

BACKGROUND

- 15th Session of the IPHC Management Strategy Advisory Board (MSAB015) was held from 11-14 May 2020
- 16th Session of the IPHC Management Strategy Advisory Board (MSAB016) was held from 19-22 October 2020.
- Ad-hoc working group meeting occurred in 2020

2020 Key Deliverables

- 1. We have defined objectives and candidate Management Procedures (MPs)
- 2. We have agreement that MPs may be data-driven, policy-driven, or some combination
- 3. Eleven candidate MPs were evaluated (considering both scale and distribution)
- 4. All candidate MPs met the conservation objectives, notwithstanding Regulatory Area 4B distribution objective
- Intent of MSE is to evaluate the relative performance of MPs; ranking was attempted
- 6. Given comparable conservation performance, advice comes down to yield and variability tradeoffs among Regulatory Areas

MSAB015 and MSAB016

- MSAB015
 - Learned about multi-area operating model
 - Defined management procedures for distributing the coastwide TCEY

- MSAB016
 - Evaluation and ranking of MPs

Ad hoc Working Group meeting

 Inter-sessional meeting held 17-18 August 2020 to review the results from the prioritized management procedures

47. The MSAB AGREED that limitations in engagement between MSAB members occurred at MSAB015 due to the electronic format, and that engagement with constituents was reduced due to health measures related to COVID-19. A compressed timeframe between August and October MSAB meetings may further reduce broader consultation with some constituents for some MSAB members.

1. We have defined objectives and candidate Management Procedures (MPs)

- Objectives: Appendix A of <u>CR007</u>
- Management Procedures: Appendix V of <u>MSAB015</u>

- 2. We have agreement that MPs may be data-driven, policy-driven, or some combination
 - 40. The MSAB **AGREED** that when developing MPs for evaluation, distribution of the TCEY to IPHC Regulatory Areas can have several components, that range from purely scientific, to describe the stock distribution and shifts in harvest rates due to differences in productivity, to policy driven, that modify the distribution based on additional considerations.
 - 42. The MSAB has evaluated MPs for distributing TCEYs as part of the scientifically driven MSE process and...

 The IPHC Fishery-Independent Setline Survey (FISS) is the best tool for stock distribution; additional approaches can be used for allocation

37. The MSAB **NOTED** that the IPHC Fishery-Independent Setline Survey (FISS) is currently the best scientific method for estimating stock distribution among Biological Regions and IPHC Regulatory Areas.

38. The MSAB **AGREED** that the use of FISS-derived distribution for distribution of the TCEY in an MP is a management decision

Defining Distribution Management Procedures

- 3. Eleven candidate MPs were evaluated (considering both scale and distribution)
 - Interim agreement (e.g. MP-A, MP-B)
 - Constraints on catch limit variability and max fishing intensity (e.g. MP-D)
 - Adjustments of relative harvest rates (e.g. MP-C, MP-H)
 - IPHC FISS distribution (e.g. MP-G MP-J)
 - Fixed-duration shares (MP-F, MP-K)
- Appendix V of <u>MSAB015</u>

4. All candidate MPs met the conservation objectives, notwithstanding Regulatory Area 4B distribution objective

42. The MSAB has evaluated MPs for distributing TCEYs as part of the scientifically driven MSE process and **AGREED** that **MPs with components that are data-driven and/or policy-driven all satisfied biological sustainability objectives 1.1 and 2.1**, notwithstanding objective 1.1 for IPHC Regulatory Area 4B, as described in paragraph 29.

- 5. Intent of MSE is to evaluate the relative performance of MPs; ranking was attempted
 - 44. ... The preliminary ranking method used in the current evaluation may exaggerate differences between management procedures. Therefore, when considering these tables, the results (i.e. specific performance metrics) should be considered along with these summary ranking tables. The rank values do not indicate the magnitude of the difference in performance metrics between MPs.
 - 45. The MSAB **AGREED** to categorize the eleven MPs into three ranked performance tiers.

Management Procedure Recommendations

Tier 1 MPs

MP-D	Interim agreement, with a coastwide constraint; ability to increase fishing intensity to SPR 36%
	 this is the only Tier 1 MP that provides a share to Area 2B and a fixed catch Area 2A
MP-H; MP-I	Apportionment using O32 or all sizes stock distribution, and new relative harvest rates
MP-J	Apportionment with a 5-year moving average, and new relative harvest rates
MP-K	Apportionment with 5-year fixed shares

Management Procedure Recommendations

46. The MSAB **NOTED Tier 1** contained MPs that generally maintained the spawning biomass **closer to the defined target** (objective 2.1), **limited catch variability** for multiple IPHC Regulatory Areas (objective 2.2), and **provided higher yield** in multiple IPHC Regulatory Areas relative to Tier 2 and Tier 3.

47. The MSAB **ENDORSED** Tier 1 MPs, that were ranked highest in the MSE results using the tools available, for consideration. These MPs are MP-D, MP-H, MP-I, MP-J, MP-K as specified in Appendix V.

- 6. Given comparable conservation performance, advice comes down to yield and variability tradeoffs among Regulatory Areas
 - 50. The MSAB NOTED that trade-offs exist between IPHC Regulatory Areas and objectives specific to each IPHC Regulatory Area, not specifically stated as a primary objective, are not met across all IPHC Regulatory Areas by any single MP evaluated. However, modifying some elements of Tier 1 MPs may better meet those unstated objectives, as specified in Section 7.1.

2021 Program of Work

 Future work for 2021 and beyond was considered and MSAB requested a meeting to develop a Program of Work

56. The MSAB **AGREED** to incorporate additional MPs and analyses into the Program of Work following recommendations from the 97th Session of the IPHC Annual Meeting.

57. The MSAB **AGREED** that proposed topics of work beyond the 2021 deliverables include revisiting objectives, MPs, specifications of the MSE framework and operating model, improving estimation models and data generation (e.g. uncertainty), outreach and communication tools, as well as recommendations from the 2020 peer review of the MSE. Some examples include those items described in paragraphs 30 and 31.

2021 Program of Work

- 53. The MSAB **RECOMMENDED** the following MPs for analysis and consideration in 2021:
 - a) MP-J in combination with a fixed TCEY of 1.65 Mlbs in Regulatory Area 2A, as in paragraph 97 b) of IPHC-2020-AM096-R, with total mortality rebalanced among remaining U.S.A. IPHC Regulatory Areas to maintain a constant SPR;
 - b) MP-J in combination with a minimum TCEY of 1.65 Mlbs in Regulatory Area 2A which allows the TCEY to exceed 1.65 in IPHC Regulatory Area 2A with total mortality rebalanced among remaining U.S.A. IPHC Regulatory Areas to maintain a constant SPR.
- 58. The MSAB REQUESTED that an MSAB meeting be scheduled to discuss a Program of Work for 2021 and beyond.

INTERNATIONAL PACIFIC

