Conservation and management (status of living marine resources; quality and provision of scientific advice; data collection and sharing; adoption of fishery Regulations, including measures adopted at the national level; compatibility of fishery Regulations)

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PURPOSE

To provide the PRIPHC02 with information regarding the Performance Review Criteria 3: *Conservation and management (status of living marine resources; quality and provision of scientific advice; data collection and sharing; adoption of fishery Regulations, also known in other RFMO's as Conservation and Management Measures, including measures adopted at the national level; compatibility of fishery Regulations)*.

BACKGROUND

An independent Science Expert has been hired by the IPHC to evaluate the progress made on the recommendations arising from the first performance review of the IPHC related to science, and also to the criteria set forth below (Criteria 3) with regards to the delivery and management of the science process and scientific advice to the Commission. It is expected that this review will occur from June to August 2019, and will be presented to the PRIPHC02 via electronic means, either at an inter-sessional teleconference, and/or at the second session of the PRIPHC02 from 8-10 October 2019.

Criteria 3: ***Conservation and management*** (status of living marine resources; quality and provision of scientific advice; data collection and sharing; adoption of fishery Regulations, also known in other RFMO's as Conservation and Management Measures, including measures adopted at the national level; compatibility of fishery Regulations)

i. Status of living marine resources
   - Status of Pacific halibut stock under the purview of the IPHC in relation to relevant biological standards.
   - Trends in the status of the stock.
   - Status of species that belong to the same ecosystems as, or are associated with or dependent upon, Pacific halibut (hereinafter "non-target species").
   - Trends in the status of non-target species.

ii. Quality and provision of scientific advice
   - Extent to which the IPHC receives and/or produces the best scientific advice relevant to the fish stocks and other living marine resources under its purview, as well as to the effects of fishing on the marine environment.
   - Extend to which the IPHC obtains and evaluates scientific advice, reviews the status of the stock, promotes the conduct of relevant scientific research, and disseminates the results thereof.

iii. Data collection and sharing
   - Extent to which the IPHC has agreed formats, specifications and timeframes for data submission, taking into account UNFSA Annex I.
   - Extent to which IPHC Contracting Parties, individually or through the IPHC, collect and share complete and accurate fisheries data concerning target stocks and non-target species and other relevant data in a timely manner.

- Extent to which fishing data and fishing vessel data are gathered by the IPHC and shared among Contracting Parties and other relevant bodies.
- Extent to which the IPHC is addressing any gaps in the collection and sharing of data as required.
- Extent to which the IPHC has set standards for the collection of socio-economic data from the fisheries; and extent to which this information is used to inform decisions by the Commission.
- Extent to which the IPHC has set security and confidentiality standards and rules for sharing of sensitive science and operational/compliance data.

iv. Consistency between scientific advice and fishery Regulations adopted;

- Extent to which the IPHC has adopted fishery Regulations for both Pacific halibut, and proposed regulations for non-target species to relevant bodies, that ensure the long-term sustainability of the ecosystem as well as of such stocks and species and are based on the best scientific evidence available.
- Extent to which the IPHC has applied the precautionary approach as set forth in UNFSA Article 6 and the Code of Conduct for Responsible Fisheries Article 7.5, including the application of precautionary reference points and harvest control rules.
- Extent to which the IPHC has adopted and implemented effective rebuilding plans for depleted or overfished stocks.
- Extent to which the IPHC has taken due account of the need to conserve marine biological diversity and minimise harmful impacts of fisheries on living marine resources and marine ecosystems.
- Extent to which the IPHC has adopted measures to minimise pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species, and impacts on associated or dependent species, in particular endangered species, through measures including, to the extent practicable, the development and use of selective, environmentally safe and cost-effective fishing gear and techniques.

v. Compatibility of management measures

- Extent to which measures have been adopted as reflected in UNFSA Article 7.

vi. Fishing allocations and opportunities

- Extent to which the IPHC agrees on the allocation of allowable catch or levels of fishing effort, including taking into account requests for participation from new Contracting Parties or participants as reflected in UNFSA Article 11.

DISCUSSION

The information currently available relating to Performance Criteria 3 are provided at Appendix A.

RECOMMENDATION

That the PRIPHC02 **NOTE** paper IPHC-2019-PRIPHC02-05 which provides information related to the Performance Review Criteria 3: *Conservation and management*

APPENDICES

Appendix A: Performance Review Criteria 3: *Conservation and management (status of living marine resources; quality and provision of scientific advice; data collection and sharing; adoption of fishery Regulations, also known in other RFMO's as Conservation and Management Measures, including measures adopted at the national level; compatibility of fishery Regulations)*

APPENDIX A
PERFORMANCE REVIEW CRITERIA 3: CONSERVATION AND MANAGEMENT (STATUS OF LIVING MARINE RESOURCES; QUALITY AND PROVISION OF SCIENTIFIC ADVICE; DATA COLLECTION AND SHARING; ADOPTION OF FISHERY REGULATIONS, ALSO KNOWN IN OTHER RFMO'S AS CONSERVATION AND MANAGEMENT MEASURES, INCLUDING MEASURES ADOPTED AT THE NATIONAL LEVEL; COMPATIBILITY OF FISHERY REGULATIONS)

i. Status of living marine resources
   - Status of Pacific halibut stock under the purview of the IPHC in relation to relevant biological standards.

