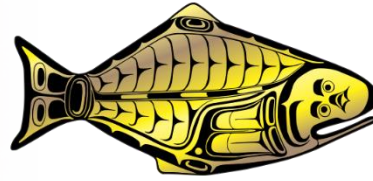


INTERNATIONAL PACIFIC



HALIBUT COMMISSION

Reports of the Management Strategy Advisory Board

Agenda Item 8.2

IPHC-2018-MSAB011-R

IPHC-2018-MSAB012-R

Management Strategy Advisory Board

- 2018 Co-Chairpersons
 - Dr. Carey McGilliard (U.S.A., NOAA Fisheries)
 - Neil Davis, Adam Keizer (Canada, DFO)

- MSAB met twice in 2018
 - MSAB011: 7-10 May
 - MSAB012: 22-25 October

Recommendations and Requests

- Prioritize objectives
- Management Procedure – fishing intensity
- Update simulation framework – scenario uncertainty, performance metrics timeframe, distribution procedures
- Affirmed Program of Work

Commission recommendation to MSAB

“MSAB focus its efforts on providing a recommendation on the level of the coast-wide fishing intensity for IM094 in November 2018.

This work on the scale portion of the harvest strategy policy should be prioritized over work on distribution.”

Commission recommendation to MSAB

- For the purpose of expediting a recommendation on the level of the coast-wide fishing intensity ...
 - prioritize long-term conservation over short-/medium-term (e.g., 3-8 years) catch performance.
- Where helpful in accelerating progress on scale, the MSAB is requested to constrain objectives to
 - (1) maintain biomass above a limit to avoid critical stock sizes,
 - (2) maintain a minimum average catch, and
 - (3) limit catch variability.

Recommendation: objectives

- The MSAB **NOTED** the refined objectives provided by the ad-hoc working group, and **RECOMMENDED** prioritizing a single conservation objective over fishery measurable objectives.*

MEASURABLE OUTCOME	TIME-FRAME	TOLERANCE
SB < Spawning Biomass Limit (SB _{Lim}) SB _{Lim} =20% spawning biomass	Long-term	0.10
Relative Average Annual Variability in Catch	Short-term	
Average Annual Variability in Catch (AAV) > 15%	Short-term	0.25
Maximize average TCEY coastwide	Short-term	

Recommendation: objectives

- The MSAB **NOTED** the refined objectives provided by the ad-hoc working group, and **RECOMMENDED** prioritizing a single conservation objective over fishery measurable objectives.*

MEASURABLE OUTCOME	TIME-FRAME	TOLERANCE
SB < Spawning Biomass Limit (SB _{Lim}) SB _{Lim} =20% spawning biomass	91-100 years	0.10
Relative Average Annual Variability in Catch	4-13 years	
Average Annual Variability in Catch (AAV) > 15%	4-13 years	0.25
Maximize average TCEY coastwide	4-13 years	

Recommendation: performance metrics

- *The MSAB **RECOMMENDED** that performance metrics for*
 - *Short term span 4-13 years*
 - *Medium term span 14-23 years*
 - *Long term span 91-100 years*
- *Understand how management procedures rank relative to one another in these time periods*

Recommendation: fishing intensity

- *The MSAB **RECOMMENDED** that a coastwide fishing intensity SPR should:*
 - *not be lower than 40% nor higher than 46%,*
 - *with a target SPR of 42%-43%*
 - *with a 30:20 HCR.*

Recommendation rationale: fishing intensity

- High fishing intensities increase catch variability and increase probability of realizing low biomass levels with little benefit in yield
- Low fishing intensities decrease yield with little benefit to increasing biomass or decreasing catch variability

Update simulation framework

- *The MSAB **REQUESTED** that additional management procedure components be considered to meet the objective of catch stability.*
 - *Multi-year quotas*
 - *Limiting change in catch limits from the previous year:*
 - *+/- a particular percentage*
 - *A max increase of 15% per year with no limit on decreasing the catch limit*
 - *Slow up (33% of change in TCEY), fast down (-50% of change in TCEY)*

Distribution procedures

- *The MSAB **REQUESTED** that an additional management procedure be considered to define allocations [within scenarios for the purpose of the simulation] and a catch limit floor that reduces catch limits in a stair-step manner during times of large abundance changes.*
- *The MSAB **AGREED** that an ad-hoc working group would be formed to recommend elements of management procedures for the distribution of TCEY. The working group will organize the management procedures listed in paper IPHC-2018-MSAB012-08 with respect to the framework of five steps for distributing TCEY to bioregions and regulatory areas ...*
- Ad-hoc working group will meet between AM095 (Jan 2019) and MSAB013 (May 2019) to discuss further

Distribution procedures

- *The MSAB **NOTED** the management procedures that are currently listed for consideration (based on discussion at several MSAB meetings) – see para. 51 of MSAB report*
- *The MSAB **URGED** members to document candidate management procedures and share any such MPs with the ad-hoc working group prior to MSAB13 (May 2019), via the IPHC Secretariat. The 95th Session of the IPHC Annual Meeting will be a key engagement point for this task*

3 year schedule

May 2018 Meeting

- Review Goals
- Look at results of SPR
- Review Performance Metrics
- Identify Scale MP's
- Review Framework
- Identify Preliminary Distribution MP's

October 2018 Meeting

- Review Goals
- Complete results of SPR
- Review Performance Metrics
- Identify Scale MP'S
- Verify Framework
- Identify Distribution MP's

Annual Meeting 2019

- Recommendation** on Scale
- Present** possible distribution MP's

May 2019 Meeting

- Review Goals
- Spatial Model Complexity
- Identify MP's (Distn Scale)
- Review Framework

October 2019 Meeting

- Review Goals
- Spatial Model Complexity
- Identify MP's (Distn Scale)
- Review Framework
- Review multi-area model development

Annual Meeting 2020

- Update on progress

May 2020 Meeting

- Review Goals
- Review multi-area model
- Review preliminary results

October 2020 Meeting

- Review Goals
- Review preliminary results

Annual Meeting 2021

- Recommendations** on Scale and Distribution



3 year schedule

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- Update on progress

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October 2020 Meeting

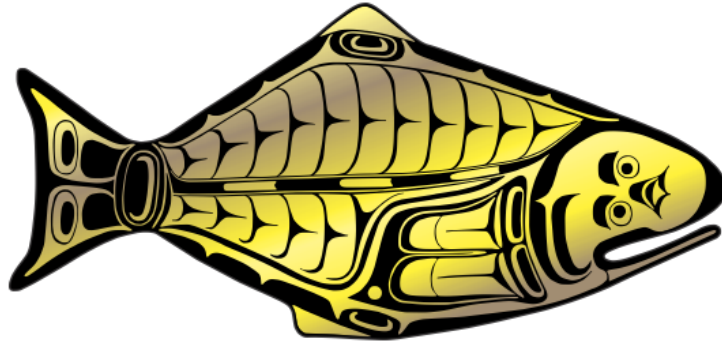
- Review Goals
- Review preliminary results

Annual Meeting 2021

- Recommendations** on Scale and Distribution



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