

## **Purpose**

 To provide the Commission with the IPHC 5-year Program of Integrated Research and Monitoring (2022-26)



IPHC 5-Year program of integrated research and monitoring (2022-26)

# INTERNATIONAL PACIFIC HALIBUT COMMISSION 5-YEAR PROGRAM OF INTEGRATED RESEARCH AND MONITORING

(2022 - 2026)

#### INTERNATIONAL PACIFIC



#### Commissioners

Canada United States of America
Paul Ryall Vacant

Neil Davis Robert Alverson
Peter DeGreef Richard Yamada

Executive Director

David T. Wilson, Ph.D.

#### BIBLIOGRAPHIC ENTRY

IPHC 2022. International Pacific Halibut Commission 5-Year program of integrated research and monitoring (2022-26). Seattle, WA, U.S.A. IPHC-2022-5YPIRM, 52 pp.

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An overarching goal of the IPHC 5-year Program of Integrated Research and Monitoring (2022-26) is to promote integration and synergies among the various research and monitoring activities of the IPHC Secretariat in order to improve knowledge of key inputs into:

- the Pacific halibut stock assessment; and
- Management Strategy Evaluation (MSE) processes;

thereby providing the best possible advice for management decision making processes.

Along with the implementation of the short- and medium-term activities contemplated in the *IPHC 5-Year Program of Integrated Research and Monitoring (2022-26)*, and in pursuit of our overarching objective, the IPHC Secretariat will also aim to:

- undertake cutting-edge research programs in fisheries research in support of Pacific halibut fisheries management;
- 2) undertake groundbreaking methodological research;
- undertake applied research;
- 4) establish new collaborative agreements and interactions with research agencies and academic institutions;
- 5) promote the international involvement of the IPHC by continued and new participation in international scientific organizations and by leading international science and research collaborations;
- 6) effectively communicate IPHC research outcomes;
- 7) incorporate talented students and early researchers in research activities contemplated.

The research and monitoring activities conducted by the IPHC Secretariat are directed towards fulfilling objectives within the following areas:

- data collection (fishery-dependent and fishery-independent),
- biological and ecological research,
- stock assessment, and
- Management Strategy Evaluation (MSE).

In addition, the IPHC responds to Commission requests for additional inputs to management and policy development which are classified under <u>management</u> <u>support</u>.

#### Research

<u>Stock assessment</u>: apply the resulting knowledge to improve the accuracy and reliability of the current stock assessment and the characterization of uncertainty in the resultant stock management advice provided to the Commission;

<u>Management Strategy Evaluation (MSE)</u>: to develop an accurate, reliable, and informative MSE process to appropriately characterize uncertainty and provide for the robust evaluation of the consequences of alternative management options, known as harvest strategies, using defined conservation and fishery objectives;

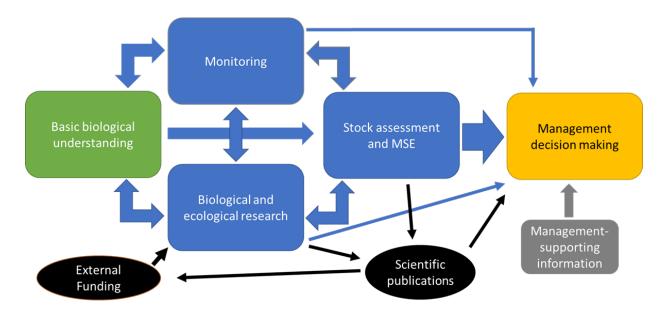
<u>Biology and Ecology</u>: identify and assess critical knowledge gaps in the biology and ecology of Pacific halibut within its known range, including the influence of environmental conditions on population and fishery dynamics;

### **Monitoring**

<u>Monitoring</u>: collect representative fishery dependent and fishery-independent data on the distribution, abundance, biology, and demographics of Pacific halibut through ongoing monitoring activities;

### Integrated management support

<u>Additional inputs</u>: respond to Commission requests for any additional information supporting management and policy development.



Flow of information from basic biological understanding of the Pacific halibut resource, through IPHC research components (monitoring, biological and ecological research, stock assessment, and MSE) to management decision-making. Management-supporting information (grey) constitute a range of additional decision-making drivers within and beyond IPHC's current research and monitoring programs. Arrows indicate the strength (size of the arrow) and direction of information exchange. Also identified (in black) are the external links from funding and scientific publications which supplement the IPHC's internal process.

# Ongoing review and update

The Commission should note that:

- a) the <u>intention</u> is to ensure that the new integrated plan is kept as a '<u>living</u> <u>plan</u>', and is reviewed and updated at least annually based on the resources available to undertake the work of the Commission (e.g. internal and external fiscal resources, collaborations, internal expertise);
- b) the plan focuses on core responsibilities of the Commission, and any redirection provided by the Commission;
- c) each year the SRB may choose to recommend modifications to the current Plan, and that any modifications subsequently made would be documented both in the Plan itself, and through reporting back to the SRB and then the Commission.

# Measuring success

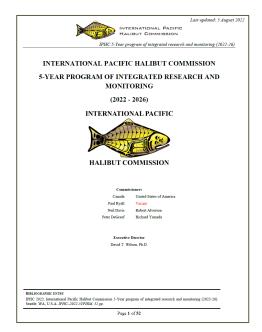
The Secretariat's success in implementing the IPHC 5-Year Program of Integrated Research and Monitoring (2022-26) will be measured according to the following criteria relevant to the stock assessment, the MSE and for all inputs to IPHC management:

- 1) Timeliness was the research conducted, analyzed, published, and provided to the Commission at the appropriate points to be included in annual management decisions?
- 2) Accessibility was the research published and presented in such a way that it was available to other scientists, stakeholders, and decision-makers?
- 3) Relevance did the research improve the perceived accuracy of the stock assessment, MSE, or decisions made by the Commission?
- 4) Impact did the research allow for more precision or a better estimate of the uncertainty associated with information for use in management?
- 5) Reliability has research resulted in more consistent information provided to the Commission for decision-making.

### Recommendation

### That the Commission:

- NOTE paper IPHC-2023-AM099-06 that provides the current version of the IPHC 5-year program of Integrated Research and Monitoring (2022-26);
- 2) **NOTE** that any additional direction provided at AM099 will be incorporated into an updated Plan and published over the coming months.



### **INTERNATIONAL PACIFIC**