Pacific halibut (*Hippoglossus stenolepis*): The IPHC is in the process of developing a stock status report for the species, with the target audience being the general public and stakeholders. We expect this report to be completed in mid-to-late 2019, however a draft was made available on the meeting page of the 95th Session of the Commission (AM095): https://www.iphc.int/uploads/pdf/am/2019am/iphc-2019-am095-10.pdf

General background information: https://www.iphc.int/management/science-and-research/pacific-halibut-stock-status-and-biology

- Trends in the status of the stock.

The IPHC conducts an annual stock assessment, using data from the fishery-independent setline survey (FISS), the commercial Pacific halibut and other fisheries, as well biological information from its research program. The assessment includes the Pacific halibut resource in the IPHC Convention Area, covering the Exclusive Economic Zones of Canada and the United States of America. Data sources are updated each year to reflect the most recent scientific information available for use in management decision making. The following webpage contains the Most recent stock assessment, the peer review process and previous (2015-2018) stock assessments: https://www.iphc.int/uploads/pdf/am/2019am/iphc-2019-am095-09.pdf

- Status of species that belong to the same ecosystems as, or are associated with or dependent upon, Pacific halibut (hereinafter "non-target species").

The IPHC Secretariat works closely with other organisations, and domestic agencies within each Contracting Party. This collaboration includes work on marine mammal interactions, seabird interactions and bycatch species, including rockfish species, spiny dogfish, sablefish, and Pacific cod.
At present, the IPHC does not conduct specific bycatch research, but rather collaborates with domestic organisations. Much of the data collected by the IPHC arises from our annual Fishery-independent setline survey (FISS). We are currently in the process of developing bycatch interaction maps for our website. The following link provides an interactive for all species caught during the FISS: https://www.iphc.int/data/iphc-secretariat-data.

An overview of the IPHC FISS is available on the website: https://www.iphc.int/management/science-and-research/fishery-independent-setline-survey-fiss.

- Trends in the status of non-target species.

The IPHC does not undertake stock status determination for non-target species, but rather provides catch/distribution information from our FISS to domestic organisations, who carry out species specific stock assessments. Examples include the follow:

Canada:

- All species (100-hook count).
- Yelloweye rockfish (*Sebastes ruberrimus*): http://www.dfo-mpo.gc.ca/species-especes/profiles-profils/yelloweye-rockfish-sebaste-yeuxjaunes-eng.html

USA:

- Yelloweye rockfish (*Sebastes ruberrimus*): Washington State waters: https://wdfw.wa.gov/species-habitats/species/sebastes-ruberrimus#conservation
- Skates and rays: all species

ii. Quality and provision of scientific advice

- Extent to which the IPHC receives and/or produces the best scientific advice relevant to the fish stocks and other living marine resources under its purview, as well as to the effects of fishing on the marine environment.
- Extend to which the IPHC obtains and evaluates scientific advice, reviews the status of the stock, promotes the conduct of relevant scientific research, and disseminates the results thereof.

- Overview, science and research at the IPHC: https://www.iphc.int/management/science-and-research
- 5 year biological and ecosystem sciences research program: https://www.iphc.int/management/science-and-research/biological-and-ecosystem-science-research-program-bandesrp
- Stock assessment: https://www.iphc.int/management/science-and-research/stock-assessment
- Management Strategy Evaluation: https://www.iphc.int/management/science-and-research/management-strategy-evaluation

iii. Data collection and sharing

- Extent to which the IPHC has agreed formats, specifications and timeframes for data submission, taking into account UNFSA Annex I.

IPHC Fishery Regulations: https://www.iphc.int/the-commission/fishery-regulations/

In season landing reports: https://www.iphc.int/data/landings-2019

- Extent to which IPHC Contracting Parties, individually or through the IPHC, collect and share complete and accurate fisheries data concerning target stocks and non-target species and other relevant data in a timely manner.

Overview of the fisheries: https://www.iphc.int/management/fisheries
Commercial Fisheries: https://www.iphc.int/management/fisheries/commercial-fisheries
Recreational Fisheries: https://www.iphc.int/management/fisheries/recreational-fisheries
Subsistence Fisheries: https://www.iphc.int/management/fisheries/subsistence-fisheries
Bycatch: https://www.iphc.int/management/fisheries/bycatch

- Extent to which fishing data and fishing vessel data are gathered by the IPHC and shared among Contracting Parties and other relevant bodies.

