

INTER-AMERICAN TROPICAL TUNA COMMISSION

101st MEETING

Victoria, Canada

7-11 August 2023

PROPOSAL IATTC-101 K-1

SUBMITTED BY CANADA, JAPAN AND THE UNITED STATES

EXPLANATORY MEMORANDUM

In 2022, IATTC revised its harvest strategy for North Pacific albacore fisheries, and tasked itself to adopt harvest control rules as part of the harvest strategy for North Pacific albacore in 2023. During July 6-7, 2023, the Northern Committee of the Western and Central Pacific Fisheries Commission adopted an amendment to the WCPFC harvest strategy for North Pacific albacore. Canada, Japan, and the United States are proposing the following revisions to Resolution C-21-05 for North Pacific albacore fishery that is consistent with the amendment recently adopted by the Northern Committee:

- 1) Defining the scope of the harvest control rules to apply to fisheries harvesting North Pacific albacore in the Convention Area north of the equator.
- 2) Prescribing harvest control parameters that detail the level of fishing intensity allowed based on stock status levels relative to the adopted reference points. These parameters are based on the formulas used in the MSE. The minimum fishing intensity, F_{min} , is defined to be F_{87} , which was calculated using the formula in the MSE report (see page 65) that multiplies the F at the limit reference point (LRP) by 0.5. F at the LRP is defined as the formula for E_{SSBlim} in the MSE Report, but H_{Target} in that formula is replaced by the target reference point (TRP) as follows: $F_{min} = 0.5 * F_{LRP} = 0.5 * (TRP * (LRP / ThRP))$.
- 3) Limiting changes to catch and effort limits to 20% from the previous 3-year management period to promote stability.
- 4) Defining that changes to fishing intensity will apply from the year after the stock assessment is completed to the year following the next stock assessment, and tasking the IATTC to recommend changes to the Resolution as appropriate to ensure fishing intensity is set in accordance with the levels recommended.

**AMENDMENT TO HARVEST STRATEGY FOR NORTH PACIFIC
ALBACORE IN THE EASTERN PACIFIC OCEAN**

The Inter-American Tropical Tuna Commission (IATTC), gathered in ~~Phoenix, Arizona~~ Victoria, Canada (USA), on the occasion of its 101st Meeting:

Recalling Resolutions C-05-02, C-13-03, and C-18-03 on North Pacific albacore tuna;

Recalling further its responsibility for the conservation and management of tunas and tuna-like species in the Convention Area, and for the formulation of recommendations to its Members and Cooperating non-Members (CPCs) with regard to the conservation and management of these resources;

Observing that the 2020 stock assessment of North Pacific albacore from the International Scientific Committee for Tuna and Tuna-like Species in the North Pacific Ocean (ISC) indicates that North Pacific albacore tuna is neither being overfished nor is it in an overfished state;

Further Observing that the spawning stock biomass of North Pacific albacore tuna has remained stable at relatively high levels during the recent historical period, such that no management action has been required;

Recognizing that fishing effort limits continue to be an effective management tool for troll and pole-and-line fisheries targeting this stock in the convention area of the IATTC;

Recognizing that changes in oceanographic conditions are likely to influence ecosystem characteristics throughout the North Pacific Ocean, thereby resulting in potential changes to the population dynamics and distribution of this species;

Recognizing the importance of working with the WCPFC, as provided for in Article XXIV of the Antigua Convention, in order to manage North Pacific albacore tuna throughout its entire migratory range spanning/across the Pacific Ocean north of the equator;

Recalling further Article 22(4) of the WCPFC Convention that provides for cooperation with the IATTC regarding fish stocks that occur in the convention areas of both organizations;

Taking into account Article IV of the Antigua Convention calling upon members of the Commission to apply the precautionary approach, as described in the relevant provisions of the United Nations Food and Agriculture Organization Code of Conduct for Responsible Fisheries, as well as the 1995 United Nations Fish Stocks Agreement, for the conservation, management and sustainable use of fish stocks covered by the Convention;

