the fishery-independent setline survey (FISS) expansions in IPHC Regulatory Areas 4B and 2A in 2017, an outline of the space-time modelling methods used to estimate time series of weight and numbers-per-unit-effort and estimates of stock distribution among Regulatory Areas, and results of an evaluation of previous FISS expansions in Regulatory Areas 2A and 4A including the implications for future expansions in these areas.
- 15. The Commission **NOTED** that the mean setline survey WPUE in Oregon and California was similar in 2017 to 2016, while WPUE in Washington was down considerably. This could imply that the decrease overall of Regulatory Area 2A was attributable to the anoxic zone off the Washington coast. It is possible, however, that Pacific halibut moved from Washington to Oregon waters, or elsewhere to avoid this zone, and that we would have seen decreased setline survey catch rates in Regulatory Area 2A even if this zone had not been present.
- 16. The Commission **NOTED** that in some Regulatory Areas, particularly Areas 2B and 3B, the magnitude of the decrease from 2016 to 2017 was not previously seen in the setline survey time series. Regarding what is driving this decrease, nothing was considered unusual in the setline survey catch of non-target species, or the hook competition adjustment. Environmental data from the setline survey's water column profilers are currently being examined, and any findings of note will be reported at the 94th Annual Meeting in January 2018.
- 17. The Commission **REQUESTED** that the IPHC Secretariat examine alternative ways of computing bottom area that account for bathymetry, noting that the current method involves estimating the surface area of the ocean.
- 18. The Commission **NOTED** that the current evaluation of the Regulatory Area 2A setline survey expansion program combines all of the surveyed parts of California when the data show two distinct regions in terms of Pacific halibut density. Future evaluations will include additional low density Pacific halibut areas surveyed in 2017, and will consider whether setline survey stations south of latitude 40°N are needed.
- 19. The Commission **NOTED** that the setline survey expansion evaluation table (Table 1 in paper IPHC-2017-IM093-07) will in future include a column for relative cost, as recommended by the Scientific Review Board. The intention is to have this available for the 94th Annual Meeting in January 2018.
- 20. The Commission **NOTED** that the anoxic event off the Washington coast affected the catch rates on the Washington ad-hoc densification expansion grid. It was highlighted that there was a minor effect of the

- densified expansion grid on overall value and precision of Regulatory Area 2A estimates of WPUE, and thus, does not support repeating this expansion in 2018.
- 21. The Commission **NOTED** that parts of the annual setline survey will be evaluated along with expansion stations to determine if annually sampling these stations is necessary. The IPHC Secretariat intends to undertake a full evaluation of the efficacy of the setline survey design including annually fished stations, once the expansion program is completed in 2019.
- 22. **NOTING** the call for additional information on several factors which may have impacted the space-time-model results for Regulatory Area 2A, including 1) The latitudinal covariate for halibut density in the space-time model for Regulatory Area 2A; 2) The number and location of ineffective stations; 3) The addition of historical data from 1993-97; and 4) The hypoxic zone observed off the Washington Coast; the Commission also **NOTED** the following initial response:
 - a) Identifying a very minor role for the first three of these factors, and noting that under the assumption that the hypoxic zone did not produce Pacific halibut mortality, but likely induced movement to more favourable habitats, the setline survey should have encountered and adequately enumerated these fish at other locales.
 - b) This last point illustrates the potential value of considering the stock distribution at the biologically meaningful level of Regions (e.g. Regulatory Areas 2A, 2B, and 2C in aggregate) rather than focusing on individual Regulatory Areas.
 - c) Further clarification was provided regarding the historically large variance estimates for Regulatory Area 2A, which have been reduced in recent years, apparently as a function of both population processes and additional sampling as well as the application of the Space-Time model for analyzing these data.
 - d) The IPHC Secretariat will provide additional information on these topics during the 94th Annual Meeting in January 2018.
 - 6.3 Data overview and preliminary stock assessment (2017), and draft harvest decision table (2017)
- 23. The Commission **NOTED** paper IPHC-2017-IM093-08 which provided an opportunity to consider the results of the 2017 IPHC stock assessment for Pacific halibut within the Convention Area, including data used in the assessment, and the draft harvest decision table for 2018 (Table 1).
- 24. The Commission **NOTED** that:
 - a) in 2017, total removals were below the 100-year average, and have been stable near 42 million pounds (19,050 t) from 2014-17. In 2017, 83% of the total removals from the stock were retained compared to 80% in 2016.
 - b) the 2017 mortality from all sources corresponds to a point estimate of SPR = 40% (there is a 75% chance that fishing intensity exceeded the IPHC's interim reference level of 46%). In order to reach the interim reference level, catch limits would need to be reduced for 2018. The Commission does not currently have a coastwide limit fishing intensity reference point.
 - c) the Pacific halibut female spawning biomass at the beginning of 2018 is estimated to be 202 million pounds (~91,600 t), with an approximate 95% confidence interval ranging from 148 to 256 million pounds (~67,100-116,100 t), which corresponds to only a 6% chance of being below the IPHC threshold (trigger) reference point of SB30%, and less than a 1% chance of being below the IPHC limit reference point of SB20%. Therefore, no adjustment to the interim target fishing intensity is required, and the stock is not considered to be 'overfished'. Projections indicate that the interim reference F_{SPR} fishing intensity is likely to result in similar, but declining biomass levels in the near future.
 - d) regional stock distribution has been stable within estimated credibility intervals over the last five years. Region 2 currently represents a greater proportion, and Region 3 a lesser proportion of the coastwide stock than observed in previous decades.

- 25. The Commission **NOTED** that stock projections were conducted using the integrated results from the stock assessment ensemble, summaries of the 2017 directed fisheries and other sources of mortality. The harvest decision table (<u>Table 1</u>) provides a comparison of the relative risk (in times out of 100), using stock and fishery metrics (rows), against a range of alternative harvest levels for 2018 (columns). The orientation of this table has changed from previous analyses in order to make the comparison of additional metrics easier (the second year of projection is now explicitly included), and to increase consistency with the results produced from the Management Strategy Evaluation. The block of rows entitled "Stock Trend" provides for evaluation of the risks to short-term trend in spawning biomass, independent of all harvest policy calculations. The remaining rows portray risks relative to the spawning biomass reference points ("Stock Status") and fishery performance identified in the interim management procedure. The alternatives (columns) provided include several coarsely spaced levels of mortality intended to provide for evaluation of stock dynamics including:
 - No mortality (useful to evaluate the stock trend due solely to population processes),
 - A 10 million pound (~4,500 t) 2018 Total Constant Exploitation Yield (TCEY)
 - A 50 million pound (~22,700 t) 2018 TCEY
 - A 60 million pound (~27,200 t) 2018 TCEY
 - The removals consistent with the reference SPR (F46%) level.
- 26. The Commission **NOTED** that a finer grid of alternative TCEY values is provided around the column corresponding to the reference level of fishing intensity (SPR=46%; for 2018 a TCEY of 31 million pounds, ~14,060 t).

Table 1. Harvest decision table for 2018. Columns correspond to yield alternatives and rows to risk metrics. Values in the table represent the probability, in "times out of 100" (or percent chance) of a particular risk.

