A Revised Target Reference Point for South Pacific Albacore

A proposal from the South Pacific Group and Australia

WCPFC SPA IWG4 meeting (virtual)
5 May 2023

Important note

- The SPG plus Australia are pleased to circulate this proposal for a revised iTRP to the WCPFC SPA IWG.
- We are currently also socializing it within the FFA as it was only introduced to them yesterday.
- We are not seeking any decision, endorsement or approval for this at the IWG, rather we are just introducing the proposal and seek to socialize with CCMs.

Background

- The SPG/FFA regard the current iTRP to be untenable.
  - Old TRP = to achieve longline catch rates 8% higher than those in 2013 (most recently estimated at 0.68 $SB/SB_{F=0}$).
  - Would require excessive catch cuts and further reasoning was provided in the FFA position to WCPFC19*
- We note that a revised TRP for SPA is scheduled for adoption at WCPFC20 later this year.
- We are proposing a revised iTRP that is more **realistic, achievable and does not require excessive and economically counterproductive catch reductions**.
- We have also provided a rationale for this proposal.

*"WCPFC19-2022-DP03-FFA position on key issues for WCFPC19".

The proposed iTRP

Proposed new TRP = the estimated average depletion[1] of the South Pacific albacore tuna stock over the period 2017-2019 ($SB_{2017\text{-}2019}/SB_{F=0}$).

- According to the most recent stock assessment (2021) this depletion level is estimated at49% (0.49 $SB/SB_{F=0}$) in the WCPFC Convention Area.

1. Spawning potential depletion refers to the estimated spawning potential as a percentage of the estimated spawning potential in the absence of fishing (i.e., the unfished spawning potential). The metric is dynamic and is estimated for each model time step.

Objective and Rationale.

Why $B_{2017\text{-}19}$?

- A shift in objectives:
  - away from purely catch rates and guaranteed viability of every vessel or fleet.
  - to now including the economic benefits of foreign fleet activity within EEZs and the need for catches to support this activity.

- Proposed iTRP is associated with a reasonable long term catch of around 60,000 t in the WCPO (compared with the current TRP with average catches ~30,000 t).

- The 2017-19 reference period is a recent 'known quantity' in terms of fishery performance with relatively stable CPUE and reasonable economic performance (domestic and foreign fishing). It avoids the COVID years.
- The 2017-19 reference period has nothing to do with allocation questions. It is purely to define the TRP.

Objective and Rationale (cont.)

Why $B_{2017\text{-}19}$?

- Shift away from using vulnerable biomass to instead using spawning stock biomass ($SB/SB_{F=0}$) within the reference period.
  - Analyses suggest that spawning stock biomass and vulnerable biomass tend to vary together.
  - So spawning stock biomass can still serve as a proxy for CPUE.
  - Simpler, easier to understand and more consistent with other measures used in the WCPFC.
- Proposed iTRP uses reference set of years and not a specific biomass depletion percentage because:
  - It provides a level of future proofing of the iTRP.
  - It give some independence from any one assessment model.
- Proposed iTRP appears to provide for a sufficient ‘buffer’ to avoid unacceptable risks of breaching the adopted Limit Reference Point (LRP).
  - However, the SPG note that the actual LRP risk will be properly assessed through management strategy evaluation in 2023 and 2024.

Updated SPC analysis of candidate TRPs

Source: Updated_tables_for_IWG_March_2023.docx

Proposed

Depletion			Vulnerable biomass		Approximate catch			F/F_{MSY}
Long-term avg $SB/SB_{F=0}$ (WCPFC-CA)	$SB/SB_{F=0}$ rel. 2017-2019	Risk < LRP	VB rel. 2013+8%	VB rel. 2017-2019	Catch scalar	WCPFC-CA	Remainder EPO	Risk F > F_{MSY}
0.49	0%	17%	-30%	-3%	0.86	62,500	15,600	12%
0.51	3%	16%	-28%	0%	0.84	60,500	15,600	12%
0.41	-17%	26%	-41%	-18%	1	72,200	15,600	17%
0.47	-4%	19%	-33%	-7%	0.9	65,000	15,600	14%
0.53	8%	14%	-25%	4%	0.8	57,800	15,600	10%
0.58	19%	8%	-18%	15%	0.7	50,500	15,600	6%
0.64	30%	4%	-10%	25%	0.6	43,300	15,600	3%
0.69	40%	1%	-3%	35%	0.5	36,100	15,600	0%

- Depletion in 2017-19 estimated at 49%
- LRP risk currently estimated at 17%
- Long term approximate WCPO catch 62,500t, noting recent catches have been below this level (EPO fixed at 15,600t)

We want to move forward

- We are due to adopt a TRP this year – this is what we suggest
- It won't require drastic cuts to catch/effort
- We think it will be palatable to other CCMs in the WCPFC
- It allows us to move forward on the Harvest Strategy approach and the zone-based management of SPA.
- We note this has only just been shared so we do not expect the IWG to decide, endorse or approve this now. We share it with the hope of future discussion with all of you.

Thank you