



Report of the 19th Session of the IPHC Management Strategy Advisory Board (MSAB019)

Meeting held electronically, 1-3 May 2024

Commissioners

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ACRONYMS

AK	Alaska
AM	Annual Meeting
ADFG	Alaska Department of Fish & Game
CDN	Canada/Canadian
DFO	Fisheries and Oceans Canada
EOI	Expressions of Interest
FISS	Fishery-Independent Setline Survey
HSP	Harvest Strategy Policy
IPHC	International Pacific Halibut Commission
MP	Management Procedure
MSAB	Management Strategy Advisory Board
MSE	Management Strategy Evaluation
O32	Over 32" (fish length)
OM	Operating Model
PDO	Pacific Decadal Oscillation
SRB	Scientific Review Board
SPR	Spawning Potential Ratio
TCEY	Total Constant Exploitation Yield
USA	United States of America
WPUE	Weight-Per-Unit-Effort

DEFINITIONS

A set of working definitions are provided in the IPHC Glossary of Terms and abbreviations:
<https://www.iphc.int/the-commission/glossary-of-terms-and-abbreviations>

HOW TO INTERPRET TERMINOLOGY CONTAINED IN THIS REPORT

This 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; ADOPTED** (formal); **REQUESTED; ENDORSED; ACCEPTED** (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.



EXECUTIVE SUMMARY

The 19th Session of the International Pacific Halibut Commission (IPHC) Management Strategy Advisory Board (MSAB019) was held in an electronic format (remote participation), from 1-3 May 2024. The MSAB currently consists of 21 board members/positions, 14 of which attended the Session from the two (2) Contracting Parties. A total of 8 individuals attended the Session as Observers. The list of participants is provided at [Appendix I](#). The meeting was opened by the USA Co-Chairperson Dr Pete Hulson (U.S.A.), who welcomed participants.

The following are a subset of the complete recommendations/requests for action from the MSAB019, which are provided in full at [Appendix V](#).

RECOMMENDATIONS

Primary MSE objectives and associated performance metrics

MSAB019-Rec.1 ([para. 51](#)) **NOTING** [paragraph 48](#), the MSAB **RECOMMENDED** developing an objective and identifying a management procedure that addresses the current circumstances and differences in perception of the stock status.

Additional considerations for the MSE process and harvest strategy policy

MSAB019-Rec.2 ([para. 52](#)) The MSAB **RECOMMENDED** adopting the following exceptional circumstances:

- a) The coastwide all-sizes FISS WPUE or NPUE from the space-time model falls above the 97.5th percentile or below the 2.5th percentile of the simulated FISS index for two or more consecutive years.
- b) The observed FISS all-sizes stock distribution for any Biological Region is above the 97.5th percentile or below the 2.5th percentile of the simulated FISS index for two or more consecutive years.
- c) Recruitment, weight-at-age, sex ratios, other biological observations, or new research indicating parameters that are outside the 2.5th and 97.5th percentiles of the range used or calculated in the MSE simulations.

MSAB019-Rec.3 ([para. 55](#)) The MSAB **RECOMMENDED** adopting the follow actions if an exceptional circumstance occurs:

- a) Consult with the SRB and MSAB to identify why the exceptional circumstance occurred, what can be done to resolve it, and determine a set of MPs to evaluate with a possibly updated OM.
- b) If a multi-year MP was implemented and an exceptional circumstance occurred in a year without a stock assessment, a stock assessment would be completed as soon as possible along with the re-examination of the MSE.
- c) Further consult with the SRB and MSAB after simulations are complete to identify whether a new MP is appropriate.

Other Business

MSAB019-Rec.4 ([para. 57](#)) The MSAB **RECOMMENDED** a one- to two-day hybrid MSAB meeting in the fall of 2024, prior to the 100th Session of the IPHC Interim Meeting (IM100), to discuss results from the ad-hoc working group ([para. 56](#)) and review any simulation designs and results.



REQUESTS

Updates to evaluations of the current interim harvest policy

MSAB019-Req.1 ([para. 32](#)) The MSAB **REQUESTED** that outreach materials be developed by the Secretariat that synthesize the effect of the PDO (e.g. via recruitment) on the coastwide and regional stock dynamics and the relative effect of fishing in simple terms with interpretation and consequences of the outcomes. This may be a pamphlet or a short document to be reviewed via email by MSAB members before the 100th Session of the IPHC Interim Meeting (IM100).

Potential management procedures to simulate and evaluate

MSAB019-Req.2 ([para. 39](#)) The MSAB **REQUESTED** that the evaluation of annual, biennial, and triennial assessments include, but is not limited to, the following concepts.