		2018 Alternative	No						Reference:							
			removals						SPR=46%			1				1
		Total removals (M lb)	0.0	11.8	21.8	29.8	30.8	31.8	32.8	33.8	34.8	35.8	41.8	51.8	61.9	1
		TCEY (M Ib)	0.0	10.0	20.0	28.0	29.0	30.0	31.0	32.0	33.0	34.0	40.0	50.0	60.0	↓
		Fishing intensity	F _{100%}	F _{73%}	F _{58%}	F _{49%}	F _{48%}	F _{47%}	F _{46%}	F _{45%}	F _{44%}	F _{43%}	F _{39%}	F _{32%}	F _{27%}	
	Fi	shing intensity interval	-	61-84%	45-73%	36-66%	36-65%	35-65%	34-64%	33-63%	32-63%	32-62%	28-58%	23-53%	19-48%	
	in 2019	is less than 2018	1	3	24	64	69	74	78	81	85	87	98	>99	>99	а
		is 5% less than 2018	<1	<1	<1	2	3	4	5	7	9	11	29	69	96	b
Stock Trend	in 2020	is less than 2018	<1	1	14	52	57	62	67	71	76	80	95	>99	>99	С
(spawning biomass)		is 5% less than 2018	<1	<1	1	11	14	18	21	25	29	34	61	94	>99	d
		is less than 2018	<1	2	23	63	68	72	76	79	83	86	97	>99	>99	е
	in 2021	is 5% less than 2018	<1	<1	5	32	36	41	46	50	55	59	83	99	>99	f
	in 2019	is less than 30%	3	4	5	6	7	7	7	7	7	7	9	11	15	g
		is less than 20%	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	h
Stock Status	in 2020	is less than 30%	2	2	4	6	6	7	7	8	8	9	12	21	32	i
(Spawning biomass)		is less than 20%	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	1	j
	in 2021	is less than 30%	1	1	4	8	8	9	10	11	12	13	21	37	54	k
		is less than 20%	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1	2	7	ı
	in 2019	is less than 2018	<1	<1	7	38	43	49	55	60	64	68	78	89	97	m
	2017	is 10% less than 2018	<1	<1	3	26	30	34	38	43	48	53	72	82	92	n
Fishery Trend		is less than 2018	<1	<1	10	43	49	54	59	63	67	70	79	91	98	o
(TCEY)	in 2020	is 10% less than 2018	<1	<1	6	31	36	40	45	50	54	59	74	84	95	р
		is less than 2018	<1	<1	14	50	55	59	63	67	69	72	81	93	>99	q
	in 2021	is 10% less than 2018	<1	<1	9	38	43	48	52	56	60	63	75	86	99	r
Fishery Status (Fishing intensity)	in 2018	is above F _{46%}	0	<1	4	33	38	43	50	54	60	64	77	87	95	s

<u>Terms</u>: Constant Exploitation Yield (CEY): A specific concept from the IPHC's interim management procedure: the Total CEY (TCEY) is the amount of yield of Pacific halibut greater than 26 inches (66 cm) in length, and Fishery CEY (FCEY), is the amount of yield for the directed Pacific halibut fisheries where applicable. Spawning Potential Ratio (SPR): A commonly used metric of fishing intensity. SPR is the ratio of the equilibrium spawning biomass per recruit given some level of fishing and the equilibrium spawning biomass per recruit in the absence of fishing. Sometimes referred to as SBR, relative Spawning Biomass per Recruit.

- 27. The Commission **NOTED** that the stock is projected to decrease gradually over the period from 2018-20 for removals around the reference SPR level. The risk of stock decline begins to increase rapidly for TCEYs above 31 million pounds (~14,060 t), becoming more pronounced by 2020 (<u>Table 1</u>). The reference SPR corresponds to a 78/100 (78%) chance of stock decline through 2019, and a 46% chance of at least a 5% decline through 2021 at that constant level of TCEY. TCEYs corresponding to recent levels of fishing mortality correspond to probabilities of stock decline over the next one to three years greater than 95%. There is a <21/100 (21%) change that the stock will decline below the threshold reference point (SB30%) in projections for all the levels of TCEY up to 40 million pounds (~18,100 t) evaluated over three years; for TCEYs exceeding that level, the probability begins to increase rapidly.
- 28. The Commission **REQUESTED** that the IPHC Secretariat provide columns in the decision table, three-year graphical projections, and catch tables for SPR values of 42%, 44%, 48%, and 50% in addition to the 46% SPR that was presented in documents IPHC-2017-IM093-08 and IPHC-2017-IM093-09.
- 29. **NOTING** questions arising regarding the specific fisheries contributing to projected bycatch reductions from 2010 to 2017, the Commission **REQUESTED** that the IPHC Secretariat work with NMFS staff to facilitate a report for consideration at the 94th Annual Meeting in January 2018.

6.4 Draft: Pacific halibut catch tables

- 30. The Commission **NOTED** paper IPHC-2017-IM093-09 which provided the Commission with a summary of IPHC Regulatory Area-specific preliminary mortality projections for 2018 based on the interim management procedure and other alternatives.
- 31. The Commission **NOTED** that the reference projection results in a 2018 TCEY of 31.00 million lbs, (~14,060 t; <u>Table 2</u>). This represents a reduction of 21% from the reference level calculated based on the 2016 stock assessment, and 24% from the catch limits adopted for 2017. Because components within the TCEY have changed since 2016, the Fishery Constant Exploitation Yields (FCEYs), and allocations to specific fisheries based on domestic catch agreements have also changed; however, projected FCEYs are all lower for 2018 than values adopted in 2017.

Table 2. Comparison of TCEY values (Mlbs) among IPHC Regulatory Areas from 2017 and projected for 2018 using the reference SPR (SPR46%) along with the current management procedure for TCEY distribution, and the adopted limits from 2017.

•	2A	2B	2C	3A	3B	4A	4B	4CDE	Total
2017 Reference SPR (46%)	0.96	6.08	6.47	13.84	4.39	1.84	1.46	4.06	39.10
2017 Adopted (40%) ¹	1.47	8.32	7.04	12.96	3.98	1.80	1.34	3.84	40.74
2018 Reference SPR (46%)	0.59	3.84	5.65	12.07	2.56	1.69	1.21	3.39	31.00

¹ This SPR value represents the current estimate, based on the 2017 stock assessment. At the time the 2017 catch limits were adopted, they were predicted to result in an SPR of 45%.

7. Management Strategy Evaluation

7.1 IPHC Management Strategy Evaluation: update

- 32. The Commission **NOTED** paper IPHC-2017-IM093-10 which provided an update on the progress of the IPHC Management Strategy Evaluation process and seeks recommendations for future work, including a review of goals and objectives defined by the MSAB, an overview of the simulation framework to evaluate the fishing intensity and harvest control rules in the IPHC harvest strategy policy, results from the closed-loop simulations, ideas for distributing the TCEY to Regulatory Areas, and a five-year work plan.
- 33. The Commission **CONSIDERED** the following items and **AGREED** to discuss them in detail at the 94th Annual Meeting in January 2018 for potential decision:

- a) The simulation framework and assumptions as described, including introducing variability to the Operating Model, simulating weight-at-age and an environmental regime, and allocation of the Total Mortality to sectors;
- b) The long-term results looking at the outcomes of various management procedures and the trade-offs between them;
- c) Management procedures (e.g. values of SPR in combination with a control rule threshold) that would meet the goal and objectives important to the Commission, based on the results shown, and additional procedures that may be of interest to evaluate in 2018;
- d) Whether the clear separation of stock distribution, and distribution procedures satisfies the Commission's recommendation to replace apportionment with a more suitable term; and
- e) The concept of distributing the TCEY to biological regions defined here as a method to satisfy the Commission's request to "initiate a process to develop alternative, biologically based stock distribution strategies."

