

Agenda Item 3.1 WP02

OM framework and robustness testing: Updates to the OMs following SC22

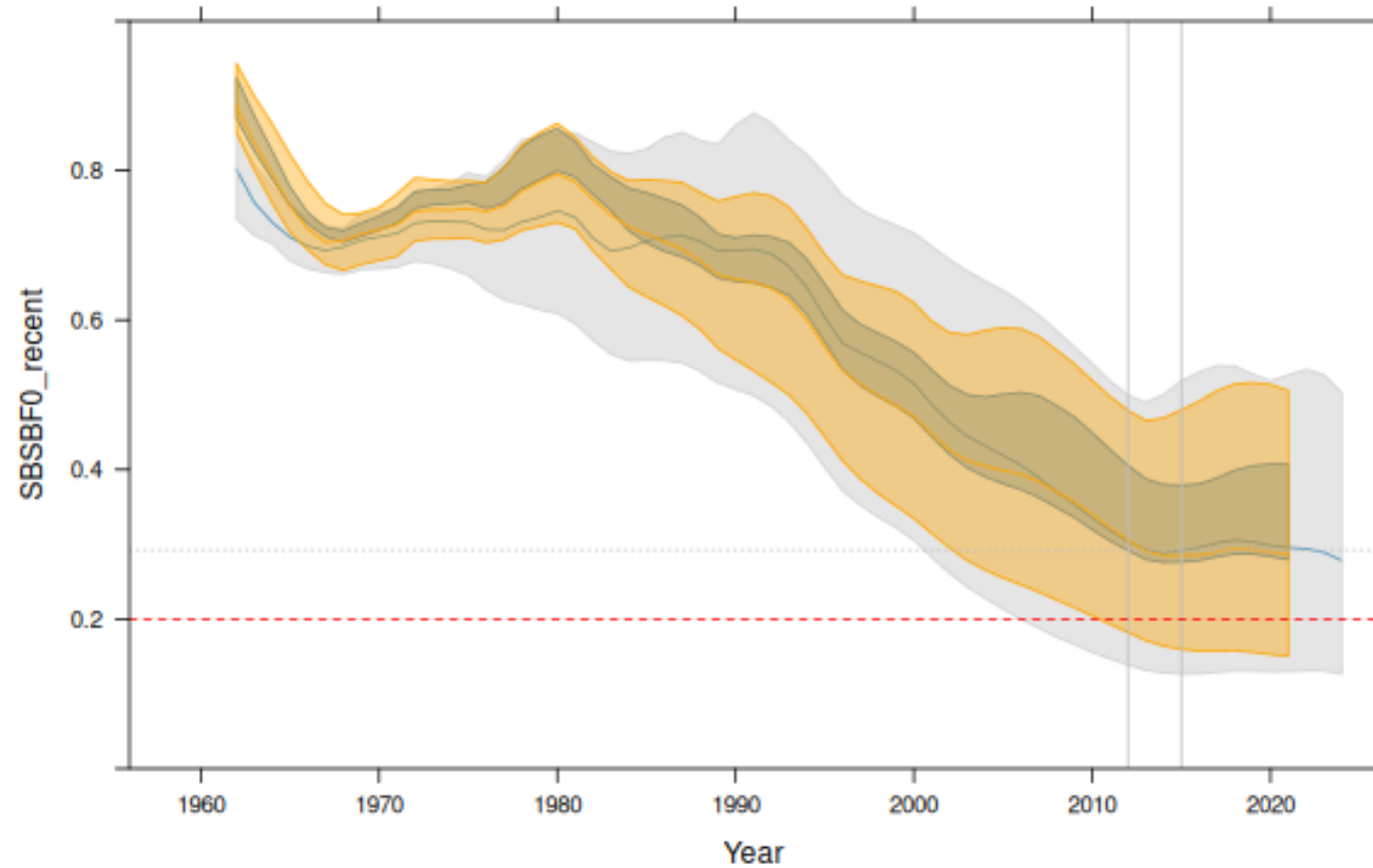
WCPFC BMW2
Honolulu, Hawaii (Hybrid)

SPC-OFP
1-2 October 2026

Introduction

- A grid of 480 OMs for WCPO bigeye tuna were presented to SC22
 - Based on 2023 stock assessment – broader range of uncertainty
- Updated stock assessment also presented to SC22.
 - Indicated a more depleted stock and greater risk of being below LRP.
- SC22 requested the OMs be updated to expand the uncertainty range and in particular to cover the lower depletion range suggested by the 2026 assessment.