- a) Annual changes in the coastwide TCEY is driven by an empirical rule in non-assessment years of a multi-year MP;
- b) A constraint on the coastwide TCEY to reduce inter-annual variability and the potential for large changes in every year or only assessment years. This may be a 10%, 15%, or 20% constraint, a slow-up fast-down approach, or similar approach;
- c) SPR values ranging from 35% to 52%.

MSAB019-Req.3 ([para. 40](#)) **RECALLING** [paragraph 39](#) item a) the MSAB **REQUESTED** the Secretariat and SRB develop empirical rule options using the following possible sources of data:

- a) A static coastwide TCEY determined from the stock assessment;
- b) FISS O32 WPUE;
- c) Incorporation of commercial and FISS age data with FISS O32 WPUE.

MSAB019-Req.4 ([para. 42](#)) The MSAB **REQUESTED** that the Commission provide guidance on whether and how to incorporate distribution in the MSE simulations. Three potential options are:

- a) Integrating over multiple distribution procedures;
- b) Use a single distribution procedure and add uncertainty;
- c) Use recent years to define percentage of TCEY in each IPHC Regulatory Area and add uncertainty.

Primary MSE objectives and associated performance metrics

MSAB019-Req.5 ([para. 47](#)) The MSAB **REQUESTED** that the Secretariat report performance metrics noted in [paragraph 44 and 45](#) over ten (10) and fifteen (15) year periods.



TABLE OF CONTENTS

REPORT OF THE 19TH SESSION OF THE IPHC MANAGEMENT STRATEGY ADVISORY BOARD (MSAB019)..... 1

EXECUTIVE SUMMARY 4

TABLE OF CONTENTS..... 6

1. OPENING OF THE SESSION..... 7

2. ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION 7

3. IPHC PROCESS..... 8

 3.1 *MSAB Membership 8*

 3.2 *Update on the actions arising from the 18th Session of the MSAB (MSAB018) 8*

 3.3 *Outcomes of the 100th Session of the IPHC Annual Meeting (AM100)..... 8*

4. MANAGEMENT STRATEGY EVALUATION UPDATES 8

 4.1 *Updates to the MSE framework to investigate management procedures for Pacific halibut fisheries 9*

 4.2 *Updates to evaluations of the current interim harvest policy 9*

5. MANAGEMENT STRATEGY EVALUATION PROGRAM OF WORK (2023-2025) 10

 5.1 *Potential management procedures to simulate and evaluate..... 10*

 5.2 *Primary MSE objectives and associated performance metrics..... 11*

 5.3 *Additional considerations for the MSE process and harvest strategy policy..... 12*

6. OTHER BUSINESS 12

7. REVIEW OF THE DRAFT AND ADOPTION OF THE REPORT OF THE 19TH SESSION OF THE IPHC MANAGEMENT STRATEGY ADVISORY BOARD (MSAB019)..... 13

APPENDIX I LIST OF PARTICIPANTS FOR THE 19TH SESSION OF THE IPHC MANAGEMENT STRATEGY ADVISORY BOARD (MSAB019)..... 14

APPENDIX II AGENDA FOR THE 19TH SESSION OF THE IPHC MANAGEMENT STRATEGY ADVISORY BOARD (MSAB019)..... 16

APPENDIX III LIST OF DOCUMENTS FOR THE 19TH SESSION OF THE MANAGEMENT STRATEGY ADVISORY BOARD (MSAB019)..... 17

APPENDIX IV MSAB MEMBERSHIP 18

APPENDIX V CONSOLIDATED SET OF RECOMMENDATIONS AND REQUESTS OF THE 19TH SESSION OF THE IPHC MANAGEMENT STRATEGY ADVISORY BOARD (MSAB019) 20



1. OPENING OF THE SESSION

1. The 19th Session of the International Pacific Halibut Commission (IPHC) Management Strategy Advisory Board (MSAB019) was held in an electronic format (remote participation), from 1-3 May 2024. The MSAB currently consists of 21 board members/positions (9 others currently being held vacant), 14 of which attended the Session from the two (2) Contracting Parties. A total of 8 individuals attended the Session as Observers. The list of participants is provided at [Appendix I](#). The meeting was opened by the USA Co-Chairperson Dr Pete Hulson (U.S.A.), who welcomed participants.
2. The MSAB **NOTED** that two (2) apologies were received by the IPHC Secretariat from the six (6) absent board members ([Appendix I](#)) and Ms Lynn Mattes (PFMC) was sitting in for Ms Heather Hall (PFMC).
3. The MSAB **RECALLED** that the primary role of the MSAB is to advise the Commission on the Management Strategy Evaluation (MSE) process. To meet this advisory role, the Commission has articulated the following specific representation and objectives for the MSAB, as described in Appendix V, paras 1 and 2 of the [IPHC Rules of Procedure \(2024\)](#):