7.2 Report of the 10th Session of the IPHC Management Strategy Advisory Board (MSAB10)

- 34. The Commission **NOTED** the Report of the 10th Session of the IPHC Management Strategy Advisory Board (MSAB10) (IPHC-2017-MSAB10-R) which was presented by Mr Adam Keizer (Canada) and Ms Rachel Baker (U.S.A). The MSAB consists of 20 board members, 19 of which attended the Session from the two (2) Contracting Parties. A total of five (5) individuals attended the Session as Observers. In addition, two (2) IPHC Commissioners were in attendance, Mr Paul Ryall (Canada) and Mr Bob Alverson (U.S.A.).
- 35. The Commission **CONSIDERED** the 3 recommendations and 7 requests made by the MSAB10, **NOTING** that formal consideration will be made at the 94th Annual Meeting in January 2018.
- 36. The Commission **REQUESTED** that the MSAB look at SPR values consistent with recent estimated SPR values from the assessment model and lower. This would mean expanding the lower range of SPR values to below 40%.

7.3 Review of fishery goals and objectives: Commission directive

- 37. **NOTING** the current fishery goals, objectives, and performance metrics identified by the MSAB for the MSE process, as detailed in the MSAB10 report (IPHC-2017-MSAB10-R), the Commission **AGREED** to provide guidance to the IPHC Secretariat and the MSAB on goals and objectives at the 94th Annual Meeting in January 2018.
- 38. **NOTING** the goals and objectives related to distributing the TCEY presented during the meeting by the U.S.A. (<u>Table 3</u>), the Commission **RECOMMENDED** that they be considered at the 94th Annual Meeting in January 2018 after soliciting input from stakeholders.
- 39. The Commission **REQUESTED** the IPHC Secretariat to consolidate the objectives related to TCEY distribution (<u>Table 3</u>) with the current goals, objectives and performance metrics provided as Appendix IV of the MSAB10 Report, for presentation at the 94th Annual Meeting in January 2018.
- 40. The Commission **NOTED** that providing guidance on the MSE process to the IPHC Secretariat and the MSAB at the Interim and Annual meetings would be an efficient and effective method to ensure the guidance is incorporated into the annual MSAB work plan.

Table 3. Pacific halibut TCEY distribution goals and objectives.

Goal	Objective
Biological sustainability: Preserving bio-complexity	 Maintaining diversity in the population across IPHC Regulatory Areas. Prevent local depletion at IPHC Regulatory Area scale.
Fisheries Sustainability: Maintain access and serve	Maintain commercial, recreational and subsistence fishing opportunities in each IPHC Regulatory Area.
consumer needs.	2. Maintain processing opportunities in each IPHC Regulatory Area.
	1. Distribution is responsive to IPHC Regulatory Area abundance trends and stock characteristics (ex. Fishery WPUE, age structure, size at age etc.).
Fisheries Sustainability: Maximize yield by regulatory area	 Distribution is responsive to management precision in each IPHC Regulatory Area.
regulatory area	3. Minimize impact on downstream migration areas.
	4. Minimize discard mortality and bycatch.
Fisheries Sustainability:	Limit annual TCEY variability due to stock distribution in both time and scale.
Minimize variability,	2. Avoid zero sum distribution policy.

7.4 Discussion of allocation principles

- 41. The Commission **CONSIDERED** the IPHC Secretariat's presentations related to documents IPHC-2017-IM093-08 and IPHC-2017-IM093-10 of an approach for distributing the TCEY to biologically-based Regional Areas (Region 2, Region 3, Region 4, and Region 4B) composed of multiple IPHC Regulatory Areas.
- 42. The Commission **NOTED** that TCEY distribution among Regions could be modified through management procedures, and that the distribution from coastwide mortality to Regulatory Areas may occur at any step in the process.
- 43. The Commission **NOTED** that other distribution methods could be considered in addition to, or instead of, the Region approach, such as distribution to Regulatory Areas based on differences in production between areas, fishery WPUE, or defined allocations.
- 44. The Commission **AGREED** that the principles related to distributing the TCEY in the future will be further considered at the 94th Annual Meeting of the Commission in January 2018.

8. IPHC RESEARCH AND 5-YEAR RESEARCH PROGRAM

8.1 IPHC Research Advisory Board – Update

45. The Commission **NOTED** that the 19th Session of the IPHC Research Advisory Board (RAB19) was moved from November 2017, to 28 February 2018 to align better with the improved IPHC research coordination process, as part of the 5-year research plan as detailed in <u>Section 8.3</u> below.

8.2 Report of the 11th Session of the IPHC Scientific Review Board (SRB11)

- 46. The Commission **NOTED** the Report of the 11th Session of the IPHC Scientific Review Board (SRB11) (IPHC-2017-SRB11-R) which was presented by Dr Marc Mangel (University of California, Santa Cruz), one of the four (4) SRB members.
- 47. The Commission **CONSIDERED** the recommendations made by the SRB11 and provided comment or endorsement as specified below.

- a) Ideally, the Commission would like to see the SRB undertake a detailed review of the annual Pacific halibut stock assessment, including consideration of the most recent fishery-dependent and fishery-independent data prior to the Interim Meeting each year. However, due to the compressed timeline of data availability and subsequent meetings, it was indicated that this is not feasible. A comprehensive annual review of the stock assessment could be based on the previous year's data, and would require an extended SRB session mid-year.
- b) The current review structure includes a detailed review of model configurations contributing to the stock assessment ensemble on a periodic basis, whenever major changes are made (recently 2012 and 2014). This is consistent with the 1st Performance Review of the IPHC and international best practice, but could be extended to include additional independent peer reviewers (beyond the SRB), as detailed below. Currently, small data and model revisions are reviewed at the mid-year SRB meeting, and finalized during the October meeting. No changes, other than updating the most recent data available, are made subsequent to that SRB review. The SRB, through a teleconference in December, has the opportunity to clarify any remaining issues prior to the Annual Meeting.
- c) As indicated in the 1st Performance Review of the IPHC and to align with international best practice, the IPHC Stock Assessment should also undergo a periodic (every 3-5 years) external peer review.

8.3 IPHC 5-year Biological & Ecosystem Science research program: update

- 48. The Commission **NOTED** paper IPHC-2017-IM093-11 which provided an overview of the new and continuing research projects proposed by IPHC Secretariat and contemplated within the 5-year Biological and Ecosystem Science Research Program.
- 49. The Commission **NOTED** the summary of research projects proposed for 2018 (<u>Appendix IVa</u>) and the summary of research projects awarded for external funding in 2017 (<u>Appendix IVb</u>)
- 50. The Commission **NOTED** that the IPHC Secretariat will conduct genetic validation of collected biological samples of sex marked fish from the 2017 coastwide sex marking project in order to evaluate its success and possible future implementation and will therefore not request fishers participation in 2018.
- 51. The Commission **NOTED** that the IPHC Secretariat clarified that the absence of available data at this time from the satellite tagging efforts on Regulatory Area 4B is due to the fact that satellite pop-up tags were programmed to surface and emit data via satellite after 1 January 2018.
- 52. The Commission **AGREED** that the proposed research on marine mammal detection methods by the IPHC Secretariat is timely and well aligned with research on this topic by other organizations.
- 53. The Commission **NOTED** that the SRB recommendation on the usefulness of a life-history modeller is under consideration by the IPHC Secretariat and that a first step in that direction is the temporary hire of a modeller to work on Pacific halibut larval connectivity between the Gulf of Alaska and the Bering Sea.
- 54. The Commission **NOTED** that the IPHC Secretariat is undertaking studies on growth and reproduction in different biological regions that represent geographical regions within the geographic distribution of the Pacific halibut.
- 55. The Commission **NOTED** that the IPHC Secretariat is working towards clearly demonstrating how biological research objectives and stock assessment are integrated in order to inform the policy decision making process.

