



## **Report of the 92<sup>nd</sup> Session of the IPHC Interim Meeting (IM092)**

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Seattle, Washington, United States of America, 29-30 November 2016

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IPHC 2016. Report of the 92<sup>nd</sup> Session of the IPHC Interim Meeting (IM092). Seattle, Washington, U.S.A., 29-30 November 2016.  
*IPHC-2016-IM092-R, 29 pp.*

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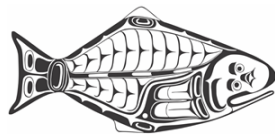
## ACRONYMS

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
HANA	Halibut Association of North America
IPHC	International Pacific Halibut Commission
NMFS	National Marine Fisheries Services, of NOAA
NOAA	National Oceanic and Atmospheric Administration
NPFMC	North Pacific Fishery Management Council
PAG	Processor Advisory Group
PFMC	Pacific Fisheries Management Council
RAB	Research Advisory Board
SRB	Scientific Review Board
SPR	Spawning Potential Ratio

## HOW TO INTERPRET TERMINOLOGY CONTAINED IN THIS REPORT

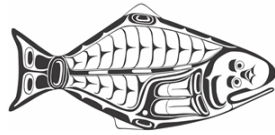
The IM092 Report has been written using the following terms and associated definitions so as to remove ambiguity surrounding how particular paragraphs should be interpreted.

- 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 92<sup>nd</sup> Session of the International Pacific Halibut Commission (IPHC) Interim Meeting (IM092) was held in Seattle, Washington, U.S.A. from 29-30 November 2016. A total of 12 members (6 Commissioners; 6 advisors/experts) attended the Session from the two (2) Contracting Parties, as well as 34 members of the public and 99 via the webcast. The meeting was opened by the Chairperson, Mr Paul Ryall (Canada) and Dr Jim Balsiger (United States of America) who welcomed participants to Seattle.

The following are a subset of the complete recommendations and requests for action from the IM092, which are provided at [Appendix VI](#).

## RECOMMENDATIONS

### *Survey expansion*

IM092–Rec.01 ([para. 38](#)) The Commission **RECOMMENDED** that the IPHC Staff develop an information paper associated with the survey expansion, which details the likely implications of periodic survey expansion on the stock assessment and apportionment, taking into consideration potential population variability of Pacific halibut in expansion areas which are infrequently surveyed. The paper shall be submitted for initial consideration at the Commission’s Work Meeting in September 2017.

### *Best practices handling guidelines*

IM092–Rec.02 ([para. 39](#)) The Commission **RECOMMENDED** that the IPHC Staff undertake a project to develop ‘*Best practice handling guidelines*’ for each of the primary gear types which catch Pacific halibut, both directed and non-directed.

## REQUESTS (for action)

### *State of the fishery (2016)*

IM092–Req.01 ([para. 6](#)) The Commission **REQUESTED** that for all future papers/presentations on the ‘*State of the Fishery*’ to the Commission, that, in addition to commercial and recreational landings, subsistence landings also be reported, thereby providing a complete picture of recent fishery dynamics.

### *Draft: IPHC 5-year Biological & Ecosystem Science research program*

IM092–Req.04 ([para. 50](#)) The Commission **REQUESTED** that the IPHC Secretariat undertake reviews/research on the following topics to assist the Commission in better understanding issues which continue to be raised by stakeholders:

- a) The effect of changing size-at-age on Pacific halibut population dynamics, noting that smaller size at age and an unchanged maturity schedule mean that an individual fish may be exposed to bycatch longer, while also spending more mature time before recruiting to the directed fishery.
- b) The possibility of different driving mechanisms for the observed change in size at age, with one factor predominating during the increase of the late 20<sup>th</sup> Century and other driving the decrease since then.

### *Regulatory proposals: Head-on landed weight requirement for the commercial fishery, including removal of the 24” head-off minimum size limit*

IM092–Req.05 ([para. 65](#)) The Commission **REQUESTED** that the IPHC staff provide additional outreach to the PAG and HANA, prior to the 93<sup>rd</sup> Session of the IPHC Annual Meeting, regarding the head-on landed weight proposal and also consider addressing the related ice and slime conversion.



***Regulatory proposals: Removal of the IPHC closed area***

IM092–Req.06 ([para. 66](#)) The Commission **REQUESTED** that additional supporting information be provided for consideration at the 93<sup>rd</sup> Session of the IPHC Annual Meeting, including any supporting evidence for the area as a nursery ground and the likely impacts of the directed fishery being allowed access.

***Stakeholder regulatory proposals***

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.

***Planning for the 2<sup>nd</sup> IPHC Performance Review***

IM092–Req.08 ([para. 77](#)) The Commission **REQUESTED** that the IPHC Secretariat finalize the draft performance review terms of reference and criteria, as well as provide a proposed process and budget to conduct the review, to be considered at the 2017 Annual Meeting (AM093) for implementation during 2017. The plan should include anticipated Commissioner and IPHC Secretariat support, as well as recommendations regarding the use of outside contractors to conduct the review.



## 1. OPENING OF THE SESSION

1. The 92<sup>nd</sup> Session of the International Pacific Halibut Commission (IPHC) Interim Meeting (IM092) was held in Seattle, Washington, U.S.A. from 29-30 November 2016. A total of 12 members (6 Commissioners; 6 advisors/experts) attended the Session from the two (2) Contracting Parties, as well as 34 members of the public and 99 via the webcast. The list of participants is provided at [Appendix I](#). The meeting was opened by the Chairperson, Mr Paul Ryall (Canada) and Dr Jim Balsiger (United States of America) who welcomed participants to Seattle.

## 2. ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION

2. The Commission **ADOPTED** the Agenda as provided at [Appendix II](#). The documents provided to the IM092 are listed in [Appendix III](#).

## 3. UPDATE ON ACTIONS ARISING FROM THE 92<sup>ND</sup> ANNUAL MEETING AND IPHC WORK MEETING

3. The Commission **NOTED** paper IPHC-2016-IM092-03 which provided an opportunity to consider the progress made during the inter-sessional period, in relation to the direct requests for action by the Commission during its 92<sup>nd</sup> Session (2016) and additional requests made during the Work Meeting held in September 2016.
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 IM092.

## 4. STATE OF THE FISHERY (2016)

5. The Commission **NOTED** paper IPHC-2016-IM092-04 which provided an update on the key fishery statistics from fisheries catching Pacific halibut during the 2016 fishing season, including the status of landings compared to catch limits adopted by the Commission.
6. The Commission **REQUESTED** that for all future papers/presentations on the ‘*State of the Fishery*’ to the Commission, that, in addition to commercial and recreational landings, subsistence landings also be reported, thereby providing a complete picture of recent fishery dynamics.

## 5. STOCK STATUS OF PACIFIC HALIBUT (2016) AND HARVEST DECISION TABLE

### 5.1 *Stock assessment inputs (space-time modelling of survey data; WPUE; etc.)*

7. The Commission **NOTED** paper IPHC-2016-IM092-05 which provided an overview of new methods of space-time modelling of survey WPUE and NPUE data, including the following abstract from the author:  
*“Space-time modelling of the IPHC fishery-independent setline survey data was used to produce regulatory-area time-series of mean WPUE and NPUE from 1998-2016, with corresponding estimates of uncertainty. This modelling approach is a clear improvement over the previous empirical method, as it makes greater use of the information within the data, and better accounts for uncertainty in the estimation. Approaches to calculating adjustments for hook competition and the timing of the survey relative to the harvest were modified in 2016 with input from the Science Review Board. Overall, trends in model-estimated mean WPUE and NPUE by area are consistent with previous empirical estimates, with some modest changes in these indices among regulatory areas. Revised apportionment estimates maintain our current understanding of the biomass distribution among areas, although with some small, but locally important, changes from estimates from the empirical method.”*
8. The Commission **NOTED** that the new method for modelling fishery-independent setline survey WPUE represents an improvement to the IPHC's stock assessment and harvest policy data inputs, but that it may have implications for stakeholders throughout the range of Pacific halibut within the IPHC Convention Area.





9. The Commission **NOTED** the potential implications of periodic survey expansion on the stock assessment model and apportionment arising from the survey, taking into consideration potential population-abundance variability of Pacific halibut in expansion areas which are infrequently surveyed, and that further updates/analysis would be provided in 2017.
10. The Commission **NOTED** that the distribution of Pacific halibut is constantly changing over time, and that maintaining survey coverage in all areas (low- and high-density), allows the IPHC Secretariat to identify those changes.