(para. 1) The Management Strategy Advisory Board (MSAB), on which individuals representing harvesters (commercial, sport, and subsistence), fisheries managers, processors, IPHC Secretariat, science advisors and other experts as required may be represented. The primary roles of the MSAB are to:

- a) Suggest topics to be considered in the Management Strategy Evaluation (MSE) process, within the scope defined in paragraph 2.*
- b) Provide the IPHC Secretariat with direct input and advice on current and planned MSE activities.*
- c) Represent constituent views in the MSE process.*

(para. 2) The MSAB will:

- a) recommend clear measurable objectives and performance metrics for the fisheries;*
- b) propose candidate management strategies, which include aspects of the fisheries that can be managed (e.g. regulatory requirements);*
- c) provide suggestions to the IPHC Secretariat about plausible fisheries-related scenarios for investigation, which include aspects of the fisheries that cannot be managed by the IPHC (e.g. removals under the management authority of a domestic management agency or changes in fisheries dynamics due to various factors);*
- d) encourage and allow members to propose tentative or exploratory ideas without prejudice to future discussions;*
- e) assist with interpreting results and identifying important trade-offs between management procedures;*
- f) represent information, views, and outcomes of the MSAB discussions to constituents accurately and appropriately;*
- g) gather and clearly articulate the interests and concerns of constituents and incorporate them into the MSAB's discussions.*

4. **NOTING** [paragraph 3](#), the MSAB **RECALLED** that the Management Strategy Evaluation process is a stakeholder informed, scientifically driven process.
5. The MSAB **NOTED** that Gwyn Mason was nominated and elected as the Canadian co-chair expiring 30 April 2026.

2. ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION

6. The MSAB **ADOPTED** the Agenda as provided at [Appendix II](#). The documents provided to the MSAB019 are listed at [Appendix III](#).



3. IPHC PROCESS

3.1 *MSAB Membership*

7. The MSAB **NOTED** paper [IPHC-2024-MSAB019-03](#) that provided the membership list as of 28 April 2024 and term expirations for the MSAB.
8. The MSAB **RECALLED** the role of observers and that as per the [IPHC Rules of Procedure \(2024\)](#), observers may participate in the deliberations of the MSAB under the guidance of the Co-Chairpersons but are not entitled to participate in the taking of decisions.
9. The MSAB **NOTED** that Gwyn Mason was appointed to the MSAB representing Fisheries and Oceans Canada (DFO) as a Canadian governmental member with a four-year term expiring 30 April 2028.
10. The MSAB **NOTED** that interested stakeholders submit expressions of interest (EOI) for MSAB vacant positions on an ongoing basis. The IPHC Secretariat provides EOI's to the Commission on a periodic basis for their consideration.
11. The MSAB **NOTED** that the Commission appointed Linda Behnken and Michele Conrad to the MSAB representing U.S.A. commercial harvester interests, and Michael Fowler was appointed to the MSAB representing Canadian sport/recreational interests, all with terms expiring 30 April 2028.
12. The MSAB **NOTED** a number of terms are expiring at the end of 2024 and that the Commission will consider reappointing those members before the first MSAB meeting in 2025 without an expression of interest.
13. The MSAB **NOTED** that MSAB members wishing to step-down from the MSAB shall notify the IPHC Secretariat and MSAB Co-Chairpersons in writing.
14. The MSAB **NOTED** that expressions of interest can be made to the Commission even if a seat is not available for their interest.
15. The MSAB **NOTED** the maximum number of representatives for each interest category as well as the maximum number of representatives for each Contracting Party, as specified in the [IPHC Rules of Procedure \(2024\)](#).

3.2 *Update on the actions arising from the 18th Session of the MSAB (MSAB018)*

16. The MSAB **NOTED** paper [IPHC-2024-MSAB019-04](#) which provided the MSAB with an opportunity to consider the progress made during the inter-sessional period in relation to the recommendations and requests of the 18th Session of the IPHC Management Strategy Advisory Board (MSAB018).
17. The MSAB **AGREED** to consider and revise as necessary, the actions arising from MSAB018, and for these to be combined with any new actions arising from MSAB019.

3.3 *Outcomes of the 100th Session of the IPHC Annual Meeting (AM100)*

18. The MSAB **NOTED** paper [IPHC-2024-MSAB019-05](#) which detailed the outcomes of the 100th Session of the IPHC Annual Meeting (AM100), relevant to the mandate of the MSAB.
19. The MSAB **NOTED** that an intersessional meeting of the Commission will occur in 2024 to provide further guidance to the MSE process.

4. MANAGEMENT STRATEGY EVALUATION UPDATES

20. The MSAB **NOTED** paper [IPHC-2024-MSAB019-06](#) that provided simulations performed since MSAB018, priority objectives defined by the Commission, and potential outcomes after updating the operating model.