8.4 Evaluation of the IPHC's 32" minimum size limit

56. The Commission **NOTED** paper IPHC-2017-IM093-12 which provided a response to the Commission request made during the 2016 Interim Meeting (IPHC 2016): IM092–Req.07 (para. 73) "The Commission REQUESTED that a review of the analysis of the effectiveness of size limits be undertaken by the IPHC Staff throughout 2017, for consideration by the Commission at its annual meeting in 2018."

- 57. The Commission **NOTED** the discrepancy between survey- and observer-based estimates of potential discards due to the Minimum Size Limit (MSL), and the range of explanations for these differences, as well as the inadequate nature of both data sources to fully address the MSL.
- 58. The Commission **NOTED** the difficulty in designing an adaptive management approach. Specifically, comments identified the challenge in scaling the results from a small geographical area (or Regulatory Area) to the entire coastwide fishery, as well as the potential cost to a subset of the fleet voluntarily participating.
- 59. The Commission **AGREED** that the MSL discussion would benefit greatly from additional stakeholder input and should be presented at the 94th Annual Meeting of the Commission in January 2018.
- 60. The Commission **AGREED** that the current MSL does not restrict the landed catch to only mature Pacific halibut: the majority of the catch is estimated to be female, and the age at 50% maturity is very close to the average age in the commercial landings. Therefore, the MSL may be providing a limited benefit in the form of a 'recruitment refuge'. If that were the management goal, then it could be debated that a higher MSL would be warranted.

9. CONTRACTING PARTY (AGENCY) UPDATES

61. The Commission **REQUESTED** that the IPHC Secretariat develop a standard template for agency reports to the Commission, in order to improve their structure and consistency, as well as to allow the agencies to prepare the appropriate information at the appropriate level of detail for the Commission's consideration.

9.1 Fisheries and Oceans Canada (DFO)

62. The Commission **NOTED** that no update on Pacific halibut matters was received from Fisheries and Oceans Canada for consideration at the IM093.

9.2 NOAA - National Marine Fisheries Service (NOAA-Fisheries)

63. The Commission **NOTED** that no update on Pacific halibut matters was received from NOAA-Fisheries for consideration at the IM093.

9.3 North Pacific Fishery Management Council (NPFMC)

64. The Commission **NOTED** paper IPHC-2017-IM093-AR03 which provided an update from the NPFMC on Council research priorities and abundance-based PSC management.

9.4 Pacific Fishery Management Council (PFMC)

65. The Commission **NOTED** that no update on Pacific halibut matters was received from the PFMC for consideration at the IM093.

10. REGULATORY PROPOSALS FOR THE 2017/18 PROCESS

10.1 IPHC Secretariat regulatory proposals

10.1.1 IPHC Closed Area (Sect. 10)

66. The Commission **NOTED** paper IPHC-2017-IM093-PropA1 which considered the intent and purpose of the IPHC Closed Area, as defined in IPHC Fishery Regulations (2017) Section 10, which currently excludes directed Pacific "halibut fishing" (i.e. the longline fleet), with the intent of protecting juveniles from extraction.

10.1.2 Commercial fishing periods (Sect. 8)

67. The Commission **NOTED** paper IPHC-2017-IM093-PropA2 which proposed establishing fixed fishing periods for the commercial Pacific halibut fisheries.

10.1.3 Removal of exemption for Vessel Monitoring System requirement for IPHC Regulatory Area 4 clearances (Sect. 15)

68. The Commission **NOTED** paper IPHC-2017-IM093-PropA3 which proposed streamlining regulatory requirements and improve monitoring for IPHC Regulatory Area 4 by requiring vessel monitoring systems (VMS) instead of an IPHC Clearance.

10.1.4 IPHC Fishery Regulations: minor amendments

69. The Commission **NOTED** paper IPHC-2017-IM093-PropA4 which proposed amendments to ensure clarity and consistency in the IPHC Fishery Regulations.

10.1.5 Discussion paper: Frozen-at-sea exemption for head-on requirement (Sect. 13)

70. The Commission **NOTED** paper IPHC-2017-IM093-PropA5 which proposed a discussion on retaining or removing the frozen-at-sea head-on exemption into the future.

10.2 Contracting Party (agency) regulatory proposals

10.2.1 Alaska CDQ Leasing in IPHC Regulatory Area 4

71. The Commission **NOTED** paper IPHC-2017-IM093-PropB1 which proposed IPHC Regulation changes to allow the use of leased Individual Fishing Quota (IFQ) by Community Development Quota (CDQ) organizations in IPHC Regulatory Areas 4B, 4C, 4D and 4E.

10.2.2 Clarify Alaska Sport Fishery Regulations

72. The Commission **NOTED** paper IPHC-2017-IM093-PropB2 which proposed a clarification to the IPHC Regulations regarding retention of Pacific halibut caught in the recreational charter fisheries in IPHC Regulatory Areas 2C and 3A.

10.2.3 Clarify Head-On Weight Requirement in Alaska Commercial Fisheries

73. The Commission **NOTED** paper IPHC-2017-IM093-PropB3 which proposed clarifications to the IPHC Regulations regarding the landing of Pacific halibut with the head on.

10.3 Stakeholder regulatory proposals

10.3.1 Commercial Catch Limits (Sect. 11): Proposals

74. The Commission **NOTED** paper IPHC-2017-IM093-PropC1 which summarises catch limit proposals received from stakeholders to date. Entries in the table reflect the individual proposals, and unless otherwise noted, proposals are expressed as TCEY (with values in millions of pounds) for particular IPHC Regulatory Areas or as a total for the whole coast.

10.3.2 Other stakeholder regulatory proposals

IPHC-2017-IM093-PropC11

75. The Commission **NOTED** papers IPHC-2017-IM093-PropC2-14 which provided the Commission with 13 regulatory proposals from various stakeholders, for potential adoption and implementation in the 2018 fishing season, as detailed below.

• IPHC-2017-IM093-PropC2 Preserving catch on private live-aboard vessels (A. Cooper) For unguided sport fishing (P. Phillips) • IPHC-2017-IM093-PropC3 • IPHC-2017-IM093-PropC4 Sport Fishing for Halibut - Cleaning Regulations (S. Riehemann) IPHC-2017-IM093-PropC5 Elimination of skin-on regulation (J. Shirk) Live-aboard processing exemption (D. Robertson) IPHC-2017-IM093-PropC6 IPHC-2017-IM093-PropC7 Eliminate the requirement for a CHP (S. Riehemann) IPHC-2017-IM093-PropC8 Allow shellfish pots on board (ALFA) IPHC-2017-IM093-PropC9 Processing halibut greater than four filets (M. Cowart) IPHC-2017-IM093-PropC10 Halibut length measurement method (R. Yamada)

Long term storage aboard pleasure vessels (L. Thompson)

- IPHC-2017-IM093-PropC12 Long term storage on cruising vessels (W. Cornell)
- IPHC-2017-IM093-PropC13 Halibut in Bering Sea pots (J. Kauffman)
- IPHC-2017-IM093-PropC14 Status Quo Harvest Measures for Guided Anglers in Area 3A (R. Yamada)
- 76. The Commission **NOTED** that the IPHC Secretariat will develop an accompanying *Implementation Note*, detailing how each of the proposals could be implemented, as well as any complications. This may or may not include specific regulatory text additions or amendments. These will be considered at the 94th Annual Meeting of the IPHC in January 2018.