### **5.2 Stock assessment modelling (2016) & Draft Harvest decision table (2017)**

11. The Commission **NOTED** paper IPHC-2016-IM092-06 which provided an opportunity to consider the results of the 2016 IPHC stock assessment for Pacific halibut within the Convention Area, the IPHC draft harvest decision table for 2017 ([Table 1](#)), as well as the results of apportionment and harvest policy calculations (presented in Section 5.3 below).
12. The Commission **NOTED** that although the space-time modelling of the IPHC fishery-independent setline survey has increased the correspondence with fishery catch-rate trends, there remain some differences in particular Regulatory Areas.
13. The Commission **NOTED** that the removals subtracted from the TCEY to determine the FCEY differ by Regulatory Area, leading to more complexity when comparing FCEYs among Regulatory Areas. One example of this is the treatment of unguided recreational removals in Alaska, which are not included in the FCEY as they are in Areas 2A and 2B. The Commission **REQUESTED** that the IPHC Secretariat provide further explanation at the 93<sup>rd</sup> Session of the Annual Meeting in 2017.
14. The Commission **NOTED** that some Regulatory Areas with increasing trends in survey indices had reduced yield estimated to be available for 2017, which appears to be a counter-intuitive result.
15. The Commission **NOTED** that the absolute estimate of stock size (female spawning biomass) has decreased from the 2015 assessment to the 2016 assessment, but is estimated to be increasing in recent years within both assessments. Space-time modelling of survey data has indicated an increasing trend in some areas, but the reduction of the overall scale of the biomass estimates compared to the previous assessment and differences in the relative change among areas results in difficulty interpreting the relative biomass between areas.
16. The Commission **NOTED** that apportionment depends not only on the within-area trends, but also how these trends compare to those in other regulatory areas (i.e. if all areas are increasing by the same amount, none will see an increase in its individual apportionment percentage). Further explanation of this will be provided at the 93<sup>rd</sup> Session of the Annual Meeting in 2017.



**Table 1.** Draft harvest decision table of yield alternatives (rows) and risk metrics (columns). Values represent the probability, in “times out of 100”, of a particular risk.

2017 Alternative	Total removals (M lb)	Fishery CEY (M lb)	Fishing intensity	Stock Trend				Stock Status				Fishery Trend				Fishery Status	
				Spawning biomass				Spawning biomass				Fishery CEY from the harvest policy				Harvest rate	
				in 2018		in 2020		in 2018		in 2020		in 2018		in 2020		in 2017	
				is less than 2017	is 5% less than 2017	is less than 2017	is 5% less than 2017	is less than 30%	is less than 20%	is less than 30%	is less than 20%	is less than 2017	is 10% less than 2017	is less than 2017	is 10% less than 2017	is above target	
No removals	0.0	0.0	F <sub>100%</sub>	<1	<1	<1	<1	3	<1	1	<1	<1	<1	<1	<1	<1	0
FCEY = 0	11.2	0.0	F <sub>77%</sub> 61%-84%	1	<1	3	<1	3	<1	1	<1	<1	<1	<1	<1	<1	<1
	20.0	8.6	F <sub>66%</sub> 49%-75%	5	<1	20	4	4	<1	3	<1	<1	<1	<1	<1	<1	<1
	30.0	18.4	F <sub>55%</sub> 39%-67%	32	<1	53	31	5	<1	6	<1	6	3	8	4	8	8
Blue Line	37.9	26.1	F <sub>48%</sub> 33%-62%	56	3	77	53	6	<1	12	<1	47	33	48	39	50	50
status quo SPR	41.6	29.7	F <sub>46%</sub> 32%-60%	68	6	87	64	6	<1	15	<1	57	45	57	49	61	61
	50.0	37.9	F <sub>40%</sub> 27%-55%	92	29	98	88	7	<1	25	1	94	83	95	86	95	95
	60.0	47.7	F <sub>35%</sub> 23%-51%	>99	52	>99	99	9	<1	37	3	>99	>99	>99	>99	>99	>99

**Terms:** *Apportionment:* Estimates of the stock distribution by IPHC regulatory area (for halibut greater than 32 inches (~81.3 cm) in length) based on the catch rates (WPUE) observed in the IPHC's setline survey. *Blue Line:* A row in the Decision Table, highlighted in blue, which provides the removals consistent with the Commission's current harvest policy. *Constant Exploitation Yield (CEY):* A specific concept from the IPHC's harvest policy: the Total CEY (TCEY) is the amount of yield of halibut greater than 26 inches (66 cm) in length, and Fishery CEY (FCEY), is the amount of yield for the directed 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.

### 5.3 Draft Pacific halibut apportionment and catch tables

17. The Commission **NOTED** [Table 2](#) which provided Fishery Constant Exploitation Yield (FCEY; the amount of yield for the directed halibut fisheries) by Regulatory Area for 2014-17, as well as the adopted FCEY for 2016, and the *status quo SPR* for 2017.

**Table 2.** Comparison of FCEYs among regulatory areas from recent years for the Blue Line, the status quo SPR (2014-16 average), and the adopted limits from 2016.

	2A	2B	2C	3A	3B	4A	4B	4CDE	Total
2014 Blue Line	0.72	4.98	4.16	9.43	2.84	0.85	0.82	0.64	24.45
2015 Blue Line	0.75	4.96	4.30	10.10	2.46	1.39	0.73	0.52	25.22
2016 Blue Line	1.02	5.22	4.62	9.27	2.71	1.30	0.92	1.64	26.70
2016 Adopted	1.14	7.30	4.95	9.60	2.71	1.39	1.14	1.66	29.89
2017 Blue Line	0.75	4.72	4.08	9.41	3.08	1.28	1.12	1.69	26.12
2017 <i>status quo SPR</i>	0.84	5.28	4.69	10.72	3.46	1.45	1.25	2.05	29.73

## 6. MANAGEMENT STRATEGY EVALUATION

### 6.1 IPHC Management Strategy Evaluation update

18. The Commission **NOTED** paper IPHC-2016-IM092-08 Rev\_1 which provides an update on the task assigned to IPHC Secretariat and the Management Strategy Advisory Board (MSAB) at the 2016 Annual



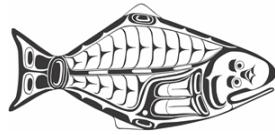
Meeting to review and provide recommendations for updating the IPHC harvest policy and harvest control rules.

19. The Commission **CONSIDERED** the proposed harvest policy revisions contained in paper IPHC-2016-IM092-08 Rev\_1) which uses an SPR-based approach and is presented as “*status quo SPR*”.
20. The Commission **NOTED** that the IPHC Secretariat will use Management Strategy Evaluation (MSE) to evaluate options for a modified harvest policy that separates the decisions regarding scale of the coastwide fishing intensity, and distribution of the removals consistent with that level of fishing among Regulatory Areas, and accounts for all sources of Pacific halibut mortality.
21. The Commission **AGREED** that the current harvest policy is considered to be outdated and that there is a need to consider modifying or removing the current blue line reference, which reflects the current interpretation of the IPHC harvest policy in the harvest decision table.
22. The Commission **NOTED** that it may still be helpful to have a row in the Decision Table which provides a constant point of reference among years. Although no specific decision was made, the *status quo SPR* row may serve this purpose.

#### **6.2 Report of the 8<sup>th</sup> Session of the IPHC Management Strategy Advisory Board (MSAB08)**

23. The Commission **NOTED** the Report of the 8<sup>th</sup> Session of the IPHC Management Strategy Advisory Board (MSAB08) (IPHC-2016-MSAB08-R) which was presented by the Co-Chairpersons of the MSAB, Mr Adam Keizer (Canada) and Ms Michele Culver (United States of America). A total of 16 individuals attended the Session, composed of 14 board members from the two (2) Contracting Parties, and two (2) observers. Seven (7) board members were absent.
24. The Commission **RECALLED** the mandate of the MSAB as stated in the IPHC Rules of Procedure (2014) as follows:

*Rule 10.5 (d) A Management Strategy Advisory Board (MSAB), on which individuals representing harvesters (commercial, sport, and subsistence), fisheries managers, processors, Staff, science advisors, Commissioners, and other experts as required may be represented. The primary role of the MSAB is to oversee and advise the Staff on the Management Strategy Evaluation (MSE) process, which shall propose fishery objectives, articulate and evaluate management procedures, and propose performance measures in order to recommend fishery management strategies for Commission consideration.*
25. The Commission **CONSIDERED** the recommendations made by the MSAB08 from its 2016 report (IPHC-2016-MSAB08-R) and provided comment or endorsement as specified below.
26. **NOTING** that the current IPHC harvest policy is unresponsive to under-26” (U26) mortality, and that selectivity curves used to define exploitable biomass (EBio) are outdated, the Commission **AGREED** that alternative harvest policy approaches that address these shortcomings and take into account mortality for all sizes and all sources be evaluated by the IPHC Secretariat and subsequently the MSAB. One approach that has the potential to account for mortality for all sizes and all sources which should be evaluated is a Spawning Potential Ratio (SPR) based harvest policy.
27. The Commission **AGREED** that clear goals and objectives need to be developed and approved by the Commission regarding stock abundance levels to provide guidance for the IPHC Secretariat and MSAB to assess the long-term health of the stock. The intention would be for a range of objectives (e.g. through coast-wide or area-specific adjustments, setting harvest targets, examining the effects of bycatch levels) to be examined.
28. The Commission **AGREED** that one possible objective to be examined would be to increase the stock size such that higher yields than those realized in recent years could be maintained, rather than maintaining a stable stock size.