4.1 Updates to the MSE framework to investigate management procedures for Pacific halibut fisheries

21. **RECALLING** paragraph 30 from the 23rd Session of the Scientific Review Board, the MSAB **NOTED** the IPHC Harvest Strategy Policy showing a separation of the coastwide TCEY and distribution of the TCEY:

IPHC-2024-SRB023-R, para. 85: *The SRB **RECOMMENDED** that the Commission consider revising the harvest policy to*

- (i) *determine coastwide TCEY via a formal management procedure and*
- (ii) *negotiate distribution independently (e.g. during annual meetings).*

Such separated processes are used in other jurisdictions (e.g. most tuna RFMOs, Mid Atlantic Fishery Management Council, AK Sablefish, etc.).

22. The MSAB **NOTED** that the MSAB and MSE process provides a structure for stakeholder involvement.
23. **RECALLING** paragraph 76 from the 99th Session of the IPHC Annual Meeting, the MSAB **NOTED** the four objectives currently endorsed by the Commission for the MSE:

IPHC-2023-AM099-R, para 76: *The Commission **RECOMMENDED** that for the purpose of a comprehensive and intelligible Harvest Strategy Policy (HSP), four coastwide objectives should be documented within the HSP, in priority order:*

- a) Maintain the long-term coastwide female spawning stock biomass above a biomass limit reference point (B20%) at least 95% of the time.*
- b) Maintain the long-term coastwide female spawning stock biomass at or above a biomass reference point (B36%) 50% or more of the time.*
- c) Optimise average coastwide TCEY.*
- d) Limit annual changes in the coastwide TCEY*

24. The MSAB **RECALLED** paragraph 25 from the 23rd Session of the IPHC Scientific Review Board:

IPHC-2023-SRB023-R, para. 25. *The SRB **RECOMMENDED** that the Commission re-evaluate the target objective for long-term coastwide female spawning stock biomass given that estimated 2023 female spawning biomass (and associated WPUE), which was well-above the current target B36%, in part triggered harvest rate reductions from the interim harvest policy. Such ad-hoc adjustments limited the value of projections and performance measures from MSE.*

25. The MSAB **NOTED** that the updated Operating Model (OM) from 2023 incorporated new data and understanding of the Pacific halibut population, and outputs were similar to past MSE results indicating that previous evaluations are still relevant.
26. The MSAB **NOTED** that the OM incorporates many sources of uncertainty including environmental influences and population factors.
27. The MSAB **NOTED** that a retrospective analysis of an empirical rule could only be analysed from 2017 onward because the FISS WPUE has been calculated consistently with the space-time model since 2016.

4.2 Updates to evaluations of the current interim harvest policy

28. The MSAB **NOTED** that the MSE framework can be used to understand the impacts of various factors on stock dynamics as well as evaluating different management procedures, and that both of these concepts are useful to evaluate the relative impacts of different MPs and the forces driving those differences.



-
29. The MSAB **APPRECIATED** the analysis by the Secretariat investigating the impacts on the Pacific halibut stock assuming different effects of Pacific Decadal Oscillation (PDO) regimes on average recruitment, movement, and distribution of recruits.
30. The MSAB **NOTED** that evaluating different PDO regimes (i.e. always high or always low) with an SPR equal to 43%:
- had little effect on the priority conservation objective, but low PDO resulted in lower TCEYs and high PDO resulted in higher TCEYs;
 - affected the long-term distribution of spawning biomass differently in each Biological Region.
31. The MSAB **NOTED** that in the analysis of the impacts of PDO regimes, unfished was defined as zero fishing mortality across all fleets, and that it would be interesting to examine the impacts when only non-directed discard mortality was present, providing the impacts of the environment vs the impacts of the directed fishery.
32. The MSAB **REQUESTED** that outreach materials be developed by the Secretariat that synthesize the effect of the PDO (e.g. via recruitment) on the coastwide and regional stock dynamics and the relative effect of fishing in simple terms with interpretation and consequences of the outcomes. This may be a pamphlet or a short document to be reviewed via email by MSAB members before the 100th Session of the IPHC Interim Meeting (IM100).

5. MANAGEMENT STRATEGY EVALUATION PROGRAM OF WORK (2023-2025)

33. The MSAB **NOTED** paper [IPHC-2024-MSAB019-07](#) presenting potential management procedures to evaluate, objectives and performance metrics, a discussion of exceptional circumstances, and additional considerations for future MSE work.
34. The MSAB **NOTED** that the evaluation of a harvest strategy is important to satisfy requirements of sustainable fishery certification agencies (e.g. Section SE of MSC Fisheries Standard v3.0).