10.4 Stakeholder statements

77. The Commission **NOTED** that no 'stakeholder statements' were submitted prior to the submission deadline.

11. PERFORMANCE REVIEW

11.1 Update on progress regarding the implementation of the 1st IPHC Performance Review recommendations

- 78. The Commission **NOTED** paper IPHC-2017-IM093-13 which detailed the current status of implementation for each of the recommendations arising from the Report of the 1st IPHC Performance Review Panel (PRIPHC01).
- 79. The Commission **AGREED** to review the status table provided at Appendix I of paper IPHC-2017-IM093-13 and to provide comment prior to the 94th Session of the IPHC Annual Meeting for incorporation into the document as necessary.

11.2 2nd IPHC Performance Review: update

- 80. The Commission **NOTED** paper IPHC-2017-IM093-14 which provided the Commission with an update on progress regarding the 2nd Performance Review of the IPHC (PRIPHC02) and an opportunity to direct the IPHC Secretariat regarding its completion.
- 81. The Commission **AGREED** that there was still scope for further modifications to the terms of reference and criteria, and that these would be communicated at the 94th Annual Meeting in January 2018 for consideration and potential inclusion.
- 82. **NOTING** the Legal analysis of the IPHC Convention undertaken by the consultant (Appendix II of paper IPHC-2017-IM093-14), the Commission **AGREED** that each Contracting Party should undertake a detailed review of the legal analysis, and to present comments for consideration at the 94th Annual Meeting in January 2018. The intention is that the Legal review will form part of the information considered by the 2nd Performance Review Panel, among other documents, throughout 2018.

12. FINANCE AND ADMINISTRATION

12.1 Financial Statement for FY2017

- 83. The Commission **NOTED** paper IPHC-2016-IM092-17 which provided a draft end of year financial statement for the Commission (financial period: 1 October 2016 to 30 September 2017).
- 84. The Commission **NOTED** the contributions (in USD) received from Contracting Parties as follows:
 - a) Canadian Contribution In FY2017, the Canadian government contributed \$1,507,000 to the IPHC. The Canadian contributions included \$848,720 for general contributions (which has been unchanged since 2003), as well as a separate amount of \$95,508 to cover pension deficit payments as well as a one-time payment of the Canadian share of pension deficits of \$563,476.
 - b) U.S.A. Contribution In FY2017, the U.S. Government appropriated **\$4,160,000** to the IPHC. The U.S. contributions included funding for pension deficits and headquarters lease costs.

85. The Commission **NOTED** that FY2017 preliminary expenses were 96% of the projected budget (General Expenses at **\$11,313,018**, and Income was 104% of the projected budget at **\$10,117,619**).

12.2 Handling of the annual budget carryover

- 86. The Commission **NOTED** paper IPHC-2017-IM093-16 which provided the methodology to be used for parsing the IPHC General and Supplemental Fund carryovers into two distinct accounts. These accounts will be used to independently track annual carryovers related to IPHC Core operations and to the fisheries-independent setline survey and other related setline survey program income and expenses.
- 87. The Commission **AGREED** that the IPHC Secretariat should revise the IPHC Financial Regulations (2014) to incorporate the new methodology, for the consideration of the Commission at its 94th Annual Meeting in January 2018.
- 88. The Commission **AGREED** that a goal of revenue neutrality for resource use (fish sales) or long-term revenue neutrality for the IPHC fishery-independent setline survey (FISS) data collections may not be necessary or feasible, particularly given periodic expansion programs into fiscally negatively geared areas. However, the general objective of aligning resource use to cost recovery for research activities should be maintained.

12.3 Budget estimates for FY2018 and FY2019 for approval, and tentatively for FY2020

- 89. The Commission **NOTED** paper IPHC-2017-IM093-17 which detailed the proposed current (FY2018) budget estimate (financial period: 1 October 2017 to 30 September 2018), as well as that for FY2019 and tentatively for 2020.
- 90. The Commission **NOTED** that Contracting Party contributions in (USD) for FY2018 are still unresolved but currently indicated as follows:
 - a) Canadian Contribution In FY2018, the Canadian government contribution is estimated at \$1,511,508. The Canadian contributions includes \$1,453,704 for general contributions (as proposed at the AM093 meeting), as well as an amount of \$54,000 to cover pension deficit payments.
 - b) U.S.A. Contribution In FY2018, indications are that the U.S. Government will appropriate \$4,200,000 to the IPHC. As currently constructed, the U.S. contributions included funding for pension deficits and headquarters lease costs.
- 91. The Commission **NOTED** that FY2018 anticipated income (in USD) is \$11,831,333 and expenses at \$12,503,971. The Commission anticipates using \$672,638 from the General/Supplemental carryover for expenses in excess of income.
- 92. The Commission **NOTED** that new contributions levels are required from both U.S. and Canadian governments for pension shortfall payments based on the 2017 International Fisheries Commissions Pension Society triennial valuation of IPHC pension liabilities. These new payment levels begin in January 2018.
- 93. The Commission **NOTED** that the fiscal year 2018 and 2019 information being presented is preliminary and the final FY2018 and FY2019 budgets will be presented and approved at the 94th Annual Meeting in January 2018.

12.4 Draft: IPHC Financial Regulations (2018)

- 94. The Commission **NOTED** paper IPHC-2017-IM093-18 which provided the Commission with an initial opportunity to consider proposed amendments to the IPHC Financial Regulations.
- 95. The Commission **NOTED** that a detailed revision of the IPHC Financial Regulations will be provided for consideration at the 94th Session of the IPHC Annual Meeting in January 2018.

12.5 Independent auditor's report (2016)

96. The Commission **NOTED** paper IPHC-2017-IM093-19 was not available for consideration at the IM093, but would be provided for review at the 94th Annual Meeting in January 2018.

13. OTHER BUSINESS

13.1 Preparation for 94th Session of the IPHC Annual Meeting (2018)

- 97. The Commission **NOTED** paper IPHC-2017-IM093-20 which provided an opportunity to direct preparations for the 94th Session of the IPHC Annual Meeting, to be held in Portland, OR, USA, from 22-26 January 2018.
- 98. The Commission **NOTED** that information concerning the meeting, including electronic versions of documents to be considered, will be published on the IPHC website as they become available, but no later than 30 days prior to the commencement of the Session (23 December 2017), in accordance with Rule 8.4 of the IPHC Rules of Procedure (2017).

13.2 Date and place of the 94th and 95th Sessions of the IPHC Interim Meeting (2018 and 2019)

- 99. The Commission **NOTED** paper IPHC-2017-IM093-21 which provided an opportunity to direct the IPHC Secretariat with regard to future sessions of the IPHC Interim Meeting.
- 100. The Commission **NOTED** the potential scheduling conflicts around the 95th Session of the IPHC Interim Meeting (IM095, 2019), with a view toward making a decision regarding IM095 no later than January 2018.