## 7. IPHC RESEARCH AND 5-YEAR RESEARCH PROGRAM

### 7.1 *Report of the 9<sup>th</sup> Session of the IPHC Scientific Review Board (SRB09)*

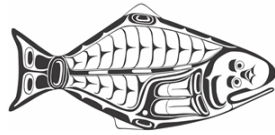
29. The Commission **NOTED** the Report of the 9<sup>th</sup> Session of the IPHC Scientific Review Board (SRB09) (IPHC-2016-SRB09-R) which was presented by Dr Jim Ianelli (NOAA-Fisheries), one of the three (3) SRB members.
30. The Commission **RECALLED** the mandate of the SRB as stated in the IPHC Rules of Procedure (2014) as follows:
- Rule 10.5 (e) A Scientific Review Board (SRB), with the main objective of providing an independent scientific review of Commission science products and programs, and to support and strengthen the stock assessment process. The Scientific Review Board shall review modelling and evaluation used by the Management Strategy Advisory Board and review research proposals from the Research Advisory Board and Staff. The Scientific Review Board will prepare reports to the Commission summarizing findings, recommendations, and documentation of any divergent views for all of its reviews.*
31. The Commission **CONSIDERED** the recommendations made by the SRB09 from its 2016 report (IPHC-2016-SRB09-R) and provided comment or endorsement as specified below.
32. The Commission **NOTED** that as the recommendations arising from the SRB09 are aimed at improving IPHC science, the IPHC Secretariat should endeavour to implement the actions requested by the SRB.
33. **NOTING** that the fall meeting report (SRB09) is relatively brief and covers refinements arising from the summer meeting report (SRB08), which covers more extensive topics and greater detail, the Commission **REQUESTED** that both reports (summer and fall from each year) be presented to the Interim Meeting and Annual Meeting annually.
34. The Commission **AGREED** that the composition and mandate of the SRB may need to be periodically updated. This should be undertaken as part of the biennial review of the IPHC Rules of Procedure.

### 7.2 *Report of the 18<sup>th</sup> Session of the IPHC Research Advisory Board (RAB18)*

35. The Commission **NOTED** the Report of the 18<sup>th</sup> Session of the IPHC Research Advisory Board (RAB18) (IPHC-2016-RAB18-R) which was presented by the Chairperson of the RAB, Dr David Wilson (IPHC Executive Director). A total of seven (7) members attended the Session from the two (2) Contracting Parties, as well as 18 IPHC staff as observers or officers. Four (4) RAB Members were absent.
36. The Commission **RECALLED** the mandate of the RAB as stated in the IPHC Rules of Procedure (2014) as follows:
- Rule 10.5 (c) A Research Advisory Board, composed of members of the halibut community that shall suggest research ideas, review IPHC research, and provide the Staff with direct input and advice from industry during the development of research plans. The Board may also make recommendations to the Scientific Review Board concerning research plans and priorities. The Executive Director shall facilitate the Board's meetings, as well as communication with the Commission and the other IPHC advisory bodies on the Board's behalf.*
37. The Commission **CONSIDERED** the recommendations made by the RAB18 from its 2016 report (IPHC-2016-RAB18-R) and provided comment or endorsement as specified below.

#### *Survey expansion*

38. The Commission **RECOMMENDED** that the IPHC Staff develop an information paper associated with the survey expansion, which details the likely implications of periodic survey expansion on the stock assessment and apportionment, taking into consideration potential population variability of Pacific halibut in expansion areas which are infrequently surveyed. The paper shall be submitted for initial consideration at the Commission's Work Meeting in September 2017.



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***Best practices handling guidelines***

39. The Commission **RECOMMENDED** that the IPHC Staff undertake a project to develop ‘*Best practice handling guidelines*’ for each of the primary gear types which catch Pacific halibut, both directed and non-directed.

***IPHC Closed Area review***

40. **NOTING** recommendation RAB18.03, as stated below, the Commission **DEFERRED** further discussion to Agenda Item 9, where a regulatory proposal on the IPHC Closed Area will be discussed:  
RAB18-03 (para. 37) “*The RAB18 RECOMMENDED that as the IPHC Closed Area was designated to protect juvenile Pacific halibut, there is no scientific justification for retaining the closure in its current form. Thus, the IPHC Closed Area should either be removed, noting that it would be unlikely that much longline fishing would occur in the area as most fish are below the legal size limit, or it should only apply to gear which would interact with juvenile Pacific halibut.*”

***Chalky Pacific halibut***

41. The Commission **AGREED** that if operational and financial resources are available, the IPHC Secretariat should consider undertaking research to answer the following questions proposed by the RAB18:
- What causes chalky flesh in Pacific halibut? Are there particular environmental signatures (temperature, dissolved oxygen, etc.) that characterize areas with incidence of chalky flesh?
  - Why does the occurrence of chalky flesh in Pacific halibut appear to be reappearing in Regulatory Areas 3A and 3B after a period of limited occurrence?
  - Are there differences in the occurrence of chalky flesh in males and females, as well as in fish of different sizes?

**7.3 Survey expansion through 2019**

42. The Commission **NOTED** paper IPHC-2016-IM092-09 which provided an overview of the IPHC fishery-independent setline survey expansion undertaken in 2016 and that planned for 2017-19, including the following abstract from the author:  
“*The third year of the International Pacific Halibut Commission’s fishery-independent setline survey expansion was carried out along the Area 4CDE continental shelf edge, with 84 additional stations fished in 2016 in this region. Several of the new stations close to the USA/Russia EEZ border had average or above the average catch rate, indicating that halibut population density does not strongly taper off approaching the border.*”

43. The Commission **NOTED** that the survey expansion into the Regulatory Area 4CDE edge survey region, in regions not previously covered by the survey found lower population densities of Pacific halibut than elsewhere in the Regulatory Area. However, on the border with the Russian/USA EEZ, catches were near or above average levels.

**7.4 Discard mortality rates (DMR): Update**

44. The Commission **NOTED** that a presentation and supporting document reviewing the basis for current Discard Mortality Rates (DMRs) for the directed Pacific halibut and other fisheries will be provided at the IPHC Annual Meeting in January 2017. The intention is for the material to be presented to serve as a single reference for historical studies on DMR and provide a starting point for prioritisation of future research.

**7.5 Draft: IPHC 5-year Biological & Ecosystem Science research program**

45. The Commission **NOTED** paper IPHC-2016-IM092-11 which provided an overview of the draft IPHC 5-year Biological and Ecosystem Science research program, including the following abstract from the author:



*“The International Pacific Halibut Commission (IPHC) has a long history of research activities devoted to describe and understand the biology of the Pacific halibut (*Hippoglossus stenolepis*). Currently, the primary objectives of the biological research conducted by IPHC are (1) to identify and assess critical knowledge gaps in the biology of the Pacific halibut, (2) to understand the influence of environmental conditions, and (3) to apply the resulting knowledge to reduce uncertainty in current stock assessment models. Current and planned biological research activities over the next five-year period (2017-21) include studies in five major research areas: (1) reproduction (i.e. sex identification, maturity estimates), (2) growth (i.e. decrease in size-at-age, temperature effects), (3) discard mortality rates (i.e. physiological condition and survival post-release of bycatch), (4) migration (i.e. larval dispersal, adult and reproductive migrations) and (5) genetics and genomics (i.e. genetic population structure, genome characterisation)”.*

46. The Commission **NOTED** the new and continuing research proposals proposed by IPHC Staff for internal funding as described in paper IPHC-2016-IM092-11 and listed at [Appendix IVa](#) and included in the summary diagram at [Appendix V](#).
47. The Commission **ENDORSED** the general approach to research detailed in paper IPHC-2016-IM092-11 and encouraged the IPHC Staff to further elaborate the various projects for consideration at the Annual Meeting of the Commission.
48. The Commission **NOTED** the following:
- a) There is a need to understand the degree of ovarian maturation reached in Pacific halibut females that ‘skip-spawn’ and the need for a better overall knowledge on the causes and frequency of skip-spawning.
  - b) The complexity of issues related to the historical changes in size-at-age and the interest in investigating changes in growth as a potential cause.
49. The Commission **NOTED** the range of research proposals developed by the IPHC Secretariat which aimed to provide additional financial support via external sources. The research projects were designed to address key biological issues for stock assessment and the Pacific halibut fisheries that complements internal IPHC funding ([Appendix IVb](#)).
50. The Commission **REQUESTED** that the IPHC Secretariat undertake reviews/research on the following topics to assist the Commission in better understanding issues which continue to be raised by stakeholders:
- a) The effect of changing size-at-age on Pacific halibut population dynamics, noting that smaller size at age and an unchanged maturity schedule mean that an individual fish may be exposed to bycatch longer, while also spending more mature time before recruiting to the directed fishery.
  - b) The possibility of different driving mechanisms for the observed change in size at age, with one factor predominating during the increase of the late 20<sup>th</sup> Century and other driving the decrease since then.