5.1 *Potential management procedures to simulate and evaluate*

35. The MSAB **NOTED** that a multi-year assessment MP with an empirical rule in non-assessment years increases the importance of data (e.g. FISS data or commercial WPUE) as it would be directly used in the MP. An empirical rule may include the following sources of data:
- No data and the coastwide TCEY remains the same from the previous year until an assessment is done;
 - Update the coastwide TCEY proportionally to the change in the coastwide FISS O32 WPUE;
 - Update the coastwide TCEY proportionally to the change in the coastwide FISS all-sizes WPUE;
 - Use projected TCEY's from the stock assessment with the reference SPR and control rule;
 - Commercial fishery catch-rates;
 - Fish age observations from the FISS or commercial fisheries.
36. The MSAB **NOTED** the changes in the FISS design may result in a more uncertain and possibly biased estimates of coastwide WPUE which can reduce the efficacy of an empirical rule, and supplementing an empirical rule with FISS and/or commercial age observations may be helpful.
37. The MSAB **NOTED** that a TCEY held constant in non-assessment years provides multi-year stability. This may be desirable for some sectors in certain years.
38. The MSAB **NOTED** that smoothing the data used in an empirical rule (e.g. averaging multiple years) may further reduce interannual variability in the TCEY in non-assessment years.



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39. The MSAB **REQUESTED** that the evaluation of annual, biennial, and triennial assessments include, but is not limited to, the following concepts.
- Annual changes in the coastwide TCEY is driven by an empirical rule in non-assessment years of a multi-year MP;
 - A constraint on the coastwide TCEY to reduce inter-annual variability and the potential for large changes in every year or only assessment years. This may be a 10%, 15%, or 20% constraint, a slow-up fast-down approach, or similar approach;
 - SPR values ranging from 35% to 52%.
40. **RECALLING** [paragraph 39](#) item a) the MSAB **REQUESTED** the Secretariat and SRB develop empirical rule options using the following possible sources of data:
- A static coastwide TCEY determined from the stock assessment;
 - FISS O32 WPUE;
 - Incorporation of commercial and FISS age data with FISS O32 WPUE.
41. The MSAB **NOTED** that the Commission will determine the TCEY distribution but that including distribution in MSE simulations would better inform the process.
42. The MSAB **REQUESTED** that the Commission provide guidance on whether and how to incorporate distribution in the MSE simulations. Three potential options are:
- Integrating over multiple distribution procedures;
 - Use a single distribution procedure and add uncertainty;
 - Use recent years to define percentage of TCEY in each IPHC Regulatory Area and add uncertainty.
43. The MSAB **NOTED** that using estimates of FISS stock distribution and recent adopted percentages may represent a broad range of distribution procedures to better capture the future uncertainty of TCEY distribution in the MSE simulations.

5.2 *Primary MSE objectives and associated performance metrics*

44. The MSAB **NOTED** that various performance metrics were presented that may be used to evaluate interannual variability in the TCEY. These include average annual variation (AAV), annual change (AC), and maximum change. The AC may be specified as a probability of exceeding a value for any number of years, which may be useful to evaluate the assessment frequencies other than annual.
45. The MSAB **NOTED** that a performance metric indicating the duration of stability (e.g. the number of consecutive years below a threshold) may be useful to evaluate the interannual variability in the TCEY, especially across different assessment frequencies.
46. The MSAB **NOTED** that calculating performance metrics over a 15-year period may allow for a more accurate comparison when evaluating the differences between annual, biennial, and triennial assessment frequencies.
47. The MSAB **REQUESTED** that the Secretariat report performance metrics noted in [paragraph 44](#) and [45](#) over ten (10) and fifteen (15) year periods.
48. The MSAB **NOTED** that the estimated stock status of Pacific halibut is above a relative spawning biomass of 36% (a priority objective of the Commission, [para. 23b](#)), but the FISS WPUE, commercial WPUE, and estimated absolute spawning biomass are at their lowest values observed in many decades.
49. The MSAB **NOTED** that a healthy stock can be defined with relative spawning biomass, absolute spawning biomass, a robust age structure, and rotund weight-at-age.



50. The MSAB **NOTED** that from MSE simulation results when fishing at the current reference $F_{SPR=43\%}$ there is a 1 in 5 chance in the long-term and a 1 in 3 chance in the short-term that the spawning biomass will be less than that observed in 2023.
51. **NOTING** [paragraph 48](#), the MSAB **RECOMMENDED** developing an objective and identifying a management procedure that addresses the current circumstances and differences in perception of the stock status.