13.3 IPHC meetings calendar (2018-20)

- 101. The Commission **NOTED** paper IPHC-2017-IM093-21 which provided an opportunity to consider the draft IPHC meetings calendar (2018-20).
- 102. The Commission **AGREED** that any changes to the draft calendar would be considered and approved at the 94th Session of the IPHC Annual Meeting in January 2018.

13.4 News release

103. The Commission **AGREED** to consider the draft news release inter-sessionally for approval.

14. REVIEW OF THE DRAFT AND ADOPTION OF THE REPORT OF THE 93RD SESSION OF THE IPHC INTERIM MEETING (IM093)

104. The report of the 93rd Session of the IPHC Interim Meeting (IPHC-2017-IM093-R) was **ADOPTED** via correspondence on 02 December 2017, including the consolidated set of recommendations and requests arising from IM093, provided at <u>Appendix V</u>.

APPENDIX I

List of participants for the 93^{RD} Session of the IPHC Interim Meeting (IM093)

Commission Officers

Chairperson	Vice-Chairperson
Dr James Balsiger (United States of America)	Mr Paul Ryall (Canada)

Commissioners

Canada	United States of America
Mr Paul Ryall	Dr James Balsiger
Mr Jake Vanderheide	Mr Robert Alverson
Mr Ted Assu	Ms Linda Behnken

Advisors/experts

Mr Neil Davis	Mr C. Colin Brinkman
Mr Adam Keizer	Mr John Lepore
Mr Allen (Rob) Kronlund	Dr Carey McGilliard
Mr Shane Petersen	Mr Brian McTague

Observers

Participant	Organisation	Email
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Marilyn Robertson	Sport fisherman	
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IPHC Secretariat

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Mr Stephen Keith

Mr Claude Dykstra

Ms Lara Erikson

Ms Jamie Goen

Dr Allan Hicks

Dr Timothy Loher

Ms Lauri Sadorus

Dr Ian Stewart

Dr Ray Webster

Ms Tracee Geernaert

Mr Tom Kong

Mr Jay Walker

Mr Keith Jernigan

Dr Josep Planas

Mr Michael Larsen

Ms Aregash Tesfatsion Ms Kelly Chapman Ms Tamara Briggie

APPENDIX II

AGENDA FOR THE 93RD SESSION OF THE IPHC INTERIM MEETING (IM093)

Date: 28–29 November 2017 Location: Seattle, Washington, USA Venue: Grand Hyatt Seattle; Room: Leonesa III

Time: 09:00-17:00 daily

Chairperson: Dr Jim Balsiger (United States of America) **Vice-Chairperson**: Mr Paul Ryall (Canada)

- 1. **OPENING OF THE SESSION** (Chairperson)
- 2. ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION (Chairperson)
- 3. UPDATE ON ACTIONS ARISING FROM THE 93rd ANNUAL MEETING (D. Wilson)
- 4. **REPORT OF THE IPHC SECRETARIAT (2017): Draft (D. Wilson)**
- **5. FISHERY STATISTICS (2017)** (J. Goen & L. Erikson)

6. STOCK STATUS OF PACIFIC HALIBUT (2017) AND HARVEST DECISION TABLE

- 6.1 Fishery Independent Setline Survey (FISS) design and implementation in 2017, including current and future expansions (J. Goen & T. Geernaert)
- 6.2 Space-time modelling of survey data (WPUE; survey expansion results, etc.) (R. Webster)
- Data overview and preliminary stock assessment (2017), and draft harvest decision table (2017) (I. Stewart, A. Hicks, R. Webster & D. Wilson)
- 6.4 Draft: Pacific halibut catch tables (I. Stewart)

7. MANAGEMENT STRATEGY EVALUATION

- 7.1 IPHC Management Strategy Evaluation: update (A. Hicks & I. Stewart)
- 7.2 Report of the 10th Session of the IPHC Management Strategy Advisory Board (MSAB10) (A. Keizer)
- 7.3 Review of fishery goals and objectives: Commission directive (Chairperson)
- 7.4 Discussion of allocation principles (Chairperson)

8. IPHC RESEARCH AND 5-YEAR RESEARCH PROGRAM

- 8.1 IPHC Research Advisory Board Update (D. Wilson)
- 8.2 Report of the 11th Session of the IPHC Scientific Review Board (SRB11) (M. Mangel)
- 8.3 IPHC 5-year Biological & Ecosystem Science research program: update (J. Planas)
- 8.4 Evaluation of the IPHC's 32" minimum size limit (I. Stewart & A. Hicks)

9. CONTRACTING PARTY (AGENCY) UPDATES

- 9.1 Fisheries and Oceans Canada (DFO)
- 9.2 NOAA National Marine Fisheries Service (NMFS)
- 9.3 North Pacific Fishery Management Council (NPFMC)
- 9.4 Pacific Fishery Management Council (PFMC)

10. REGULATORY PROPOSALS FOR THE 2017-18 PROCESS

- 10.1 IPHC Secretariat regulatory proposals (S. Keith & J. Goen)
- 10.2 Contracting Party (agency) regulatory proposals (Agency staff)
- 10.3 Stakeholder regulatory proposals (S. Keith)

10.4 Stakeholder statements (S. Keith)

11. IPHC PERFORMANCE REVIEW

- 11.1 Update on progress regarding the implementation of the 1st IPHC Performance Review recommendations (S. Keith & D. Wilson)
- 11.2 2nd IPHC Performance Review: Update (D. Wilson)
 - Discussion of Legal Review of the IPHC Convention

12. FINANCE AND ADMINISTRATION

- 12.1 Financial Statement for FY2017 (M. Larsen)
- 12.2 Handling of the annual budget carryover (M. Larsen & D. Wilson)
- 12.3 Budget estimates for FY2018 and FY2019 for approval, and tentatively for FY2020 (M. Larsen & D. Wilson)
- 12.4 Draft: IPHC Financial Regulations (2018) (M. Larsen & S. Keith)
- 12.5 Independent auditor's report (2016) (M. Larsen)

13. OTHER BUSINESS

- 13.1 Preparation for 94th Session of the IPHC Annual Meeting (2018) (S. Keith)
- 13.2 Date and place of the 94th and 95th Sessions of the IPHC Interim Meeting (2018 and 2019) (S. Keith)
- 13.3 IPHC meetings calendar (2018-20) (S. Keith)
- 13.4 News Release (S. Keith)

14. REVIEW OF THE DRAFT AND ADOPTION OF THE REPORT OF THE 93rd SESSION OF THE IPHC INTERIM MEETING (IM093)

14.1 Draft Report (Chairperson and Executive Director)

APPENDIX III LIST OF DOCUMENTS FOR THE 93RD SESSION OF THE IPHC INTERIM MEETING (IM093)