Fisheries summary provided at AM095: https://www.iphc.int/uploads/pdf/am/2019am/iphc-2019-am095-05.pdf

- Extent to which the IPHC is addressing any gaps in the collection and sharing of data as required.

The IPHC regularly discusses and agrees upon data collection gaps and requests updates during each annual meeting cycle. See the Contracting Party (by agency) reports sections 12, in the annual meeting report: https://www.iphc.int/uploads/pdf/am/2019am/iphc-2019-am095-r.pdf

- Extent to which the IPHC has set standards for the collection of socio-economic data from the fisheries; and extent to which this information is used to inform decisions by the Commission.

The Commission, at its 95th Session in 2019, agreed to the hiring of a Fishery Economist. As part of the Fisheries Policy and Economics Branch of the IPHC, the Fisheries Economist will primarily work in the identification and analysis of economic issues pertaining to Pacific halibut within the IPHC Convention Area. The principal objectives for the position are to provide 1) an economic analysis of the Pacific halibut resource; and 2) advice, consultation, guidance, and review of fishery regulations and policies proposed to, or implemented by, the IPHC.

The IPHC Secretariat is currently partway through the recruitment process. Major Duties and Responsibilities: Undertake and guide a broad economic study, including the identification of any knowledge gaps, of the Pacific halibut resource under the following six core tasks:

- Survey previous studies and existing economic information.
- Develop a comprehensive qualitative structural description of the current economics of the Pacific halibut resource, encompassing all Pacific halibut sectors, including, but not limited to commercial, recreational, bycatch, subsistence, ceremonial, and research.
- Develop a quantitative analysis of the economic value and impact of the directed Pacific halibut fishery, from the hook to the retail or end-user level, including recreational and subsistence use.
- Detail the geography of each sector's economic impact and its effect on local, regional, and national economies.
- Analyze the community impacts of the Pacific halibut fishery throughout its range, including all user groups, expressed as quantitatively as possible.
- Summarize the methodology and results in comparison to other economic data and reports for the Pacific halibut fishery, other regional fisheries, and comparable seafood industry sectors.

    - Extent to which the IPHC has set security and confidentiality standards and rules for sharing of sensitive science and operational/compliance data.

The IPHC Secretariat is currently finalizing a new Data Confidentiality Policy and Standards Document. A version will be provided in session as it is yet to be published.

iv. Consistency between scientific advice and fishery Regulations adopted;

- Extent to which the IPHC has adopted fishery Regulations for both Pacific halibut, and proposed regulations for non-target species to relevant bodies, that ensure the long-term sustainability of the ecosystem as well as of such stocks and species and are based on the best scientific evidence available.

The documents and reports of the IPHC Annual Meetings provide the advice and decisions for the Panel to consider in accordance with this performance criteria:

2019: https://www.iphc.int/venues/details/95th-session-of-the-iphc-annual-meeting-am095
2018: https://www.iphc.int/venues/details/94th-session-of-the-iphc-annual-meeting-am094
2017: https://www.iphc.int/venues/details/93rd-session-of-the-iphc-annual-meeting-am093

- Extent to which the IPHC has applied the precautionary approach as set forth in UNFSA Article 6 and the Code of Conduct for Responsible Fisheries Article 7.5, including the application of precautionary reference points and harvest control rules.

The IPHC Harvest Strategy Policy provides a framework for applying a rigorous science-based approach to setting harvest levels for Pacific halibut (*Hippoglossus stenolepis*) within the Convention Area.

- Harvest Strategy Policy: https://www.iphc.int/the-commission/harvest-strategy-policy
- Management Strategy Evaluation: https://www.iphc.int/management/science-and-research/management-strategy-evaluation

- Extent to which the IPHC has adopted and implemented effective rebuilding plans for depleted or overfished stocks.

Has not yet been necessary. However, the Harvest Strategy Policy provides a framework for the development of a rebuilding strategy should the need arise.

- Harvest Strategy Policy: https://www.iphc.int/the-commission/harvest-strategy-policy

- Extent to which the IPHC has taken due account of the need to conserve marine biological diversity and minimise harmful impacts of fisheries on living marine resources and marine ecosystems.

The IPHC MSE process is considering ecosystem objectives, along with other similar factors:

- Management Strategy Evaluation: https://www.iphc.int/management/science-and-research/management-strategy-evaluation

- Extent to which the IPHC has adopted measures to minimise pollution, waste, discards, catch by lost or abandoned gear, catch of non-target species, both fish and non-fish species, and impacts on associated or dependent species, in particular endangered species, through measures including, to the extent practicable, the development and use of selective, environmentally safe and cost-effective fishing gear and techniques.

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- IPHC Fishery Regulations and those of the Contracting Parties: https://www.iphc.int/the-commission/fishery-regulations