5.3 *Additional considerations for the MSE process and harvest strategy policy*

52. The MSAB **RECOMMENDED** adopting the following exceptional circumstances:
- The coastwide all-sizes FISS WPUE or NPUE from the space-time model falls above the 97.5th percentile or below the 2.5th percentile of the simulated FISS index for two or more consecutive years.
 - The observed FISS all-sizes stock distribution for any Biological Region is above the 97.5th percentile or below the 2.5th percentile of the simulated FISS index for two or more consecutive years.
 - Recruitment, weight-at-age, sex ratios, other biological observations, or new research indicating parameters that are outside the 2.5th and 97.5th percentiles of the range used or calculated in the MSE simulations.
53. The MSAB **NOTED** that the FISS is conducted to measure the population and that it may not be an accurate depiction of the fishery, and that fishery-dependent data may provide insights into fishery concerns that the FISS may not capture.
54. The MSAB **REQUESTED** that the SRB and Secretariat work together to consider different ways to incorporate fishery-dependent data into an exceptional circumstance.
55. The MSAB **RECOMMENDED** adopting the follow actions if an exceptional circumstance occurs:
- Consult with the SRB and MSAB to identify why the exceptional circumstance occurred, what can be done to resolve it, and determine a set of MPs to evaluate with a possibly updated OM.
 - If a multi-year MP was implemented and an exceptional circumstance occurred in a year without a stock assessment, a stock assessment would be completed as soon as possible along with the re-examination of the MSE.
 - Further consult with the SRB and MSAB after simulations are complete to identify whether a new MP is appropriate.

6. OTHER BUSINESS

56. The MSAB **REQUESTED** that the Secretariat assist with hosting an ad-hoc working group (in accordance with the MSAB Terms of Reference and Rules of Procedure ([Appendix V, Sect. V, para 10](#)), in 2024 to discuss potential management procedures that include adjusting fishing intensity at low spawning biomass, low FISS WPUE, low commercial fishery catch-rates, or low productivity.
57. The MSAB **RECOMMENDED** a one- to two-day hybrid MSAB meeting in the fall of 2024, prior to the 100th Session of the IPHC Interim Meeting (IM100), to discuss results from the ad-hoc working group ([para. 56](#)) and review any simulation designs and results.
58. The MSAB **AGREED** that an annual MSAB meeting in May allows for the board to adequately provide guidance to the MSE process.



7. REVIEW OF THE DRAFT AND ADOPTION OF THE REPORT OF THE 19TH SESSION OF THE IPHC MANAGEMENT STRATEGY ADVISORY BOARD (MSAB019)

59. The report of the 19th Session of the IPHC Management Strategy Advisory Board ([IPHC-2024-MSAB019-R](#)) was **ADOPTED** on 3 May 2024, including the consolidated set of recommendations and/or requests arising from MSAB019, provided at [Appendix V](#).

APPENDIX I
LIST OF PARTICIPANTS FOR THE 19TH SESSION OF THE IPHC MANAGEMENT STRATEGY
ADVISORY BOARD (MSAB019)

Officers

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Commissioners

Canada	United States of America
Nil	Nil

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Canada	United States of America
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Ms Evelyn Roozee	Ms Heather Fitch
Mr Matt Sweeting-Woods (DFO)	Mr Austin Flanigan
	Mr Brian Ritchie
	Ms Lorna Wargo

IPHC Secretariat

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APPENDIX II
AGENDA FOR THE 19TH SESSION OF THE IPHC MANAGEMENT STRATEGY ADVISORY BOARD
(MSAB019)

Date: 1-3 May 2024

Location: Electronic

Time (PDT): 13:00-17:00 (1st), 09:00-17:00 (2nd), 09:00-15:00 (3rd)

Co-Chairpersons: MS. Gwyn Mason (Canada); Dr Pete Hulson (USA)

- 1. OPENING OF THE SESSION**
 - Election of Canadian Co-Chairperson
- 2. ADOPTION OF THE AGENDA AND ARRANGEMENTS FOR THE SESSION**
- 3. IPHC PROCESS**
 - 3.1. MSAB Membership (D. Wilson)
 - 3.2. Update on the actions arising from the 18th Session of the MSAB (MSAB018) (A. Hicks)
 - 3.3. Outcomes of the 100th Session of the IPHC Annual Meeting (AM100) (A. Hicks)
- 4. MANAGEMENT STRATEGY EVALUATION UPDATES**
 - 4.1. Updates to the MSE framework to investigate management procedures for Pacific halibut fisheries (A. Hicks)
 - 4.2. Updates to evaluations of the current interim harvest policy (A. Hicks)
- 5. MANAGEMENT STRATEGY EVALUATION PROGRAM OF WORK (2024-2025)**
 - 5.1. Potential management procedures to simulate and evaluate (A. Hicks)
 - 5.2. Primary MSE objectives and associated performance metrics (A. Hicks)
 - 5.3. Additional considerations for the MSE process and harvest strategy policy (A. Hicks)
- 6. OTHER BUSINESS**
- 7. REVIEW OF THE DRAFT AND ADOPTION OF THE REPORT OF THE 19TH SESSION OF THE IPHC MANAGEMENT STRATEGY ADVISORY BOARD (MSAB019)**