## 8. AGENCY UPDATES

51. The Commission **NOTED** paper IPHC-2016-IM092-12a which provided an update on IPHC engagement with Agencies and Fishery Management Councils over 2016.
52. The Commission **NOTED** electronic monitoring on Alaska’s small boat (40-57.5 ft; ~12-17.5 m) fleet is no longer a pilot program in the Gulf of Alaska. Rather, it is in pre-implementation phase, with full integration projected/targeted for 2018. The proposed research on injury profiles and DMRs using electronic monitoring would not be on the small boat fleet in pre-implementation for electronic monitoring because there was not enough space. However, once implemented, it would be used for small boats as well. In addition, there may be an opportunity to coordinate future electronic monitoring research



regarding halibut vitalities and DMRs by using imagery from some of Alaska’s factory trawlers who have cameras on their production lines.

53. The Commission **NOTED** the Marine Mammal Protection Act Letter of Authorization request from NOAA-Fisheries to authorize marine mammal interactions in IPHC’s fisheries-independent setline survey was a new permitting requirement for IPHC and that IPHC continues to report any marine mammal interactions to NOAA-Fisheries and DFO.

#### **8.1 North Pacific Fishery Management Council (NPFMC)**

54. The Commission **NOTED** paper IPHC-2016-IM092-12b which provided an update from the NPFMC on Council research priorities and abundance-based PSC management.
55. The Commission **NOTED** that Abundance-Based Management (ABM) of Prohibited Species Catch (PSC) limits for Pacific halibut is being investigated by a working group of NPFMC, Alaska Fishery Science Center (AFSC), Alaska Regional Office (AKRO) and IPHC staff. A public meeting will occur at the February 2017 NPFMC meeting and it is expected that an analysis will be presented at the April NPFMC meeting. The earliest possible implementation of an ABM framework would be 2019, and PSC limits would likely remain the same in the interim.
56. The Commission **NOTED** that current bycatch is less than the limits (PSC) in the Bering Sea/Aleutian Islands, and it is uncertain if the bycatch could be reduced further in some sectors. A report on the effectiveness of deck-sorting of Pacific halibut in the Amendment 80 fleet will be provided at the IPHC Annual Meeting in January 2017. Not all Amendment 80 vessels are participating in the deck sorting exempted fishing permit (EFP) experiment.
57. The Commission **NOTED** that it would be appropriate to have a joint IPHC/NPFMC meeting at a similar time as the April or June NPFMC meetings in 2017.

#### **8.2 Pacific Fishery Management Council (PFMC)**

58. The Commission **NOTED** that no update on Pacific halibut matters was received from the PFMC for consideration at the IM092.

#### **8.3 Department of Fisheries and Oceans (DFO)**

59. The Commission **NOTED** the Pacific halibut fishery update provided by Fisheries and Oceans Canada. Agency staff summarized Canadian catch limits and allocation processes, as well as 2016 management measures that are likely to affect Pacific halibut fisheries. Management measures include reduced catch limits of non-target species, improvements to recreational fishery catch monitoring, and the development of a plan to meet marine conservation targets. Agency staff also summarized organizational changes within Fisheries and Oceans Canada that present opportunities for collaboration with the Commission, including engagement in the management strategy evaluation process, and an improved understanding of changes to spatial fishery effort distribution.
60. The Commission **NOTED** that the scope of Canada's marine conservation targets is available via the following weblink: <http://www.dfo-mpo.gc.ca/oceans/conservation/index-eng.html>

#### **8.4 National Marine Fisheries Service (NOAA-Fisheries)**

61. The Commission **NOTED** that no update on Pacific halibut matters was received from NOAA-Fisheries for consideration at the IM092.

### **9. REGULATORY PROPOSALS FOR 2017**

62. The Commission **NOTED** paper IPHC-2016-IM092-13a which provided a list of the 16 Regulatory Proposals received by the deadline of 31 October 2016, detailed in papers IPHC-2016-IM092-13b through 13d.



63. **NOTING** that a documented process for the submission, review and revision of Regulatory proposals does not exist, the Commission **AGREED** on the following interim review/comment process leading up to the 93<sup>rd</sup> Annual Meeting, where a formal process shall be adopted via the IPHC Rules of Procedure:

- a) The 16 Regulatory Proposals shall be reviewed by the IPHC Secretariat;
- b) Comment on each proposal, from relevant regulatory bodies, Contracting Parties and the IPHC Secretariat shall be sought, and provided to the author/s of the proposal for their consideration and potential incorporation into a reviewed proposal.
- c) The original or revised Regulatory Proposal shall be resubmitted no later than 31 December 2016, with the review comments provided as an appendix to each proposal for the Commission's consideration.

### **9.1** *IPHC Staff regulatory proposals*

64. The Commission **NOTED** paper IPHC-2016-IM092-13b which provided the Commission with two (2) regulatory proposals from the IPHC Staff, for potential adoption and implementation in the 2017 fishing season, as detailed below.

#### **9.1.1** *Head-on landed weight requirement for the commercial fishery, including removal of the 24" head-off minimum size limit.*

65. The Commission **REQUESTED** that the IPHC staff provide additional outreach to the PAG and HANA, prior to the 93<sup>rd</sup> Session of the IPHC Annual Meeting, regarding the head-on landed weight proposal and also consider addressing the related ice and slime conversion.

#### **9.1.2** *Removal of the IPHC Closed Area.*

66. The Commission **REQUESTED** that additional supporting information be provided for consideration at the 93<sup>rd</sup> Session of the IPHC Annual Meeting, including any supporting evidence for the area as a nursery ground and the likely impacts of the directed fishery being allowed access.

67. The Commission **AGREED** that as appropriate, information on other gears which are currently permitted to fish in the IPHC Closed Area (i.e. trawl), and their impact (i.e. bycatch of juveniles), along with information on the history of the lines marking Areas 4CDE, and past considerations by IPHC and the NPFMC.

68. The Commission **NOTED** that the IPHC Secretariat considers Regulatory Areas 4CDE and the IPHC Closed Area to be a single unit for assessment purposes.

### **9.2** *Agency regulatory proposals*

69. The Commission **NOTED** paper IPHC-2016-IM092-13c which provided the Commission with one (1) regulatory proposal from the National Marine Fisheries Service (NOAA-Fisheries), for potential adoption and implementation in the 2017 fishing season, as detailed below.

#### **9.2.1** *Fishing in Multiple Regulatory Areas in Alaska*

70. The Commission **NOTED** the proposal would further harmonize IPHC and NOAA-Fisheries' regulations.

### **9.3** *Stakeholder regulatory proposals*

71. The Commission **NOTED** paper IPHC-2016-IM092-13d (1-13) which provided the Commission with 13 regulatory proposals from various stakeholders, for potential adoption and implementation in the 2017 fishing season, as detailed below.

- IPHC-2016-IM092-13d-1: Upgrade the US-Canada Treaty (J. Whitethorn)
- IPHC-2016-IM092-13d-2: Drop the Blue Line (J. Whitethorn)
- IPHC-2016-IM092-13d-3: Drop IPHC setline survey (J. Whitethorn)





- IPHC-2016-IM092-13d-4: Closure of the Nursery Area (J. Whitethorn)
- IPHC-2016-IM092-13d-5: Catch Limit: Coastwide (P. Ewing)
- IPHC-2016-IM092-13d-6: None provided (J. Kearns)
- IPHC-2016-IM092-13d-7: Elimination of Law requiring skin to be left on Halibut (J. Shirk)
- IPHC-2016-IM092-13d-8: Amend Federal Regulation 28(i)(d) (S. Reihemann)
- IPHC-2016-IM092-13d-9: Charter Boat Trip Limits 3A #1 (M. Erickson)
- IPHC-2016-IM092-13d-10: Charter Boat Trip Limits 3A #2 (M. Erickson)
- IPHC-2016-IM092-13d-11: Guided Angler 3A Daily Limit (M. Erickson)
- IPHC-2016-IM092-13d-12: Clarify regulations about use/possession of pot gear while commercially fishing for halibut (P. Wyman)
- IPHC-2016-IM092-13d-13: Size Limit clarification (P. Thompson)

72. The Commission **NOTED** that some of the stakeholder proposals (including 13d-9 through 13-11) may be more suitable for submission to the NPFMC, given their content appears to refer to matters of allocation. The interim review process set out in [paragraph 63](#) above, would identify those proposals which would not need to be presented to 93<sup>rd</sup> Session of the IPHC Annual meeting.

