



UPDATE ON THE ACTIONS ARISING FROM THE 25TH SESSION OF THE IPHC SCIENTIFIC REVIEW BOARD (SRB025)

PREPARED BY: IPHC SECRETARIAT (9 MAY 2025)

PURPOSE

To provide the Scientific Review Board (SRB) with an opportunity to consider the progress made during the intersessional period, on the recommendations/requests arising from the SRB025.

BACKGROUND

At the SRB025, the members recommended/requested a series of actions to be taken by the IPHC Secretariat, as detailed in the SRB024 meeting report ([IPHC-2024-SRB025-R](#)) available from the IPHC website, and as provided in [Appendix A](#).

DISCUSSION

During the 26th Session of the SRB (SRB026), efforts will be made to ensure that any recommendations/requests for action are carefully constructed so that each contains the following elements:

- 1) a specific action to be undertaken (deliverable);
- 2) clear responsibility for the action to be undertaken (such as the IPHC Staff or SRB officers);
- 3) a desired time frame for delivery of the action (such as by the next session of the SRB or by some other specified date).

RECOMMENDATIONS

That the SRB:

- 1) **NOTE** paper IPHC-2025-SRB026-03, that provided the SRB with an opportunity to consider the progress made during the inter-sessional period, in relation to the consolidated list of recommendations/requests arising from the previous SRB meeting (SRB025).
- 2) **AGREE** to consider and revise the actions as necessary, and to combine them with any new actions arising from SRB026.

APPENDICES

[Appendix A](#): Update on actions arising from the 25th Session of the IPHC Scientific Review Board (SRB025).

APPENDIX A

Update on actions arising from the 25th Session of the IPHC Scientific Review Board (SRB025)

RECOMMENDATIONS

Action No.	Description	Update
SRB025– Rec.01 (para. 14)	<p><i>IPHC 5-Year Program of Integrated Research and Monitoring (2022-26)</i></p> <p>The SRB RECOMMENDED that the IPHC 5-year Program of Integrated Research and Monitoring be revised by SRB026 to reflect changing priorities in light of major progress on biological research and ongoing monitoring challenges.</p>	<p><i>In Progress</i></p> <p>Update: The 5YPIRM is currently being revised and a draft for the next 5-year period is expected to be provided to the SRB027.</p>
SRB025– Rec.02 (para. 15)	<p>The SRB RECOMMENDED incorporating evaluation of new technologies into the 5-year Program of Integrated Research and Monitoring. Initial examples include:</p> <ul style="list-style-type: none"> a) testing samples of AI-generated age compositions in the assessment model as soon as is practicable to determine their potential value for that purpose; b) using AI to support ageing requirements for gene-tagging and/or CKMR methods to estimate abundance. These ages would be required beyond ageing workloads for normal assessment purposes; c) epigenetic ageing (a new project beginning 2025), which could provide more reliable and unbiased ages than AI and perhaps comparable in precision to human-read ages. 	<p><i>In Progress</i></p> <p>Update: The 5YPIRM is currently being revised and a draft for the next 5-year period is expected to be provided to the SRB027.</p>
SRB025– Rec.03 (para. 18)	<p><i>Pacific halibut stock assessment</i></p> <p>The SRB RECOMMENDED considering the impact of alternative FISS designs not only on the coast-wide abundance estimates but also on our understanding of the stock distribution across regions.</p>	<p><i>In Progress</i></p> <p>Update: Additional information on uncertainty due to reduced FISS designs was added to presentations and documents for AM101. Further, the uncertainty in stock distribution was propagated into projected TCEYs for 2025.</p>

SRB025– Rec.04 (para. 24)	<p>Management strategy evaluation</p> <p>NOTING the analysis of depensation, the SRB RECOMMENDED redoing this analysis in the future whenever estimated spawning stock biomass falls below the minimum level previously observed within the corresponding PDO regime.</p>	<p>Completed</p> <p>The estimates from the stock assessment will be monitored to determine if the analysis should be repeated.</p>
SRB025– Rec.05 (para. 26)	<p>The SRB strongly RECOMMENDED against using MSE (a strategic tool) in the annual TCEY setting process. Exceptional circumstances checks (on WPUE and CATCH) are used to judge whether management procedures are generating appropriate recommendations in a given year.</p>	<p>Completed</p> <p>This recommendation was noted by the Commission.</p>
SRB025– Rec.06 (para. 27)	<p>The SRB RECOMMENDED including performance metrics expressing impacts of alternative FISS designs and MP options in terms of the dollar value of foregone yield to more directly capture economic outputs. The SRB RECOGNISED that there is long-term price uncertainty and complicated economics. Nevertheless, it is not unreasonable to present economic performance for the short-term projections.</p>	<p>In Progress</p> <p>Update: Specific performance metrics are being developed, but general economic consequences have been communicated.</p>
SRB025– Rec.07 (para. 30)	<p>The SRB RECOMMENDED adopting realised coastwide catch as a fishery-dependent indicator for testing exceptional circumstances. Realised coastwide catch each year can be compared to the projected distribution of future TCEY for that year to determine whether biological or management processes (e.g. decision variability) are leading to unexpected TCEY.</p>	<p>Completed</p> <p>This has been added to the draft Harvest Strategy Policy and is reported in document IPHC-2025-SRB026-08.</p>
SRB025– Rec.08 (para. 31)	<p>The SRB RECOMMENDED adding a measurable objective related to absolute spawning biomass under the general objective 2.1 “maintain spawning biomass at or above a level that optimises fishing activities” to be included in the priority Commission objectives after, or in place of, the current relative biomass threshold objective.</p>	<p>In Progress</p> <p>Update: Objectives related to absolute spawning biomass are being discussed by the Commission and MSAB.</p>
SRB025– Rec.09 (para. 35)	<p>Biology and ecology</p> <p>The SRB RECOMMENDED that when incorporating the new maturity ogive derived from the use of generalised additive models into</p>	<p>Completed</p> <p>This recommendation is addressed in Section 2 of document IPHC-SRB026-</p>