APPENDIX III
LIST OF DOCUMENTS FOR THE 19TH SESSION OF THE MANAGEMENT STRATEGY ADVISORY BOARD (MSAB019)

Meeting documents	Title	Availability
IPHC-2024-MSAB019-01	Agenda & Schedule for the 19 th Session of the IPHC Management Strategy Advisory Board (MSAB019)	✓ 29 Jan 2024 ✓ 28 Mar 2024
IPHC-2024-MSAB019-02	List of Documents for the 19 th Session of the IPHC Management Strategy Advisory Board (MSAB019)	✓ 31 Jan 2024 ✓ 28 Mar 2024 ✓ 30 Apr 2024
IPHC-2024-MSAB019-03	MSAB membership 2024 (D. Wilson)	✓ 28 Mar 2024
IPHC-2024-MSAB019-04	Update on actions arising from the 18 th Session of the MSAB (MSAB018) (IPHC Secretariat)	✓ 13 Mar 2024
IPHC-2024-MSAB019-05	Outcomes of the 100 th Session of the IPHC Annual Meeting (AM100) (A. Hicks)	✓ 20 Mar 2024
IPHC-2024-MSAB019-06	Updates to the Management Strategy Evaluation framework and a review of coastwide management procedures (A. Hicks & I. Stewart)	✓ 28 Mar 2024
IPHC-2024-MSAB019-07	Considerations for the Management Strategy Evaluation Program of Work for 2023-2025 (A. Hicks & I. Stewart)	✓ 28 Mar 2024
Information Papers		
IPHC-2024-MSAB019-INF01	Management Strategy Evaluation – Environment vs fishing (A. Hicks)	✓ 20 Mar 2024
IPHC-2024-MSAB019-INF02	Interim: IPHC Harvest Strategy Policy (IPHC Secretariat)	✓ 30 Apr 2024



APPENDIX IV
MSAB MEMBERSHIP
(as of 1 May 2024)

Membership category	Member	Canada	U.S.A.	Current Term commencement	Current Term expiration
Commercial harvesters (6-8)					
1	Sporer, Chris	CDN Commercial		10-April-23	31-Dec-26
2	Hauknes, Robert	CDN Commercial		10-April-23	31-Dec-24
3	Grout, Angus	CDN Commercial		10-April-23	31-Dec-26
4	Vacant	CDN Commercial			Vacant
5	Behnken, Linda		USA Commercial	01-May-24	30-April-28
6	Odegaard, Per		USA Commercial	10-April-23	31-Dec-24
7	Conrad, Michele		USA Commercial	01-May-24	30-April-28
8	Johnson, James		USA Commercial	17-Apr-23	31-Dec-24
First Nations/ Tribal fisheries (2-4)					
1	Lane, Jim	CDN First Nations		10-April-23	31-Dec-26
2	Vacant	CDN First Nations			Vacant
3	Mazzone, Scott		USA Treaty Tribes	9-May-23	31-Dec-24
4	Vacant		USA Treaty Tribes		Vacant



Membership category	Member	Canada	U.S.A.	Current Term commencement	Current Term expiration
Government Agencies (4-8; max 4 from each party)					
1	Mason, Gwyn	DFO		01-May-24	30-April-28
2	Huang, Ann-Marie	CDN Science Advisor		10-April-23	31-Dec-24
3	Vacant	DFO			Vacant
4	Iverson, Kurt		NOAA-Fisheries		31-Dec-26
5	Hulson, Pete		USA Science Advisor	13-Jul-22	31-Dec-24
6	Hall, Heather		PFMC	17-May-22	31-Dec-26
7	Bush, Karla		NPFMC	25-Oct-21	31-Dec-24
8	Vacant		ADFG		Vacant
Processors (2-4)					
1	Vacant	CDN Processing			Vacant
2	Vacant	CDN Processing			Vacant
3	Parker, Peggy		USA Processing	9-May-23	31-Dec-24
4	Drobnica, Angel		USA Processing	17-Apr-23	31-Dec-26
Recreational/ Sport fisheries (2-4)					
1	Ashcroft, Chuck	CDN Sportfishing		17-Apr-23	31-Dec-24
2	Fowler, Michael	CDN Sportfishing		01-May-24	30-April-28
3	Marking, Tom		USA Sportfishing (CA)	9-May-23	31-Dec-26
4	Braden, Forrest		USA sportfishing (AK)	17-Apr-23	31-Dec-24



APPENDIX V

CONSOLIDATED SET OF RECOMMENDATIONS AND REQUESTS OF THE 19TH SESSION OF THE
IPHC MANAGEMENT STRATEGY ADVISORY BOARD (MSAB019)

RECOMMENDATIONS

Primary MSE objectives and associated performance metrics

MSAB019-Rec.1 (para. 51) **NOTING** [paragraph 48](#), the MSAB **RECOMMENDED** developing an objective and identifying a management procedure that addresses the current circumstances and differences in perception of the stock status.