Bearing in mind that Article 7.5.3 of the Code of Conduct for Responsible Fishing indicates that regional fisheries management organizations (RFMOs) should determine stock-specific target and limit reference points, the action to be taken if reference points are approached or exceeded, and measures to be taken to ensure that limit reference points will not be exceeded;

Considering the ISC has determined that its management strategy evaluation (MSE) work is complete and ready to form the basis for adoption of a harvest strategy for North Pacific albacore; and,

Recalling that, as directed in Resolution C-18-03, the IATTC Scientific Staff has made recommendations in respect of the ISC's MSE framework for consideration by the Commission;

Further recalling the Scientific Advisory Committee (SAC), at its 13th meeting, as well the IATTC Scientific Staff, recommended that the Commission use the results of the concluded MSE process to establish reference points and a harvest control rule (HCR) for North Pacific albacore tuna.

Agrees:

1. A harvest strategy, which includes the elements described in this Resolution, shall be adopted for all fisheries which harvest North Pacific albacore tuna in the Convention Area.

MANAGEMENT OBJECTIVES

- a. Considering the overarching objective of ensuring the sustainability of North Pacific albacore tuna and current fisheries supported by the stock in the eastern Pacific Ocean, the following management objectives are established:
 - i. Maintain Spawning Stock Biomass (SSB) above the Limit Reference Point, with a probability of at least 80% over the next 10 years.

- ii. Maintain depletion of total biomass around historical (2006-2015) average depletion over the next 10 years.
- iii. Maintain fishing intensity (F) at or below the target reference point with a probability of at least 50% over the next 10 years.
- iv. To the extent practicable, management changes (e.g., catch and/or effort) should be relatively gradual between years.

REFERENCE POINTS

- b. For the purpose of the North Pacific albacore harvest strategy, the following reference points are established:
 - i. Target reference point (TRP) = $F_{45\%}$, which is the fishing intensity (F) level that results in the stock producing 45% of spawning potential ratio (SPR)
 - ii. Threshold reference point ($SSB_{\text{threshold}}$) = $30\%SSB_{\text{current},F=0}$, which is 30% of the dynamic unfished spawning stock biomass
 - iii. Limit reference point (LRP) = $14\%SSB_{\text{current},F=0}$, which is 14% of the dynamic unfished spawning stock biomass

ACCEPTABLE LEVELS OF RISK

- c. The risk of breaching the Limit Reference Point based on the most current estimate of SSB shall be no greater than 20%.

MONITORING

- d. The IATTC staff shall collaborate with the ISC to conduct regular stock assessments of North Pacific albacore tuna every three years, at which time status relative to reference point in paragraph 1.b. will be evaluated.
- e. When performing a stock assessment, IATTC staff shall collaborate with the ISC to consider the criteria for identification of exceptional circumstances developed by the ISC, and notify the IATTC if these exceptional circumstances have occurred ~~if the biology, environmental conditions, data sources, status of the stock, and/or other underlying assumptions have changed substantially enough to warrant revisiting the components in this harvest strategy.~~

HARVEST CONTROL RULES

- f. By 2023, the Commission shall adopt harvest control rules as part of the harvest strategy for North Pacific albacore, consistent with Figure 1. The harvest control rules apply to all fisheries harvesting albacore in the Convention Area north of the equator.
- g. The harvest control rule parameters produce a relationship between stock status and fishing intensity, as shown in Figure 1, and are as follows with the minimum allowed fishing intensity (F_{min}) equal to $F_{87\%}$, which is the fishing intensity (F) level that results in the stock producing 87% of spawning potential ratio (SPR). SSB_{current} refers to spawning stock

biomass in the terminal year of the assessment and $SSB_{current, F=0}$ to the terminal year dynamic unfished spawning stock biomass.