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.

## 10. PERFORMANCE REVIEW

### *10.1 Update on progress regarding the implementation of the 1<sup>st</sup> IPHC Performance Review recommendations*

74. The Commission **NOTED** paper IPHC-2016-IM092-14 which detailed the status of each of the recommendations from the 1<sup>st</sup> IPHC Performance Review (PRIPHC01).
75. The Commission **AGREED** to review the status table provided at Appendix I of paper IPHC-2016-IM092-14 and to provide comment prior to the 93<sup>rd</sup> Session of the IPHC Annual Meeting for incorporation.

### *10.2 Planning for the 2<sup>nd</sup> IPHC Performance Review*

76. The Commission **NOTED** paper IPHC-2016-IM092-15 which provided the Commission with a draft process for undertaking a 2<sup>nd</sup> Performance Review of the IPHC in 2017.
77. The Commission **REQUESTED** that the IPHC Secretariat finalize the draft performance review terms of reference and criteria, as well as provide a proposed process and budget to conduct the review, to be considered at the 2017 Annual Meeting (AM093) for implementation during 2017. The plan should include anticipated Commissioner and IPHC Secretariat support, as well as recommendations regarding the use of outside contractors to conduct the review.

## 11. IPHC COMMUNICATIONS

### *11.1 IPHC Website improvements*

78. The Commission **NOTED** paper IPHC-2016-IM092-16 which outlined the approach planned for the IPHC website redesign and the selection of a professional web design team.
79. The Commission **ACKNOWLEDGED** the improvements already being made to the IPHC website and thanked the IPHC Secretariat for those modifications which have greatly improved information accessibility.
80. The Commission **NOTED** that the IPHC website improvement team has sought proposals from five professional website design firms in the Seattle area. Three proposals were received and each was



evaluated on the firm’s creative approach with a focus on user-centred designs, the use of a content management system, website application development capabilities, and cost.

81. The Commission **NOTED** that one key element of the project is obtaining feedback from IPHC website users. The team has developed a seven-question survey that will be used to collect feedback. The survey will remain open through the Annual Meeting in January 2017, as an input to the website design planning, and then after that to gather feedback from website users on improvements. Another tool that will be used is “card sorting.” Card sorting is a technique that will help determine how information will be categorized. Additional tools may be used after collaborating with the professional design team. The new website is expected to be launched in the summer of 2017.

### ***11.2 IPHC Social media and outreach***

82. The Commission **NOTED** the ad-hoc presentation on IPHC social media efforts for the past three years, with key components as follows:
- a) In 2013 the IPHC Secretariat developed a Social Media Committee to help guide social media communications best practices and initiated an active presence on the Facebook and Twitter platforms.
  - b) Since 2013, the IPHC Facebook page has acquired 788 subscribers, produced over 300 posts, observed over 280,000 post impressions, and has logged 35,000 post engagements.
  - c) Facebook posts during the IPHC’s 2016 Annual Meeting reached 21 times that of the physical audience.
  - d) On Twitter the IPHC account currently has 253 subscribers, produced 1,300 posts, observed over 170,000 post impressions worldwide, with peaks in coastal towns (since 2014), and has noted a consistent large spike in activity during Interim Meeting and Annual Meeting. This platform has been an effective tool for interaction with journalists covering our meetings.
  - e) For the future the IPHC plans on developing an active presence on the LinkedIn social media platform, working with MSAB to meet their outreach goals, increasing content of interest to its readers, and playing an active role in the American Fisheries Society’s new Science Communications Section.
83. The Commissioners **REQUESTED** that further updates be provided on the IPHC’s social media and outreach efforts at further Sessions of the Commission, particularly on the demographic statistics of the IPHC social media subscription base, and the possibility of utilizing social media as a tool to help stakeholders better understand the IPHC’s science, procedures and activities.

## **12. FINANCE AND ADMINISTRATION**

### ***12.1 Financial Statement for FY2016***

84. The Commission **NOTED** paper IPHC-2016-IM092-17 which provided the end of year financial statement for the Commission (financial period: 1 October 2015 to 30 September 2016).
85. The Commission **NOTED** the contributions received from Contracting Parties as follows:
- a) U.S.A. Contribution – In FY2016, the U.S. Government appropriated **\$4,150,000** to the IPHC. The U.S. contributions included funding for pension deficits and headquarters lease costs up to **\$250,000**.
  - b) Canadian Contribution – In FY2016, the Canadian government contributed **\$974,228** 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 **\$30,000** for lab upgrades.



86. The Commission **NOTED** that FY2016 preliminary expenses were 93% of the projected budget (General Expenses at **\$9,965,736** USD and Income was 108% of the projected budget at **\$10,486,680** USD).
87. The Commission **NOTED** an increase in the General/Supplemental carryover of \$520,958 USD.
88. The Commission **NOTED** that the University of Washington would be invoiced an additional **\$8,162** for FY2016 lease costs based on the 2010 Separation and Relocation Agreement.
89. The Commission **NOTED** that the fiscal year 2016 information provided at the Interim Meeting is preliminary and the final audited financial statements will be presented and approved at the annual meeting.

### **12.2 Handling of the annual budget carryover**

90. The Commission **NOTED** paper IPHC-2016-IM092-18 which provides a methodology for parsing the IPHC General and Supplemental Fund carryovers into two distinct accounts which are used to track annual carryovers related to the IPHC core operations and fishery-independent survey (FIS).
91. The Commission **AGREED** that the IPHC Financial Regulations should be revised to incorporate a specific policy statement on the handling of fishery-independent survey expenses and revenue, with the overall objective potentially being limited to cost-recovery and long-term revenue neutrality. A draft shall be provided for consideration at the 93<sup>rd</sup> Session of the IPHC Annual Meeting in January 2017.

### **12.3 Budget estimates for FY2017**

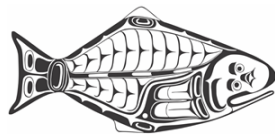
92. The Commission **NOTED** paper IPHC-2016-IM092-19 which detailed the draft current year budget estimate for the Commission (FY2017 - financial period: 1 October 2016 to 30 September 2017).
93. The Commission **NOTED** that U.S.A. appropriations for FY2017 is still unresolved but currently indicated at **\$4,150,000** USD. The Canadian general assessment is shown at **\$848,720** USD and the pension deficit payment at **\$95,508** USD.
94. The Commission **NOTED** that FY2017 anticipated income is **\$9,610,548** USD and expenses at **\$11,329,275** USD. The Commission anticipates using **\$1,718,728** USD from the General/Supplemental carryover for expenses in excess of income.
95. The Commission **NOTED** that the fiscal year 2017 information being presented is preliminary and the final FY2017 budget will be presented and approved at the Annual Meeting.

### **12.4 IPHC Rules of Procedure (2014)**

96. The Commission **NOTED** paper IPHC-2016-IM092-20 which provided the Commission with an initial opportunity to consider proposed amendments to the IPHC Rules of Procedure (2014).
97. The Commission **NOTED** that in accordance with Rule 15, paragraph 2 of the IPHC Rules of Procedure (2014), which states: “2. *These Rules of Procedure should be reviewed for their consistency and appropriateness at least biennially.*”, on 20 October 2016, the IPHC Secretariat indicated the need to revisit the IPHC Rules of Procedure (2014) at the Interim Meeting and Annual Meeting of the Commission in 2016 and 2017, respectively (via IPHC Circular 2016-001).
98. The Commission **AGREED** that there was a need to further modernise the IPHC Rules of Procedure, and to ensure that the Terms of Reference and Rules of Procedure of its subsidiary bodies are largely aligned with those of the Commission.
99. The Commission **AGREED** that a revised version shall be considered at the 93<sup>rd</sup> Session of the IPHC Annual Meeting in January 2017.

### **12.5 Scholarship Committee report**

100. The Commission **NOTED** paper IPHC-2016-IM092-21 which detailed the report and recommendations of the IPHC Scholarship Committee for 2016.



101. **NOTING** the IPHC Scholarship Committee’s selection of Ms. Ysabel Echeverio of Stevensville, MT, to receive the 2016 IPHC Scholarship, the Commission **ENDORSED** the selection and expressed its congratulations.