Additional considerations for the MSE process and harvest strategy policy

MSAB019-Rec.2 (para. 52) The MSAB **RECOMMENDED** adopting the following exceptional circumstances:

- a) The coastwide all-sizes FISS WPUE or NPUE from the space-time model falls above the 97.5th percentile or below the 2.5th percentile of the simulated FISS index for two or more consecutive years.
- b) The observed FISS all-sizes stock distribution for any Biological Region is above the 97.5th percentile or below the 2.5th percentile of the simulated FISS index for two or more consecutive years.
- c) Recruitment, weight-at-age, sex ratios, other biological observations, or new research indicating parameters that are outside the 2.5th and 97.5th percentiles of the range used or calculated in the MSE simulations.

MSAB019-Rec.3 (para. 55) The MSAB **RECOMMENDED** adopting the follow actions if an exceptional circumstance occurs:

- a) Consult with the SRB and MSAB to identify why the exceptional circumstance occurred, what can be done to resolve it, and determine a set of MPs to evaluate with a possibly updated OM.
- b) If a multi-year MP was implemented and an exceptional circumstance occurred in a year without a stock assessment, a stock assessment would be completed as soon as possible along with the re-examination of the MSE.
- c) Further consult with the SRB and MSAB after simulations are complete to identify whether a new MP is appropriate.

Other Business

MSAB019-Rec.4 (para. 57) The MSAB **RECOMMENDED** a one- to two-day hybrid MSAB meeting in the fall of 2024, prior to the 100th Session of the IPHC Interim Meeting (IM100), to discuss results from the ad-hoc working group ([para. 56](#)) and review any simulation designs and results.

REQUESTS

Updates to evaluations of the current interim harvest policy

MSAB019-Req.1 (para. 32) The MSAB **REQUESTED** that outreach materials be developed by the Secretariat that synthesize the effect of the PDO (e.g. via recruitment) on the coastwide and regional stock dynamics and the relative effect of fishing in simple terms with interpretation and consequences of the outcomes. This may be a pamphlet or a short



document to be reviewed via email by MSAB members before the 100th Session of the IPHC Interim Meeting (IM100).

Potential management procedures to simulate and evaluate

- MSAB019-Req.2 (para. 39) The MSAB **REQUESTED** that the evaluation of annual, biennial, and triennial assessments include, but is not limited to, the following concepts.
- Annual changes in the coastwide TCEY is driven by an empirical rule in non-assessment years of a multi-year MP;
 - A constraint on the coastwide TCEY to reduce inter-annual variability and the potential for large changes in every year or only assessment years. This may be a 10%, 15%, or 20% constraint, a slow-up fast-down approach, or similar approach;
 - SPR values ranging from 35% to 52%.
- MSAB019-Req.3 (para. 40) **RECALLING** [paragraph 39](#) item a) the MSAB **REQUESTED** the Secretariat and SRB develop empirical rule options using the following possible sources of data:
- A static coastwide TCEY determined from the stock assessment;
 - FISS O32 WPUE;
 - Incorporation of commercial and FISS age data with FISS O32 WPUE.
- MSAB019-Req.4 (para. 42) The MSAB **REQUESTED** that the Commission provide guidance on whether and how to incorporate distribution in the MSE simulations. Three potential options are:
- Integrating over multiple distribution procedures;
 - Use a single distribution procedure and add uncertainty;
 - Use recent years to define percentage of TCEY in each IPHC Regulatory Area and add uncertainty.

Primary MSE objectives and associated performance metrics

- MSAB019-Req.5 (para. 47) The MSAB **REQUESTED** that the Secretariat report performance metrics noted in [paragraph 44 and 45](#) over ten (10) and fifteen (15) year periods.

Additional considerations for the MSE process and harvest strategy policy

- MSAB019-Req.6 (para. 54) The MSAB **REQUESTED** that the SRB and Secretariat work together to consider different ways to incorporate fishery-dependent data into an exceptional circumstance.

Other Business

- MSAB019-Req.7 (para. 56) The MSAB **REQUESTED** that the Secretariat assist with hosting an ad-hoc working group (in accordance with the MSAB Terms of Reference and Rules of Procedure ([Appendix V, Sect. V, para 10](#)), in 2024 to discuss potential management procedures that include adjusting fishing intensity at low spawning biomass, low FISS WPUE, low commercial fishery catch-rates, or low productivity.