i. If $SSB_{current}/SSB_{current, F=0}$ is above or equal to $SSB_{threshold}$ with a probability of at least 50%, fishing intensity shall be maintained at or below the TRP on average over 10 years.

ii. If $SSB_{current}/SSB_{current, F=0}$ is below $SSB_{threshold}$ with a probability greater than 50%, and is above the LRP with a probability of at least 50%, fishing intensity shall be reduced¹ to a level in accordance with following formula:

$$F = \frac{TRP - F_{min}}{SSB_{threshold} - LRP} * (SSB_{current}/SSB_{current, F=0} - LRP) + F_{min}$$

iii. If $SSB_{current}/SSB_{current, F=0}$ is at or below the LRP with a probability greater than 50%, the IATTC shall, in collaboration with the ISC and in coordination with the WCPFC, adopt rebuilding measures that will rebuild SSB to levels of at least the $SSB_{threshold}$ with a probability of at least 65 % within 10 years of $SSB_{current}/SSB_{current, F=0}$ having been identified to be at or below the LRP with a probability greater than 50%. In the absence of such rebuilding measures, fishing intensity shall be set at F_{min} .²

h. If $SSB_{current}/SSB_{current, F=0}$ is above the LRP and below $SSB_{threshold}$, the maximum increase or decrease in catch or effort between the three-year management periods shall be 20% relative to the catch and effort levels specified for the previous year.

i. In the year following the relevant ISC stock assessment, the IATTC will recommend adjustment to the existing Resolution for North Pacific Albacore to ensure fishing intensity is at or below the level set forth by this HCR using the latest ISC stock assessment. Changes to fishing intensity in accordance with the harvest control parameters (paragraph 1.g) shall apply between assessments starting the year after the stock assessment was completed, until the year following the next stock assessment that provides an estimate of unfished SSB.

f.j. The IATTC scientific staff in 2024 shall collaborate with the ISC to advise how fishing intensity should be interpreted to actual management under this harvest strategy.

~~g. The harvest control rules adopted pursuant to paragraph 1.f. shall outline *inter alia* the actions the Commission will take to manage North Pacific albacore tuna.~~

~~h. The actions referenced under paragraph 1.g. shall be determined by the position of the most recent fishing intensity and biomass estimates relative to the reference points established pursuant to this Resolution.~~

OTHER PROVISIONS

2. The Commission shall promote compatibility ~~starting with the definition of “reference points”~~, between the harvest strategy adopted through this Resolution, and ~~any~~ the future harvest strategy adopted ~~by~~ the WCPFC with respect to North Pacific albacore tuna.

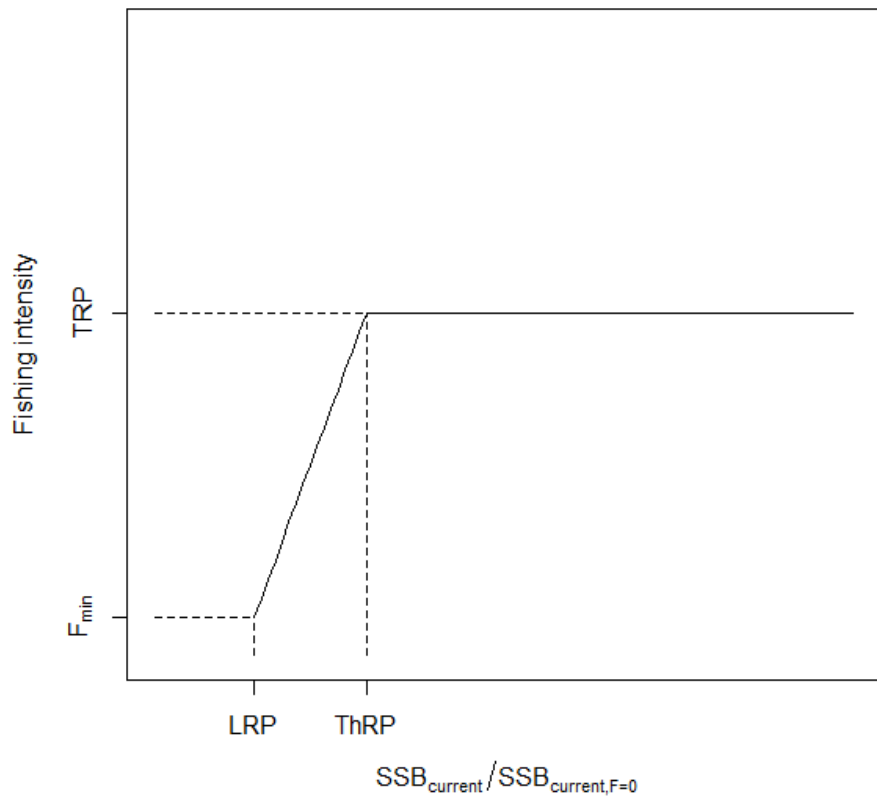
3. A review of the performance of the Harvest Strategy by the IATTC and IATTC scientific staff, in collaboration with the ISC, shall be completed by 2030 and 2033. The aim of the review is to ensure the Harvest Strategy is performing as expected and to determine whether there are conditions that