Document	Title	Availability
IPHC-2017-IM093-01	Draft: Agenda & Schedule for the 93 rd Session of the IPHC Interim Meeting (IM093)	✓ 22 Aug 2017 ✓ 14 Oct 2017 ✓ 27 Nov 2017
IPHC-2017-IM093-02	Draft: List of Documents for the 93 rd Session of the IPHC Interim Meeting (IM093)	✓ 14, 31 Oct 2017 ✓ 8, 10 Nov 2017 ✓ 27 Nov 2017
IPHC-2017-IM093-03	Update on actions arising from the 93 rd Annual Meeting (IPHC Secretariat)	✓ 24 Oct 2017
IPHC-2017-IM093-04	Report of the IPHC Secretariat (2017): Draft (IPHC Secretariat)	✓ 26 Oct 2017
IPHC-2017-IM093-05 Rev_1	Fishery statistics (2017): Draft (J. Goen & L. Erikson)	✓ 27 Oct 2017 ✓ 27 Nov 2017
IPHC-2017-IM093-06	Fishery Independent Setline Survey (FISS) design and implementation in 2017, including current and future expansions (J. Goen & T. Geernaert)	✓ 26 Oct 2017
IPHC-2017-IM093-07	Space-time modelling of IPHC fishery-independent setline survey data (R. Webster)	✓ 27 Oct 2017
IPHC-2017-IM093-08	Summary of the data, stock assessment, and harvest decision table for Pacific halibut (<i>Hippoglossus stenolepis</i>) at the end of 2017 (I. Stewart, A. Hicks, R. Webster & D. Wilson)	✓ 27 Nov 2017
IPHC-2017-IM093-09	Preliminary Pacific halibut catch tables for 2018 (I. Stewart)	✓ 27 Nov 2017
IPHC-2017-IM093-10	IPHC Management Strategy Evaluation (MSE): update (A. Hicks & I. Stewart)	✓ 8 Nov 2017
IPHC-2017-IM093-11	IPHC 5-year Biological and Ecosystem Science research program: update (J. Planas)	✓ 29 Oct 2017
IPHC-2017-IM093-12	Evaluation of the IPHC's 32" minimum size limit (I. Stewart & A. Hicks)	✓ 18 Oct 2017
IPHC-2017-IM093-13	Update on progress regarding the implementation of the 1 st IPHC Performance Review recommendations (S. Keith & D. Wilson)	✓ 16 Oct 2017
IPHC-2017-IM093-14	2 nd IPHC Performance Review: Update (D. Wilson)	✓ 16 Oct 2017
IPHC-2017-IM093-15	Financial Statement for FY2017 (M. Larsen)	✓ 30 Oct 2017
IPHC-2017-IM093-16	Handling of the annual budget carryover (M. Larsen)	✓ 29 Oct 2017
IPHC-2017-IM093-17	Budget estimates for FY2018 and FY2019 (for approval) and tentatively for 2020 (M. Larsen & D. Wilson)	✓ 10 Nov 2017
IPHC-2017-IM093-18	Draft: IPHC Financial Regulations (2018) (M. Larsen & S. Keith)	✓ 29 Oct 2017
IPHC-2017-IM093-19	Independent auditor's report (2016) (M. Larsen)	Pending
IPHC-2017-IM093-20	Preparation for the 94 th Session of the IPHC Annual Meeting (2018) (S. Keith)	✓ 26 Oct 2017
IPHC-2017-IM093-21	Date and place of the 94 th and 95 th Sessions of the IPHC Interim Meeting (2018 and 2019) and the IPHC Work Meetings (S. Keith)	✓ 27 Oct 2017

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IPHC-2017-IM093-22	Draft: IPHC meetings calendar (2018-20) (S. Keith)	✓ 27 Oct 2017
Contracting Party (Agency) up	pdates	
IPHC-2017-IM093-AR01	Fisheries and Oceans Canada (DFO)	None provided
IPHC-2017-IM093-AR02	NOAA – National Marine Fisheries Service (NMFS)	None provided
IPHC-2017-IM093-AR03	North Pacific Fishery Management Council (NPFMC)	✓ 22 Nov 2017
IPHC-2017-IM093-AR04	Pacific Fishery Management Council (PFMC)	None provided
Regulatory proposals for 2018		
IPHC Secretariat regu	ulatory proposals for 2018	
IPHC-2017-IM093-PropA1	IPHC Closed Area (Sect. 10) (IPHC Secretariat)	✓ 27 Oct 2017
IPHC-2017-IM093-PropA2	Fishing Periods (Sect. 8) (IPHC Secretariat)	✓ 26 Oct 2017
IPHC-2017-IM093-PropA3	Removal of exemption for Vessel Monitoring System requirement for IPHC Regulatory Area 4 clearances (Sect. 15) (IPHC Secretariat)	✓ 27 Oct 2017
IPHC-2017-IM093-PropA4	IPHC Fishery Regulations: minor amendments (IPHC Secretariat)	✓ 27 Oct 2017
IPHC-2017-IM093-PropA5	Discussion paper: Frozen-at-sea exemption for head-on requirement (Sect. 13) (IPHC Secretariat)	✓ 27 Oct 2017
Contracting Party (Ag	rency) regulatory proposals for 2018	
IPHC-2017-IM093-PropB1	CDQ Leasing in IPHC Regulatory Area 4 (NMFS)	✓ 29 Oct 2017
IPHC-2017-IM093-PropB2	Clarify sport fishing regulations in Regulatory Areas 2C and 3A (NMFS)	✓ 29 Oct 2017
IPHC-2017-IM093-PropB3	Clarify head-on requirement in Alaska Commercial Fisheries (NMFS)	✓ 29 Oct 2017
Other Stakeholder reg	rulatory proposals for 2018	
IPHC-2017-IM093-PropC1	Catch limit proposals (Sect. 11) (Various)	✓ 29 Oct 2017
IPHC-2017-IM093-PropC2	Preserving catch on private live-aboard vessels (A. Cooper)	✓ 16 Aug 2017
IPHC-2017-IM093-PropC3	For unguided sport fishing (P. Phillips)	✓ 14 Sept 2017
IPHC-2017-IM093-PropC4	Sport Fishing for Halibut - Cleaning Regulations (S. Riehemann)	✓ 22 Sept 2017
IPHC-2017-IM093-PropC5	Elimination of skin-on regulation (J. Shirk)	✓ 16 Oct 2017
IPHC-2017-IM093-PropC6	Live-aboard processing exemption (D. Robertson)	✓ 17 Oct 2017
IPHC-2017-IM093-PropC7	Eliminate the requirement for a CHP (S. Riehemann)	✓ 20 Oct 2017
IPHC-2017-IM093-PropC8	Allow shellfish pots on board (ALFA)	✓ 23 Oct 2017
IPHC-2017-IM093-PropC9	Processing halibut greater than four filets (M. Cowart)	✓ 24 Oct 2017
IPHC-2017-IM093-PropC10	Halibut length measurement method (R. Yamada)	✓ 26 Oct 2017
IPHC-2017-IM093-PropC11	Long term storage aboard pleasure vessels (L. Thompson)	✓ 26 Oct 2017
IPHC-2017-IM093-PropC12	Long term storage on cruising vessels (W. Cornell)	✓ 26 Oct 2017
IPHC-2017-IM093-PropC13	Halibut in Bering Sea pots (J. Kauffman)	✓ 27 Oct 2017
IPHC-2017-IM093-PropC14	Status Quo Harvest Measures for Guided Anglers in Area 3A (R. Yamada)	✓ 27 Oct 2017

IPHC-2017-IM093-R

Reports from IPHC subsidiary bodies							
IPHC-2017-SRB10-R	Report of the 10 th Session of the IPHC Scientific Review Board (SRB10)	✓ 4 Oct 2017					
IPHC-2017-SRB11-R	Report of the 11 th Session of the IPHC Scientific Review Board (SRB11)	✓ 4 Oct 2017					
IPHC-2017-MSAB09-R	Report of the 9 th Session of the IPHC Management Strategy Advisory Board (MSAB09)	✓ 4 Oct 2017					
IPHC-2017-MSAB10-R	Report of the 10 th Session of the IPHC Management Strategy Advisory Board (MSAB10)	✓ 27 Oct 2017					
IPHC-2017-PAB022-R	Report of the 22 nd Session of the IPHC Processor Advisory Board (PAB022)	✓ 4 Oct 2017					
IPHC-2017-CB087-R	Report of the 87 th Session of the IPHC Conference Board (CB87)	✓ 4 Oct 2017					
Information papers							
IPHC-2017-IM093-INF01	INF01 Understanding the IPHC harvest decision table (2017) (I. Stewart)						

APPENDIX IV IPHC RESEARCH PROJECTS

Part a: Summary of research projects proposed for 2018.