**13. OTHER BUSINESS**

**13.1 Preparation for 93rd Session of the IPHC Annual Meeting (2017)**

102. The Commission **NOTED** paper IPHC-2016-IM092-22 which provided an opportunity to direct preparations for the 93<sup>rd</sup> Session of the IPHC Annual Meeting, to be held in Victoria, BC, from 23-27 January 2017.

103. The Commission **NOTED** the draft agenda and schedule for the 93<sup>rd</sup> Session of the IPHC Annual Meeting, and that changes or additions to the agenda and schedule should be submitted to the IPHC Secretariat in time to be published not later than two weeks before the commencement of the Session meeting (9 January 2017).

**13.2 Date and place of the 93<sup>rd</sup> and 94<sup>th</sup> Sessions of the IPHC Interim Meeting**

104. The Commission **NOTED** paper IPHC-2016-IM092-23 which provided an opportunity to direct the IPHC Secretariat with regard to future sessions of the IPHC Interim Meeting and the IPHC Work Meeting.

105. The Commission **AGREED** to the proposed dates and places for the 93<sup>rd</sup> and 94<sup>th</sup> Sessions of the IPHC Interim Meeting and the IPHC Work Meetings, as provided in [Table 3](#).

**Table 3.** Draft meeting schedule for the IPHC Interim Meetings and Work Meetings (2017 and 2018)

Meeting	Session	2017		Session	2018	
		Date	Location		Date	Location
Work Meeting	TBD	20-21 September	Bellingham, WA, U.S.A.	TBD	19-20 September	Bellingham, WA, U.S.A.
Interim Meeting	93 <sup>rd</sup>	28-29 November	Seattle, WA, U.S.A.	94 <sup>th</sup>	27-28 November	Seattle, WA, U.S.A.

**14. THE PROCESS FOR ‘REVIEW OF THE DRAFT AND ADOPTION OF THE REPORT OF THE 92<sup>ND</sup> SESSION OF THE IPHC INTERIM MEETING (IM092)’**

106. The Commission **AGREED** that the Draft Report of the IM092 shall be distributed to the Contracting Parties for a 7-day comment period, before being recirculated for a further 7-day review period, as a consolidated version with edits from both Parties. Once agreement has been reached on the edits proposed, the report shall be considered adopted via correspondence.

107. The report of the 92<sup>nd</sup> Session of the IPHC Interim Meeting (IPHC–2016–IM092–R) was **ADOPTED** via correspondence on 20 December 2016, including the consolidated set of recommendations and requests arising from IM092, provided at [Appendix VI](#).

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**APPENDIX I****LIST OF PARTICIPANTS FOR THE 92<sup>ND</sup> SESSION OF THE IPHC INTERIM MEETING (IM092)****Commission Officers**

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

**Commissioners**

<b>Canada</b>	<b>United States of America</b>
Mr Paul <b>Ryall</b>	Dr James <b>Balsiger</b>
Mr David <b>Boyes</b>	Mr Robert <b>Alverson</b>
Mr Ted <b>Assu</b>	Ms Linda <b>Behnken</b>

**Advisors/experts**

Mr Neil <b>Davis</b>	Mr Jonathan <b>Pollard</b>
Mr Adam <b>Keizer</b>	Ms Michele <b>Culver</b>
Dr Robyn <b>Forrest</b>	Dr Carey <b>McGilliard</b>

**IPHC Secretariat**

Dr David Wilson  
Mr Stephen Keith  
Mr Claude Dykstra  
Ms Lara Erikson  
Ms Jamie Goen  
Mr Ed Henry  
Dr Allan Hicks  
Dr Timothy Loher  
Ms Dana Rudy  
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

**APPENDIX II****AGENDA FOR THE 92<sup>ND</sup> SESSION OF THE IPHC INTERIM MEETING (IM092)**

**Date:** 29–30 November 2016

**Location:** Seattle, Washington, U.S.A.

**Venue:** Grand Hyatt Seattle; Room: Leonesa III

**Time:** 09:00-17:00 daily

**Chairperson:** Mr Paul Ryall (Canada)

**Vice-Chairperson:** Dr Jim Balsiger (United States of America)

- 1. OPENING OF THE SESSION**
- 2. ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION**
- 3. UPDATE ON ACTIONS ARISING FROM THE 92<sup>ND</sup> ANNUAL MEETING AND IPHC WORK MEETING**
- 4. STATE OF THE FISHERY (2016)**
- 5. STOCK STATUS OF PACIFIC HALIBUT (2016) AND HARVEST DECISION TABLE**
  - 5.1 Stock assessment inputs (Spatio-temporal modelling of survey data; WPUE; etc.)
  - 5.2 Stock assessment modelling (2016) & Draft Harvest decision table (2017)
  - 5.3 Draft Pacific halibut apportionment and catch tables
- 6. MANAGEMENT STRATEGY EVALUATION**
  - 6.1 IPHC Management Strategy Evaluation update
  - 6.2 Report of the 8<sup>th</sup> Session of the IPHC Management Strategy Advisory Board (MSAB08)
- 7. IPHC RESEARCH AND 5-YEAR RESEARCH PROGRAM**
  - 7.1 Report of the 9<sup>th</sup> Session of the IPHC Scientific Review Board (SRB09)
  - 7.2 Report of the 18<sup>th</sup> Session of the IPHC Research Advisory Board (RAB18)
  - 7.3 Survey expansion through 2019
  - 7.4 Discard mortality rates (DMR): Update
  - 7.5 Draft: IPHC 5-year Biological & Ecosystem Science research program
- 8. AGENCY UPDATES**
  - 8.1 North Pacific Fishery Management Council (NPFMC)
  - 8.2 Pacific Fishery Management Council (PFMC)
  - 8.3 Department of Fisheries and Oceans (DFO)
  - 8.4 National Marine Fisheries Service (NOAA-Fisheries)
- 9. REGULATORY PROPOSALS FOR 2017**
  - 9.1 IPHC proposals
  - 9.2 Agency proposals
  - 9.3 Stakeholder proposals
- 10. PERFORMANCE REVIEW**
  - 10.1 Update on progress regarding the implementation of the 1<sup>st</sup> IPHC Performance Review recommendations
  - 10.2 Planning for the 2<sup>nd</sup> IPHC Performance Review

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**11. IPHC COMMUNICATIONS**

- 11.1 IPHC Website improvements
- 11.2 IPHC Social media and outreach

**12. FINANCE AND ADMINISTRATION**

- 12.1 Financial Statement for FY2016
- 12.2 Handling of the annual budget carryover
- 12.3 Budget estimates for FY2017 and tentatively for 2018
- 12.4 IPHC Rules of Procedure (2014)
- 12.5 Scholarship Committee report

**13. OTHER BUSINESS**

- 13.1 Preparation for 93<sup>rd</sup> Session of the IPHC Annual Meeting (2017)
- 13.2 Date and place of the 93<sup>rd</sup> and 94<sup>th</sup> Sessions of the IPHC Interim Meeting

**14. THE PROCESS FOR ‘REVIEW OF THE DRAFT AND ADOPTION OF THE REPORT OF THE 92<sup>nd</sup> SESSION OF THE IPHC INTERIM MEETING (IM092)’**

- 14.1 Draft Report and Minutes
- 14.2 News Release

## APPENDIX III

LIST OF DOCUMENTS FOR THE 92<sup>ND</sup> SESSION OF THE IPHC INTERIM MEETING (IM092)

