

NATIONAL MARINE FISHERIES SERVICE (NMFS) REPORT ON
INTERNATIONAL HIGHLY MIGRATORY SPECIES ACTIVITIES

NMFS is soliciting feedback from the Pacific Fishery Management Council on the attached draft proposal for Pacific bluefin tuna (PBF). The United States is considering submitting this proposal to the upcoming virtual meeting of the Joint Inter-American Tropical Tuna Commission-Western and Central Pacific Fisheries Commission Northern Committee Working Group on PBF (JWG) scheduled for July 11-13, 2022. The United States recently held two public meetings to solicit input on operational management objectives and performance indicators for Pacific bluefin tuna (see G.2.a Supplemental NMFS Report 4). The proposal reflects this input. Modifications were made to some of the suggested management objectives and performance indicators provided in the public meetings to generalize their use in evaluating the candidate harvest control rules and candidate reference points recommended by the JWG in 2019. Acknowledging that the process to evaluate candidate harvest strategies requires a narrower list of options to achieve timely results, NMFS identified the most important operational management objectives and performance indicators for inclusion and consideration. For example, for the yield related objectives, NMFS focused on those that referenced proportional fishery impact, which has been a priority for the United States. Additionally, NMFS did not include proposed indicators that were redundant or that could allow for spawning stock biomass (SSB) likely too low for consideration (e.g., the historical lowest SSB).

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CANDIDATE OPERATIONAL MANAGEMENT OBJECTIVES AND PERFORMANCE INDICATORS FOR PACIFIC BLUEFIN TUNA

Proposal by the United States of America to the Seventh WCPFC-NC and IATTC Joint Working Group Meeting on the Management of Pacific Bluefin Tuna

Explanatory Note

In 2021, the International Scientific Committee for Tuna and Tuna-Like Species (ISC) suggested that in order to make progress toward developing a long-term harvest strategy for Pacific bluefin tuna (PBF), the Northern Committee (NC) of the Western and Central Pacific Fisheries Commission (WCPFC) and the Inter-American Tropical Tuna Commission (IATTC) Joint Working Group Meeting on the Management of Pacific Bluefin Tuna (JWG) should develop operational management objectives and performance indicators by which to measure whether a proposed harvest strategy will meet those agreed-upon management objectives. The NC at its 17th Regular Session, in turn, prioritized further development of the PBF harvest strategy, and tasked itself to work through the JWG to identify performance criteria to evaluate candidate reference points and harvest control rules.

The United States continues to be committed to developing a long-term harvest strategy for PBF, and held several public meetings with its stakeholders from April - June 2022 to solicit input on candidate operational management objectives and performance indicators for PBF. U.S. stakeholders reviewed the current management objectives included in the WCPFC harvest strategy as well as candidate management objectives identified by ICCAT for Atlantic bluefin tuna, and indicated interest in organizing candidate operational management objectives and performance indicators for PBF around the same four general categories that ICCAT has used for Atlantic bluefin tuna: safety, status, stability and yield.

Based on the four categories of management objectives, the United States has developed a list of candidate management objectives and performance indicators, and would like the JWG and in turn, the WCPFC-NC to recommend them for use by the ISC. A recommendation from the WCPFC-NC to the ISC would fulfill the ISC's request for additional guidance on how to evaluate the candidate reference points and harvest control rules adopted in 2019.

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Candidate operational management objectives and performance indicators for Pacific bluefin tuna

Category	Operational Management Objective	Performance Indicator
Safety	There should be a less than [5-20%] ¹ probability of the stock falling below the LRP	-Probability that $SSB < LRP$ in any given year of the evaluation period
Status	To maintain the stock above the LRP and to maintain fishing mortality below F_{Target} with at least 75% probability	-Probability that $SSB > LRP$ and $F \leq F_{TARGET}$ in any given year of the evaluation period
	If SSB has been assessed by the ISC as below LRP, to rebuild SSB to or above [LRP or ThRP] ² with at least a 90% probability and within as short time as possible, but not longer than 10 years	-If $SSB < LRP$, probability that $SSB > [LRP \text{ or } ThRP]$ after 10 years after $SSB < LRP$.
Stability	-To limit changes in overall catch limits between management periods to no more than 15% downwards, unless the ISC has assessed that there is a greater than 50% chance the stock is below the LRP	-Percent change upwards in catches between management periods excluding periods when $SSB < LRP$ -Percent change downwards in catches between management periods excluding periods when $SSB < LRP$

¹ The acceptable levels of risk may vary depending on the LRP selected, but should be no greater than 20%.

² Candidate HCR 1a and 1b include a threshold reference point while Candidate HCR 2 does not include a threshold reference point. If the HCR evaluated includes a Threshold, then rebuild above the threshold. Otherwise rebuild above the LRP.

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Category	Operational Management Objective	Performance Indicator
Yield	Maintain a proportional fishery impact between the WCPO and EPO similar to the average proportional fishery impact from 1970-1994	-Median fishery impact (in %) on SSB in any given year of the evaluation period by fishery and by WCPO fisheries and EPO fisheries -The probability that the proportional EPO fishery impact is at least the 1970-1994 average in any given year