

FEATURE COMPARISON OF “FRAMEWORK FOR A PRECAUTIONARY MANAGEMENT APPROACH FOR NORTH PACIFIC ALBACORE” (COUNCIL PROPOSAL) AND “CANDIDATE TARGET AND LIMIT REFERENCE POINTS AND DECISION FRAMEWORK FOR NORTH PACIFIC ALBACORE” (NMFS PROPOSAL)

Note: Acronyms are listed and defined on page 3.

Feature	Council Proposal	NMFS Proposal
Format	Preliminary WCPFC CMM, management framework outline	Proposed IATTC Resolution, proposed work plan and assignment to IATTC staff
Purpose, Goals and Objectives	Implements management framework	Evaluation of candidate measures
Scope	<ul style="list-style-type: none"> <li>• CCM flag vessels fishing for NP albacore or catching NP albacore incidentally, both current and potential</li> <li>• Intended to apply ultimately in both the WCPFC and IATTC jurisdictions</li> </ul>	Not specified; compatibility in IATTC and WCPFC arenas promoted
<b>Biological Reference Points</b>		
F limit	<ul style="list-style-type: none"> <li>• <math>F_{SPR-20\%}</math> as initial proposal to seed negotiations</li> <li>• <math>F_{curr}</math> with “current” TBD as a benchmark reference point</li> </ul>	None identified
F target	$F_{target\ max}$ – “ACL-below-OFL type” buffer	<ul style="list-style-type: none"> <li>• <math>F_{SPR-10\%}</math></li> <li>• <math>F_{SPR-20\%}</math></li> <li>• <math>F_{SPR-30\%}</math></li> <li>• <math>F_{SPR-40\%}</math></li> <li>• <math>F_{SSB-ATHL}</math></li> </ul>
Biomass (stock status) limit	$SSB_{MSY}$	<ul style="list-style-type: none"> <li>• <math>SB_{0.5R0}</math>, <math>h = 0.75^1</math></li> <li>• 20% of unfished SB</li> </ul>
Biomass (stock status) target	Not specified	Not identified

<sup>1</sup> Spawning biomass that produces half of the recruitment of an unexploited population, using the Beverton-Holt spawner-recruit relationship at the specified steepness ( $h$ ).

Feature	Council Proposal	NMFS Proposal
Evaluation of Measures	Not specified	Management strategy evaluation of 6 BRP combinations and 2 HCRs (TAC, TAE) with respect to 7 performance criteria
<b>Harvest Control Rules</b>		
Catch	<ul style="list-style-type: none"> <li>• “ACL-below-OFL” buffer in the range of 5-20%</li> <li>• CCM-specific partial F fishing rates TBD as a basis for national TACs</li> <li>• 3-year TAC to be considered</li> </ul>	<ul style="list-style-type: none"> <li>• If <math>SB_{curr} \geq SB\text{-limit}</math> annual TAC = F-target at <math>B_{curr}</math> for 3 years (no buffer)</li> <li>• If <math>SB_{curr} &lt; SB\text{-limit}</math>, annual TAC = <math>(F\text{-target} * SB_{curr}) / SB\text{-limit}</math> at <math>B_{curr}</math></li> </ul>
Effort	Disallow acute increase in net fishing effort directed at NP albacore by any CCM, but still rely on catch accounting as the key control mechanism	Rules as above converted to total allowable effort (TAE) but F – E relationship not specified
Management Measures	<ul style="list-style-type: none"> <li>• Catch-based measures TBD with different measures applied depending on stock status; flexibility for CCMs to implement measures relative to individual <math>F_{target}</math> catch limits</li> <li>• Measures to prevent increase in fishing effort TBD, with focus on preventing acute increases in effort with catch-based management as the primary focus</li> </ul>	No measures specified beyond HCRs; TBD at some point after July 2015
Timeline	Not specified but presumed to be consistent with NC Work Plan (see below)	“The IATTC scientific staff shall present the results of the MSE at the 2015 Scientific Advisory Committee meeting. If applicable, the staff should endeavor to recommend reference points in their provision of advice on the status of North Pacific albacore and on recommendations for management measures.”

WCPFC Northern Committee Work Plan for North Pacific albacore (NC 9 Summary Report excerpt)

Work areas	Objectives	1-year tasks		
	2014-2016	2014	2015	2016
<p><b>1. Northern stocks</b></p> <p>a. Monitor status; consider management action</p>	<p>Review status and take action as needed for:<sup>2</sup></p> <p><b><u>North Pacific albacore</u></b></p> <p>Tasks</p> <p>(A) Review members’ reports on their implementation of CMM 2005-03</p> <p>(1) Estimate the proportion of the total catch of albacore in the North Pacific Ocean (in the Convention Area, and/or across the entire North Pacific Ocean, as appropriate) that is effectively subject to the effort limits mandated in the CMM.</p> <p>(2) Determine how total effort across those fisheries has changed from 2002 through 2012 through a review of members’ reports of annual fishing effort by their vessels “fishing for” NP albacore fisheries.</p> <p>(B) Establish a precautionary approach-based management framework, including: (1) recommend appropriate reference points; (2) agreeing in advance to actions that will be taken in the event each of the particular limit reference points is breached (decision rules); (3) recommend any changes to CMM 2005-03.</p>	<p>Consider other management options than the existing management measures, if appropriate.</p> <p>Review the compiled members’ reports and identify and rectify shortcomings</p> <p>Finalize Task (B) (1) and (2)</p>	<p>Review the compiled members’ reports and identify and rectify shortcomings</p> <p>Recommend any changes to CMM 2005-03 (Task(B)(3))</p>	<p>Review the compiled members’ reports and identify and rectify shortcomings</p>

<sup>2</sup> In the event that the Commission, in accordance with paragraph 5 of Annex I of the Commission Rules of Procedure, adds additional stocks, such as the northern stock of striped marlin, to the list of stocks understood to be “northern stocks”, this work programme will be revised to include periodic status reviews and consideration of management action for such stocks.

## Acronyms

ACL	Annual catch limit
BRP	Biological reference point
CCM	Members, Cooperating Non-Members and participating Territories
CMM	Conservation and management measure
F	Fishing mortality rate
h	Steepness
HCR	Harvest control rule
IATTC	Inter-American Tropical Tuna Commission
OFL	Overfishing limit
R <sub>0</sub>	Recruitment under unexploited conditions
SB	Spawning biomass
SPR	Spawning potential ratio
TAC	Total allowable catch
TAE	Total allowable effort
TBD	To be determined
WCPFC	Western and Central Pacific Fisheries Commission