Document	Title	Availability
IPHC-2016-IM092-01	Agenda & Schedule for the 92 <sup>nd</sup> Session of the IPHC Interim Meeting (IM092)	✓ 17 Oct 2016
IPHC-2016-IM092-02	List of Documents for the 92 <sup>nd</sup> Session of the IPHC Interim Meeting (IM092)	✓ 09 & 28 Nov 2016
IPHC-2016-IM092-03	Update on actions arising from the 92 <sup>nd</sup> annual meeting and IPHC Work Meeting	✓ 09 Nov 2016
IPHC-2016-IM092-04	State of the Fishery (2016) (J. Goen)	✓ 22 Nov 2016
IPHC-2016-IM092-05	Spatio-temporal modelling of survey data (R. Webster)	✓ 28 Nov 2016
IPHC-2016-IM092-06	Stock assessment (2016) and Draft harvest decision table (2017) (I. Stewart & A. Hicks)	✓ 22 Nov 2016
IPHC-2016-IM092-07	Draft Pacific halibut apportionment and catch tables (I. Stewart)	✓ 28 Nov 2016
IPHC-2016-IM092-08 Rev_1	IPHC Management Strategy Evaluation update (A. Hicks)	✓ 22 & 28 Nov 2016
IPHC-2016-IM092-09	Survey expansion through 2019 (R. Webster)	✓ 28 Nov 2016
IPHC-2016-IM092-10	<b>Withdrawn</b>	<b>Withdrawn</b>
IPHC-2016-IM092-11	Draft: IPHC 5-year Biological & Ecosystem Science research program (J. Planas)	✓ 22 Nov 2016
IPHC-2016-IM092-12a	IPHC engagement with Agencies and Councils (J. Goen)	✓ 28 Nov 2016
IPHC-2016-IM092-12b	NPFMC Memorandum: Update on Council research priorities and abundance-based PSC management (C. Oliver)	✓ 23 Nov 2016
<b><i>Regulatory proposals for 2017</i></b>		
IPHC-2016-IM092-13a	Regulatory proposals for 2017 (J. Goen)	✓ 23 Nov 2016
<b><i>IPHC Staff Regulatory proposals for 2017</i></b>		
IPHC-2016-IM092-13b	IPHC Regulatory proposals for 2017 (J. Goen)	✓ 22 Nov 2016
<b><i>Agency Regulatory proposals for 2017</i></b>		
IPHC-2016-IM092-13c	Agency Regulatory proposals for 2017 (J. Goen)	✓ 23 Nov 2016
<b><i>Stakeholder Regulatory proposals for 2017</i></b>		
IPHC-2016-IM092-13d-1	Upgrade the US-Canada Treaty (J. Whitethorn)	✓ 26 Oct 2016
IPHC-2016-IM092-13d-2	Drop the Blue Line (J. Whitethorn)	✓ 26 Oct 2016
IPHC-2016-IM092-13d-3	Drop IPHC setline survey (J. Whitethorn)	✓ 26 Oct 2016
IPHC-2016-IM092-13d-4	Closure of the Nursery Area (J. Whitethorn)	✓ 26 Oct 2016
IPHC-2016-IM092-13d-5	Catch Limit: coastwide (P. Ewing)	✓ 24 Jun 2016
IPHC-2016-IM092-13d-6	None provided (J. Kearns)	✓ 29 Oct 2016



IPHC-2016-IM092-13d-7	Elimination of law requiring skin to be left on halibut (J. Shirk)	✓ 16 Oct 2016
IPHC-2016-IM092-13d-8	Amend Federal Regulation 28(i)(d) (S. Reihemann)	✓ 24 Oct 2016
IPHC-2016-IM092-13d-9	Charter Boat Trip Limits 3A #1 (M. Erickson)	✓ 31 Oct 2016
IPHC-2016-IM092-13d-10	Charter Boat Trip Limits 3A #2 (M. Erickson)	✓ 31 Oct 2016
IPHC-2016-IM092-13d-11	Guided Angler 3A Daily Limit (M. Erickson)	✓ 31 Oct 2016
IPHC-2016-IM092-13d-12	Clarify regulations about use/possession of pot gear while commercially fishing for halibut (P. Wyman)	✓ 31 Oct 2016
IPHC-2016-IM092-13d-13	Size Limit clarification (P. Thompson)	✓ 28 Oct 2016
IPHC-2016-IM092-14	Update on progress regarding the implementation of the 1 <sup>st</sup> IPHC Performance Review recommendations (S. Keith & D. Wilson)	✓ 28 Nov 2016
IPHC-2016-IM092-15	Planning for the 2 <sup>nd</sup> IPHC Performance Review (D. Wilson)	✓ 21 Nov 2016
IPHC-2016-IM092-16	IPHC communications (K. Jernigan)	✓ 21 Nov 2016
IPHC-2016-IM092-17	Financial Statement for FY2016 (M. Larsen)	✓ 28 Nov 2016
IPHC-2016-IM092-18	Handling of the annual budget carryover (M. Larsen & D. Wilson)	✓ 28 Nov 2016
IPHC-2016-IM092-19	Budget estimates for FY2017 and tentatively for 2018 (M. Larsen)	✓ 28 Nov 2016
IPHC-2016-IM092-20	Amendment of the IPHC Rules of Procedure (2014) (D. Wilson)	✓ 14 Nov 2016
IPHC-2016-IM092-21	Scholarship Committee report: 2016 (S. Keith)	✓ 21 Nov 2016
IPHC-2016-IM092-22	Preparation for the 93 <sup>rd</sup> Session of the IPHC Annual Meeting (2017) (S. Keith)	✓ 22 Nov 2016
IPHC-2016-IM092-23	Date and place of the 93 <sup>rd</sup> and 94 <sup>th</sup> Sessions of the IPHC Interim Meeting (2017 and 2018) and the IPHC Work Meetings (S. Keith)	✓ 22 Nov 2016
<b><i>Reports from IPHC subsidiary bodies</i></b>		
IPHC-2016-SRB09-R	Report of the 9 <sup>th</sup> Session of the IPHC Scientific Review Board (SRB09)	✓ 28 Nov 2016
IPHC-2016-MSAB08-R	Report of the 8 <sup>th</sup> Session of the IPHC Management Strategy Advisory Board (MSAB08)	✓ 28 Nov 2016
IPHC-2016-RAB18-R	Report of the 18 <sup>th</sup> Session of the IPHC Research Advisory Board (RAB18)	✓ 28 Nov 2016
IPHC-2016-PAG21-R	Report of the 21 <sup>st</sup> Session of the IPHC Processor Advisory Group (PAG21)	✓ 22 Nov 2016
IPHC-2016-CB086-R	Report of the 86 <sup>th</sup> Session of the IPHC Conference Board (CB86)	✓ 22 Nov 2016
<b><i>Information papers</i></b>		
IPHC-2016-IM092-INF01	DRAFT: Understanding the IPHC harvest decision table	✓ 11 Nov 2016

**APPENDIX IV**  
**RESEARCH PROJECTS PROPOSED FOR FY2017**

**Part a:** List of new and continuing projects selected for internal (IPHC) funding

Project #	Project Name	Priority	Budget (US\$)	Principle Investigator	Management implications
<b>New Projects</b>					
2017-01	Full characterization of the annual reproductive cycle	High	91,098	Planas	Maturity assessment
2017-02	Investigation of halibut dispersal on Bowers Ridge	High-Medium	124,527	Loher	Spawning areas
2017-03	Tail pattern recognition analysis in Pacific halibut	High	2,370	Dykstra	Adult distribution
2017-04	Condition factors for tagged U32 fish	High	13,000	Dykstra	DMR estimates
2017-05	Identification and validation of markers for growth	High	27,900	Planas	Changes in biomass/size-at-age
2017-06	Discard mortality rates and injury classification profile by release method	High-Medium	16,123	Dykstra	DMR estimates
2017-07	Sequencing the Pacific halibut genome	High	22,500	Planas	Population estimate
<b>Continuing Projects</b>					
621.15	Voluntary at-sea sex marking	High	18,120	Loher	Stock spawning biomass
669.11	At-sea collection of Pacific halibut weight to reevaluate conversion factors	High	1,500	Soderlund	Length-weight relationship
621.16	Development of genetic sexing techniques	High	146,107	Loher	Sex composition of catch
650.2	Investigation of halibut dispersal on the 4D Edge	High	5,500	Loher	Spawning areas
650.18	Archival tags: tag attachment protocols	High	2,800	Loher	Adult distribution
670.11	Wire tagging of halibut on NMFS trawl and setline surveys	High	12,000	Forsberg	Juvenile and adult distribution
642	Assessment of mercury and other contaminants	Medium	8,400	Dykstra	Environmental effects
661.11	<i>Ichthyophonus</i> incidence monitoring	Medium	8,055	Dykstra	Environmental effects
	<b>Total - New Projects</b>		<b>297,518</b>		
	<b>Total - Continuing Projects</b>		<b>202,482</b>		
	<b>Overall Total (all projects)</b>		<b>500,000</b>		