Project #	Project Name	Priority	Budget (\$US)	External funding for FY2018 (\$US)	Management implications	
New Projects	s					
2018-01	Influence of thermal history on growth	High	136,004	-	Changes in biomass/size-at-age	
2018-02	Adult captive holding studies	High- Medium	58,395	-	Changes in biomass/size-at- age/distribution	
2018-03	Whale detection methods	High	37,511	-	Mortality estimation	
2018-04	Larval connectivity	High	20,000	-	Larval distribution	
Continuing I	Projects					
621.16	Development of genetic sexing techniques	High	33,928	-	Sex composition of catch	
642.00	Assessment of mercury and other contaminants	Medium	8,600	-	Environmental effects	
650.18	Archival tags: tag attachment protocols	High	800	-	Adult distribution	
650.21	Investigation of halibut dispersal in Area 4B	High	6,800	-	Spawning areas	
661.11	Ichthyophonus incidence monitoring	Medium	8,755	-	Environmental effects	
669.11	At-sea collection of halibut weight to reevaluate conversion factors	High	7,645	-	Length-weight relationship	
670.11	Wire tagging of halibut on NMFS trawl and setline surveys	High	12,840	1	Juvenile and adult distribution	
672.12	Condition factors for tagged U32 Fish	High	9,116	-	DMR estimates	
672.13	Discard mortality rates and injury classification profile by release method	High- Medium	1,037	255,402	DMR estimates	
673.13	Sequencing the Pacific halibut genome	High	32,500	-	Environmental effects	
673.14	Identification and validation of markers for growth	High	25,681	57,773	Changes in biomass/size-at-age	
674.11	Full characterization of the annual reproductive cycle	High	121,488	-	Maturity assessment	
675.11	Tail pattern recognition	High	3,900	-	Juvenile and adult distribution	
	Total - New Projects (\$US)		\$251,910			
	Total - Continuing Projects (\$US)		\$273,090			
	Overall Total (all projects) (\$US)		\$525,000			
	External Funding (for FY2018) (\$US)			\$313,175		

Part b: Summary of research projects awarded for external funding in 2017.

Project #	Grant agency	Project name	Partners	IPHC Budget (\$US)	PI	Management implications	Grant period
1	S-K NOAA	Improving discard mortality rate estimates in the Pacific halibut by integrating handling practices, physiological condition and postrelease survival (Award No. NA17NMF4270240)	Alaska Pacific University, Anchorage, AK	\$286,121	Planas (lead PI) Dykstra Loher Stewart Hicks	Bycatch estimates	September 2017 – August 2019
2	NPRB	Somatic growth processes in the Pacific halibut (<i>Hippoglossus stenolepis</i>) and their response to temperature, density and stress manipulation effects (Award No. 1704)	AFSC- NOAA- Newport, OR	\$131,891	Planas (lead PI) Rudy Loher	Changes in biomass/size- at-age	September 2017 – August 2019
Total awarded (\$)			\$418,012				

APPENDIX V

CONSOLIDATED SET OF RECOMMENDATIONS AND REQUESTS OF THE 93RD SESSION OF THE IPHC INTERIM MEETING (IM093) (28-29 NOVEMBER 2017)

RECOMMENDATIONS

Report of the IPHC Secretariat (2017)

- IM093–Rec.01 (para. 6) The Commission **RECOMMENDED** that the IPHC Secretariat develop a working paper for consideration at the 94th Annual Meeting, containing the following:
 - a) A detailed description of how the Regulatory Area 2A commercial fishery (derby) is managed, including roles and responsibilities of agencies, the PFMC and the IPHC; and
 - b) An update to the analysis of various fishing periods and fishing period limits provided to the PFMC in September 2017, including the addition of 2- and 5-day fishing periods.

Review of fishery goals and objectives: Commission directive

IM093–Rec.02 (<u>para. 38</u>) **NOTING** the goals and objectives related to distributing the TCEY presented during the meeting by the U.S.A. (<u>Table 3</u>), the Commission **RECOMMENDED** that they be considered at the 94th Annual Meeting in January 2018 after soliciting input from stakeholders.

REQUESTS

Fishery statistics (2017)

IM093–Rec.01 (para. 8) **NOTING** Appendix I of paper IPHC-2017-IM093-05 Rev_1 was provided the evening prior to the Interim Meeting, and detailed information available on bycatch levels among all gears/sectors, as requested by the Commission at its 93rd Annual Meeting (AM093-Rec.09), the Commission **REQUESTED** that the IPHC Secretariat facilitate consideration of the information inter-sessionally, so that the Commission may provide further guidance on the type of information it requires, for consideration at the 94th Annual Meeting in January 2018.

Space-time modelling of survey data (WPUE; survey expansion results, etc.)

IM093–Req.02 (para. 17) The Commission **REQUESTED** that the IPHC Secretariat examine alternative ways of computing bottom area that account for bathymetry, noting that the current method involves estimating the surface area of the ocean.

Data overview and preliminary stock assessment (2017), and draft harvest decision table (2017)

- IM093–Req.03 (para. 28) The Commission **REQUESTED** that the IPHC Secretariat provide columns in the decision table, three-year graphical projections, and catch tables for SPR values of 42%, 44%, 48%, and 50% in addition to the 46% SPR that was presented in documents IPHC-2017-IM093-08 and IPHC-2017-IM093-09.
- IM093–Req.04 (para. 29) **NOTING** questions arising regarding the specific fisheries contributing to projected bycatch reductions from 2010 to 2017, the Commission **REQUESTED** that the IPHC Secretariat work with NMFS staff to facilitate a report for consideration at the 94th Annual Meeting in January 2018.

Report of the 10th Session of the IPHC Management Strategy Advisory Board (MSAB10)

IM093–Req.05 (para. 36) The Commission **REQUESTED** that the MSAB look at SPR values consistent with recent estimated SPR values from the assessment model and lower. This would mean expanding the lower range of SPR values to below 40%.

Review of fishery goals and objectives: Commission directive

IM093–Req.06 (para. 39) The Commission **REQUESTED** the IPHC Secretariat to consolidate the objectives related to TCEY distribution (<u>Table 3</u>) with the current goals, objectives and performance

metrics provided as Appendix IV of the MSAB10 Report, for presentation at the 94th Annual Meeting in January 2018.

Contracting Party (Agency) updates

IM093–Req.07 (para. 61) The Commission **REQUESTED** that the IPHC Secretariat develop a standard template for agency reports to the Commission, in order to improve their structure and consistency, as well as to allow the agencies to prepare the appropriate information at the appropriate level of detail for the Commission's consideration.