¹ When adopting proposed revisions to the conservation and management measures proposed, which may include *inter alia* reductions in fishing effort, CPCs will take into account historical fishing activity and the source of increased fishing mortality in reference to the average effort referenced in Resolution C-05-02.

² Ibid.

justify its continuation, or that warrant: reconditioning the MSE operating models; retuning the existing Harvest Strategy; including new indices into a new Harvest Strategy; and/or considering alternate candidate management procedures or development of a new MSE framework. Based on those reviews and subsequent advice from the IATTC scientific staff, the IATTC in 2030 and 2033 shall decide on the future of the Harvest Strategy.

- ~~3. The staff will coordinate with ISC to develop in 2023, criteria for the identification of exceptional circumstances.~~
4. The Director shall communicate this Resolution to the WCPFC Secretariat.



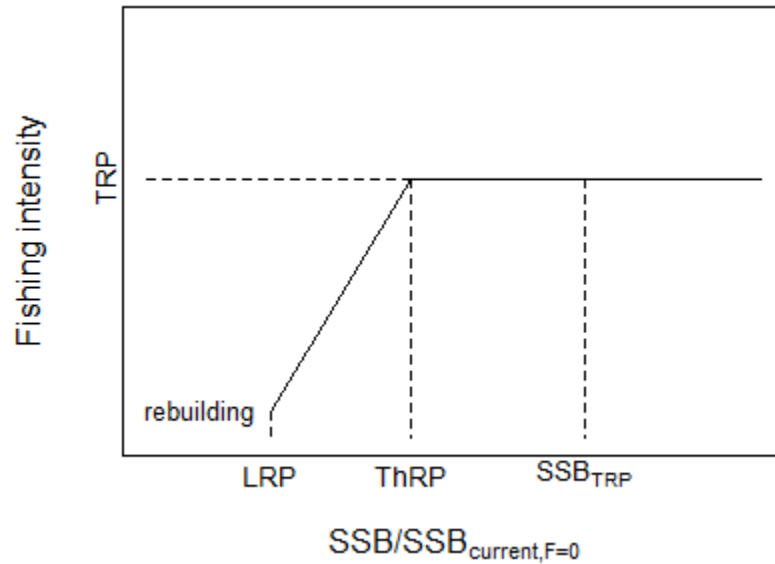


Figure. 1. Illustration of the harvest control rules with target reference point (TRP), threshold reference point (ThRP), limit reference point (LRP), and **the minimum allowed fishing intensity (F_{min})** ~~the expected SSB when fishing at the TRP (SSB_{TRP})~~. The harvest control rules ~~to be adopted pursuant to paragraph 1.f. are intended to~~ include the triggering of a rebuilding **measure plan** if the $SSB_{current}/SSB_{current,F=0}$ falls below the LRP.