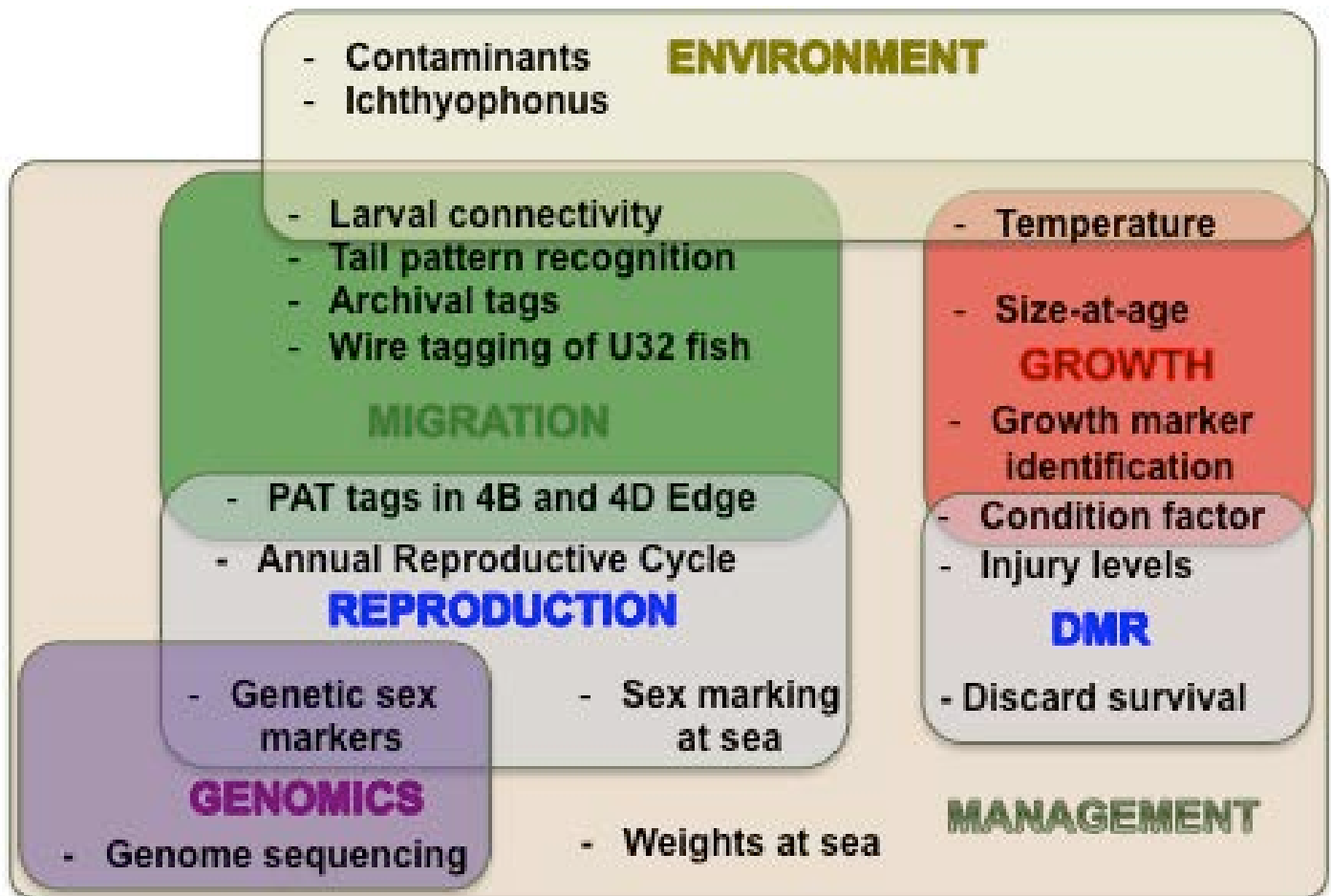
**Part b:** List of projects selected for external funding (submitted or to be submitted)

Grant agency	Project name	Partners	IPHC Budget (US\$)	PI	Management implications	Submission status
<b>S-K NOAA</b>	Improving discard mortality rate estimates in the Pacific halibut by integrating handling practices, physiological condition and post-release survival	Alaska Pacific University	223,220	Planas Dykstra Loher Stewart Hicks	Bycatch estimates	To be submitted by 12/9/2016
<b>NPRB</b>	Somatic growth processes in the Pacific halibut ( <i>Hippoglossus stenolepis</i> ) and their response to temperature, density and stress manipulation effects	AFSC-NOAA-Newport	122,264	Planas	Changes in biomass/size-at-age	To be submitted by 12/16/2016
<b>NPRB</b>	Larval transport, supply, and connectivity of Pacific halibut between the Gulf of Alaska and the Bering Sea	AFSC-NOAA-SandPoint-NWFSC	8,000	Sadorus Planas Stewart	Biomass distribution	To be submitted by 12/16/2016
<b>EPH NOAA</b>	Validating biochemical markers of growth for habitat assessment in flatfishes	AFSC-NOAA-Newport	35,000	Planas	Changes in biomass/recruitment	Submitted in November 2016
	<b>Total requested</b>		<b>388,884</b>			

APPENDIX V

SUMMARY DIAGRAM OF IPHC RESEARCH PROJECTS FOR FY2017

Summary diagram showing the interaction among the various research areas at IPHC with indication of the specific new and continuing projects proposed for FY2017.



## APPENDIX VI

**CONSOLIDATED SET OF RECOMMENDATIONS AND REQUESTS OF THE 92<sup>ND</sup> SESSION OF THE  
IPHC INTERIM MEETING (29-30 NOVEMBER 2016)**

*RECOMMENDATIONS*

*Survey expansion*

IM092–Rec.01 ([para. 38](#)) The Commission **RECOMMENDED** that the IPHC Staff develop an information paper associated with the survey expansion, which details the likely implications of periodic survey expansion on the stock assessment and apportionment, taking into consideration potential population variability of Pacific halibut in expansion areas which are infrequently surveyed. The paper shall be submitted for initial consideration at the Commission’s Work Meeting in September 2017.

*Best practices handling guidelines*

IM092–Rec.02 ([para. 39](#)) The Commission **RECOMMENDED** that the IPHC Staff undertake a project to develop ‘*Best practice handling guidelines*’ for each of the primary gear types which catch Pacific halibut, both directed and non-directed.

*REQUESTS*

*State of the fishery (2016)*

IM092–Req.01 ([para. 6](#)) The Commission **REQUESTED** that for all future papers/presentations on the ‘*State of the Fishery*’ to the Commission, that, in addition to commercial and recreational landings, subsistence landings also be reported, thereby providing a complete picture of recent fishery dynamics.

*Stock assessment modelling (2016) & Draft Harvest decision table (2017)*

IM092–Req.02 ([para. 13](#)) The Commission **NOTED** that the removals subtracted from the TCEY to determine the FCEY differ by Regulatory Area, leading to more complexity when comparing FCEYs among Regulatory Areas. One example of this is the treatment of unguided recreational removals in Alaska, which are not included in the FCEY as they are in Areas 2A and 2B. The Commission **REQUESTED** that the IPHC Secretariat provide further explanation at the 93<sup>rd</sup> Session of the Annual Meeting in 2017.

*Report of the 9<sup>th</sup> Session of the IPHC Scientific Review Board (SRB09)*

IM092–Req.03 ([para. 33](#)) **NOTING** that the fall meeting report (SRB09) is relatively brief and covers refinements arising from the summer meeting report (SRB08), which covers more extensive topics and greater detail, the Commission **REQUESTED** that both reports (summer and fall from each year) be presented to the Interim Meeting and Annual Meeting annually.

*Draft: IPHC 5-year Biological & Ecosystem Science research program*

IM092–Req.04 ([para. 50](#)) The Commission **REQUESTED** that the IPHC Secretariat undertake reviews/research on the following topics to assist the Commission in better understanding issues which continue to be raised by stakeholders:

- a) The effect of changing size-at-age on Pacific halibut population dynamics, noting that smaller size at age and an unchanged maturity schedule mean that an individual fish may be exposed to bycatch longer, while also spending more mature time before recruiting to the directed fishery.
- b) The possibility of different driving mechanisms for the observed change in size at age, with one factor predominating during the increase of the late 20<sup>th</sup> Century and other driving the decrease since then.

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***Regulatory proposals: Head-on landed weight requirement for the commercial fishery, including removal of the 24” head-off minimum size limit.***

IM092–Req.05 ([para. 65](#)) The Commission **REQUESTED** that the IPHC staff provide additional outreach to the PAG and HANA, prior to the 93<sup>rd</sup> Session of the IPHC Annual Meeting, regarding the head-on landed weight proposal and also consider addressing the related ice and slime conversion.

***Regulatory proposals: Removal of the IPHC closed area.***

IM092–Req.06 ([para. 66](#)) The Commission **REQUESTED** that additional supporting information be provided for consideration at the 93<sup>rd</sup> Session of the IPHC Annual Meeting, including any supporting evidence for the area as a nursery ground and the likely impacts of the directed fishery being allowed access.

***Stakeholder regulatory proposals***

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.

***Planning for the 2<sup>nd</sup> IPHC Performance Review***

IM092–Req.08 ([para. 77](#)) The Commission **REQUESTED** that the IPHC Secretariat finalize the draft performance review terms of reference and criteria, as well as provide a proposed process and budget to conduct the review, to be considered at the 2017 Annual Meeting (AM093) for implementation during 2017. The plan should include anticipated Commissioner and IPHC Secretariat support, as well as recommendations regarding the use of outside contractors to conduct the review.