Revised BET OM grid (reference set)

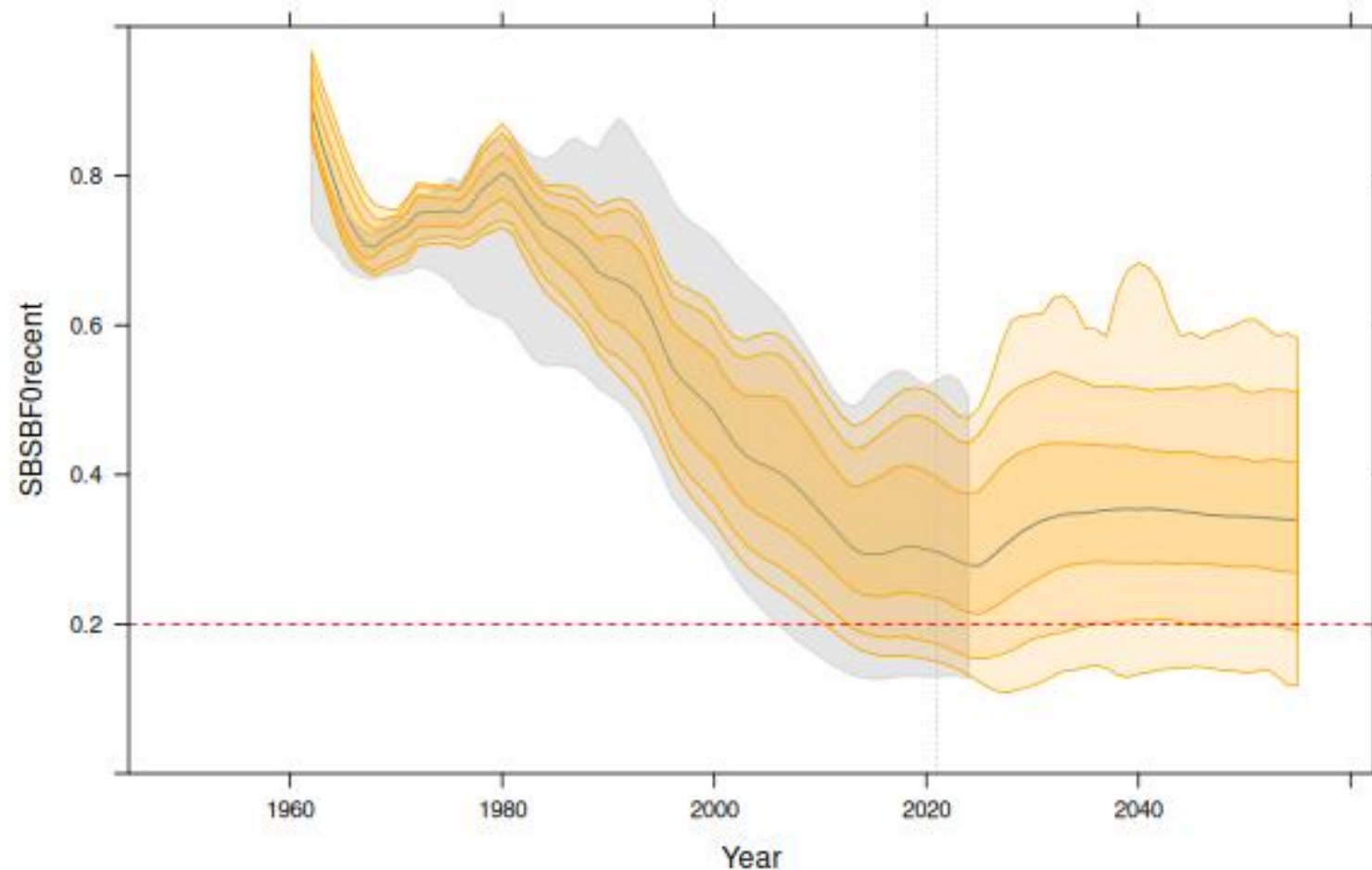


288 model fits – orange shading

2023 assessment – dark grey

2026 assessment – light grey

Revised BET OM grid (projection)



1152 OMs

SBSBF0 2024	2026 ass	OM grid
max	0.5	0.48
Min	0.13	0.13
Median	0.28	0.28
2012-2015	0.29	0.30
Relative to 12-15	0.95	0.93

Revised BET OM grid (reference set)

Axis	Levels	Options			
		1	2	3	4
Process Error					
Recruitment variability	2	1962-2020	2010-2020		
Observation Error					
Catch and effort	1	20%			
Model Error					
Steepness	3	0.8	0.65	0.95	
Mixing period	4	1	2	3	4
Tag overdispersion	3	2	4	8	
Growth	4				
Lmin		22	38	22	30
Lmax		150	155	160	150
k		0.188	0.066	0.188	0.09
Natural mortality	2	0.1	0.15		
Movement	1	estimated internally			
DD catchability		not currently implemented			
Implementation Error					
Effort creep	2	0%	PS 2%, LL 1%		