

**JOINT IATTC AND WCPFC-NC WORKING GROUP MEETING ON THE  
MANAGEMENT OF PACIFIC BLUEFIN TUNA  
SIXTH SESSION (JWG-06)**

**ELECTRONIC MEETING**  
8am-11am, Japan Standard Time  
27-29 July 2021

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**Update on Management Strategy Evaluation of Pacific Bluefin Tuna**

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**IATTC-NC-JWG06-2021/WP-02**

**ISC<sup>1</sup>**

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<sup>1</sup> International Scientific Committee on Tuna and Tuna-like Species in the North Pacific Ocean



## **Update on Management Strategy Evaluation of Pacific Bluefin Tuna**

ISC

**July 2021**

This working document was submitted by ISC to Sixth Joint IATTC-NC Working Group Meeting on PBF Management, from 27 to 29 July, 2021.

The International Scientific Committee for Tuna and Tuna-Like Species in the North Pacific Ocean (ISC) was requested by the Joint IATTC and WCPFC-NC Working Group on the Management of Pacific Bluefin Tuna (JWG) during its Fourth Meeting (see Attachment F, WCPFC-NC15 Summary Report) to begin work on a management strategy evaluation (MSE) for Pacific bluefin tuna (PBF) with a goal of completing the first iteration by 2024. The ISC hosted two workshops in preparation for discussions on MSE by the JWG in 2018 and 2019. However, these workshops, while educational for participants, did not lead to substantive discussion on management objectives for PBF, including level of risks and timelines for achievement..

Accordingly, after discussion in 2019, the JWG agreed to a Terms of Reference for the PBF MSE to clarify the purpose of the MSE and the roles of JWG and the ISC in the process (Attachment F, WCPFC-NC15 Summary Report). The role of the JWG is to:

1. Convene workshops to solicit input from managers, scientists, and stakeholders
2. Provide overall guidance on the MSE, taking into account views expressed in stakeholder workshops, which may include, but is not limited to, specification of management objectives, performance indicators, timelines, candidate reference points, and candidate harvest control rules; and
3. Provide progress reports on the MSE to the IATTC and WCPFC-NC.

The role of the ISC in the PBF MSE process is to provide technical guidance on and oversee the development, execution and outputs of the model to be used in the PBF MSE.

The JWG also agreed in 2019 to a set of candidate harvest control rules and candidate reference points (Attachment G, WCPFC-NC15 Report). It should be noted that an MSE process requires far more active and sustained participation by managers and stakeholders in a scientific process than is currently expected for a standard stock assessment, i.e., a commitment to find the time to participate and provide relevant input and feedback is needed.

The ISC interprets the role of the PBFWG as supervising the development and execution of the MSE models and providing advice, information and assistance to the JWG in fulfilling its role. The ISC role as stated in the Terms of Reference reflects earlier input that the ISC currently lacks the capacity to simultaneously conduct an MSE process and provide high quality stock assessments according to the agreed schedule which will see an update assessment delivered in 2022 and a benchmark assessment in 2024. The PBFWG must also complete revisions to complex evaluations of rebuilding trajectories until the stock reaches the second interim rebuilding target, as well as additional analyses using ensemble model approaches to evaluate proposed management actions. Together, these scientific products represent a significant effort and set of inputs for PBF management outside of a full MSE.

Important information and decisions from the JWG to move the MSE forward and complete the first iterations by 2024 is currently lacking. The two most important inputs from the JWG are:

- Management objectives for the stock and their translation into operational objectives that can be measured (the ISC can assist with operationalizing objectives),

and

- Anticipated management framework. In particular, there are questions about how to operationalize the concept of “eastern Pacific” vs. “western Pacific” tradeoff(s).

A set of clear management objectives that reflects the input of managers, scientists and stakeholders is critical to the success of an MSE process, in particular for the complex management of species like PBF. These objectives are used to evaluate the performance of candidate harvest strategies and highlight potential tradeoffs that managers and stakeholders may need to consider for the management of the stock.

In summary, in order to advance the PBF MSE process and provide initial feedback by 2024, the ISC offers the following observations:

- The ISC reiterates its earlier advice (see the 2<sup>nd</sup> JWG Meeting Report, Attachment E, WCPFC-NC13 Summary Report) that it currently lacks the capacity to conduct the MSE and complete stock assessment assignment simultaneously. Based on this advice, the ISC requested support for two analysts, one in the eastern Pacific and one in the western Pacific who will lead the MSE process (modelling, assistance to the JWG) under the supervision of the PBFWG; and
- Clear management objectives are required to begin the first iteration of the MSE process, in part because the modelling has to be designed to provide the necessary outputs to evaluate the performance against these objectives. While the rebuilding plan provides some guidance on objectives, it represents an insufficient set of objectives, which should reflect biological and socio-economic aspects of the stock and fisheries.