	the stock assessment, that the Secretariat consider using annual calculation of a regionally weighted ogive for years where FISS regional abundance estimates are available rather than one weighted by the 2023 FISS relative abundances by biological region.	06 and results will be presented at the meeting.
SRB025– Rec.10 (para. 36)	The SRB NOTED a decrease in the coastwide A50, driven largely by changes in Biological Region 2 from 2022 to 2023 and RECOMMENDED : a) not to pool years to inspect potential decreasing trends in the age at maturity; b) investigating separately the maturity ogives and the age at the first maturity by determining, where possible, whether an individual has spawned previously.	Completed This recommendation is addressed in Section 2 of document IPHC-SRB026-06 and results will be presented at the meeting.
SRB025– Rec.11 (para. 44)	2025 FISS design evaluation The SRB RECOMMENDED a preliminary analysis of potential alternative approaches to generating Pacific halibut abundance estimates in the future. For example, the MSE simulations could be used to generate projected survey deficits over the next 3-5 yrs to estimate the distribution of cumulative "supplemental funding" (CSF) required over that time. The CSF can then be compared to the estimated cost of developing and executing alternative abundance estimators such as gene-tagging and/or CKMR, which partially rely on less expensive commercial catch sampling. Genetic methods require up-front development costs that may look more reasonable against the prospect of the CSF. Annual CKMR costs could be substantially less than annual FISS costs, while providing reliable absolute biomass estimates regardless of stock status.	In Progress Update: Supplemental funding and FISS design needs are highly uncertain and rapidly evolving. The Secretariat will need to propose this type of work as part of the next research plan and receive feedback from the Commission on which alternative abundance estimators to explore.
SRB025– Rec.12 (para. 47)	Age composition data (both fishery-dependent and fishery-independent) The SRB RECOMMENDED that the Secretariat investigate using the AI to identify region of collection. Otolith shape is sometimes used as a tool for understanding mixing and stock structure and the AI may have skill in identifying region of origin (and thus mixing and migration rates) from otolith images.	In Progress Update: An update will be provided in-session. See also paper IPHC-2025-SRB026-10

REQUESTS

Action No.	Description	Update
SRB025– Req.01 (para. 20)	<p><i>Pacific halibut stock assessment</i></p> <p>The SRB REQUESTED an analysis of the relationship between commercial CPUE and the FISS WPUE at the coastwide and regional levels to investigate the strength of hyperstability/hyperdepletion in CPUE for the stock assessment in 2025. This analysis should include two scenarios: (i) the historical FISS WPUE estimates and (ii) FISS WPUE estimates calculated from reduced designs (i.e. subset the historical FISS data and recalculate WPUE from the reduced data set). The statistical model used for the analysis should account for uncertainty in the FISS index (the X-axis variable) using, for example, an error-in-variables approach like that in Harley et al. 2001 (CJFAS). This analysis represents a first step in including presumed hyperstability in scenarios that investigate the impacts of reduced FISS designs.</p>	<p>Pending</p> <p>Update: This analysis was placed on hold while the full stock assessment was developed. It can be prioritized for SRB027 depending on other topics arising.</p>
SRB025– Req.02 (para. 22)	<p>RECALLING previous discussions at SRB020 (IPHC-2022-SRB020-R) and SRB021 (IPHC-2022-SRB021-R) regarding stock assessment research priorities and that several of the smaller topics have been addressed, the SRB REQUESTED an update on the list of larger topics larger topics that may require moving to a three-year schedule for stock assessment. Examples of such topics include the following:</p> <p>a) Exploration of alternative stock assessment model frameworks, e.g. state-space models like the Woods Holde Assessment Model (WHAM), Bayesian models, and spatially structured models beyond the Areas as Fleets model.</p>	<p>Completed</p> <p>Update: An updated list of research topics is included in the preliminary assessment for 2025.</p>
SRB025– Req.03 (para. 32)	<p><i>Management strategy evaluation</i></p> <p>NOTING that the definitions of “overfished” and “overfishing” are consistent with the use of these terms in the USA federal fishery management systems under the Magnuson-Stevens Act, but differ from the terms and definitions elsewhere, the SRB REQUESTED a broader investigating of terms and definitions related to B and F</p>	<p>In Progress</p> <p>Update: This is being addressed with the Commission. See document IPHC-2025-SRB026-08.</p>

	reference points used by fishery managements organisations throughout the world.	
SRB025– Req.04 (para. 37)	<i>Biology and ecology</i> The SRB REQUESTED a preliminary evaluation of the feasibility for using information on the genetic differentiation of Pacific halibut parasites as a possible stock structure marker.	<i>In Progress</i> The IPHC Secretariat has conducted literature searches on the types and prevalence of parasites in Pacific halibut and their outcomes will be discussed at the SRB026 meeting.